North Fulton Amateur Radio League NFARL eNEWS

August 2021

Over 40 Years Promoting
Service | Friendship | Education | Fun

www.nfarl.org

100 Watts and a Wire/ Focus on Wire Antennas and a Contest
-Chuck Catledge, AE4CW

You can get a lot from just a little…

"A 100 Watts and a wire…" is something you've likely heard before if you've been around the ham radio scene for a few years. What better choice of words for linking ham ingenuity with capability and skill? There are probably plenty, but lately this phrase seems to keep showing up in various radio related events.

If you're new to amateur radio, this phrase might not have the same significance to you as it does to one with more amateur radio experience. Given current levels of communications technologies, most people think nothing of the principles that enable long distance communication to occur, never mind understand them. This may be one of the areas that amateur radio provides a bit of leverage, or "competitive advantage" to other aspects of modern society. Ham radio gives us a place to actually experiment with the physics and engineering science involved with present day communication and information technologies. Just how many repeaters did your last cell phone call utilize?

One technique used to develop understanding uses repetition and experience drawn from others and research. Ham radio provides a convenient platform for using this approach in self-development. Plenty of opportunities to capitalize on practicing empirically based understanding through participation, observation and leveraging the knowledge from the Elmers and others involved. National and club level activities like ARRL Field Day, US Islands, school club mentoring, ARRIS, ham fests and the like are good examples. Connecting with an "Elmer" to get assistance is an under-utilized ham radio benefit!

Speaking of Elmers, Chuck Catledge, AE4CW, is the current President of the Southeastern DX Club, and a NFARL member. Chuck plans to kick off the August NFARL club meeting presentation

(Continued on page 2)

100 Watts and a Wire (continued)

for us. Chuck will tell us about the SEDXC "100 Watts and a Wire" event coming up this September, point out some wire antenna information, and ask club members who've got DX and wire antenna ops experience to offer help to hams that want to get their HF station and wire set up for participation in the September SEDXC contest. Please consider sharing your skill and expertise!

Here's some background on Chuck; he was granted his 1st license in 1957, KN5MWQ, with support from family and friends. Amateur radio involvement yielded to education, career and life experiences until 2007. At that point, Chuck was relicensed as AE4CW and seems to be enjoying ham radio since! You can check Chuck's QRZ page out for details. However, we'll let you know Chuck likes DXing, contest, radio technologies like antennae, and enjoys equipment restoration. Please welcome Chuck as he shares information on the "100 Watts and a Wire" contest, antennae, and invites us to share our collective knowledge and experience.

President's Corner / John Norris, N4IHV

Ham radio adventures will take you in many directions. I think of projects that I started and thought I knew how they would end. Well, that is never how it occurs! You start the project and discover there is another problem not considered. Now the end date changes rapidly. I have been taught lots of new things during detours in project building. It creates frustration and then great satisfaction upon completion. That is just one thing that makes ham radio so much fun and educational.

Antenna design and radio combinations are a force to be reckoned with as one moves through the typical amateur radio operator's life. Most of us never know when there is a good stopping point in this process. It is a good thing because many of us reap the benefit of others adventures in this area. We hear someone talk about a great radio or antenna and then must try it as well. Of course, none of us ever inflate the results as we profess the accolades of our new adventure. It is a good thing because it keeps the design wheel turning.

When I first started taking flying lessons, I remember the intimidation I felt looking at all of the gauges and buttons. That passed after a lot of use. Now when I get a new radio it begins again with all of the buttons. I believe it is much more than aircraft buttons and gauges on the intimidation scale.

I love that I chose to become a ham and have so many wonderful friends that I have met over the years. It is the best continuing education program in which I could have been enrolled.

John Norris, NFARL President

N4IHV

HamJam 2021 / Wes Lamboley, W3WL

12 HAMJAM YEARS AND COUNTING!

I am writing this for newcomers in the Club, but all members can take pride in this event we hold every year, since 2009! Yes, Virginia, there is a HamJam and this is its 12th year of happening! The date is set for November 13 at the Metropolitan Club in Alpharetta, and the details are in the process of being worked. Last year got "COVIDED", but this year's event is going forward. One of the items on the agenda this year is a real-time balloon launch from the parking lot for another telemetry adventure around the world for many days.

I am in awe when I review the HamJam happenings over the years. The event began back in 2009 with a brainstorm from Mac, W4AX, and recently I reviewed the list of speakers we have had at the event, and I was amazed at their fantastic quality. Please do go look at http:hamjam.info/about.html for an idea of what I am talking about. You will be amazed.

The bottom line for HamJam is to:

1. Provide a spot to enjoy camaraderie with fellow hams,
2. See and hear three world-class speakers on ham radio-related topics, and
3. Raise funds for youth-related Education, Scholarships and Activities.

To date we have donated over $40,000 to such projects by raffling off ham radio-type prizes provided to us by many vendors. And, by the way, we hold the event on a Saturday morning so there is still time to get home and root for your favorite college football team!

So, please plan to come to HamJam 2021. The date is November 13 and we open at 8AM. Do QRX for more info about this year's event as it becomes available.

It's All About Youth!

Presented by the North Fulton Amateur Radio League

Help Me Find My Way Home!

This is a heart-wrenching story we need your help with….
I was going nuts trying to understand this guy's story when I first came across him. He was hiding in a box in the back of my truck, found shortly after returning from Field Day 2021.
I believe his name is Chrome Vanadium Kobalt, I've started calling him "Kobalt" for short. He's unable to tell me where his real home is. He does have a big smile (spans about 1-1/4") and seems easily adjusted. If you know where Kobalt belongs, please let Mike KN4OAK know. Otherwise Kobalt might wind up spending the rest of his days in the NFARL equipment trailer….

SCHOLARSHIPS! / Wes Lamboley, W3WL

2021 NFARL/MATPARC SCHOLARSHIP AWARDS

Joseph N. Fletcher, KM4PSL
The Metro Atlanta Telephone Pioneer Amateur Radio Club Scholarship

The American Radio Relay League Foundation recently announced the recipients of the 2021 scholarships. A $2000.00 scholarship, donated on behalf of the Metro Atlanta Telephone Pioneer Radio Club (MATPARC) with funds administered by NFARL, goes to Joseph Fletcher, KM4PSL, of Ringgold, GA. Additionally, a $2000.00 scholarship, donated from HamJam monies from NFARL, goes to Emily Wilbourn, KM4JXB, of Jefferson, GA. We wish both these scholars Godspeed in pursuit of their higher educations, and are proud to say they are ham radio operators representing our youth! Pictures of Joseph and Emily can be seen in QST for September, 2021.

For the record, the ARRL Foundation awarded 122 scholarships worth $564,250 this year. Included were 6 each for $25,000, 4 each for $15,000, 17 each for $10,000 and 4 each for $5,000!

Emily E. Wilbourn, KM4JXB
The North Fulton Amateur Radio League (NFARL) Scholarship

Photos from QST, www.arrl.org September 2021

Book Review / Mike Riley, KN4OAK

AC6V's FM 101x Using FM Repeaters

I enjoyed reading Rodney R. Dinkins' book "*AC6V's FM101x Using FM Repeaters"* a couple of weeks ago. I ran across this title while finishing the listing of remaining books in the NFARL Library inventory. At first glance I thought the book may contain buried nuggets of information pertaining to repeater performance measurements. This didn't turn out to be true. Although there is a chapter which describes repeater design configurations in an easily understood fashion.

This book was written for new hams to provide them with a simple and basic understanding of repeaters and possible selection criteria for their "first" HF/VHF radio. The subject matter depth and content length is sufficient for non-technical readers to grasp while not losing interest of those with a technical background. Simple leisurely reading in one day.

If you're new to ham radio and this book sounds of interest to you, it will be available at the August NFARL club meeting for you to borrow.

Dinkins, Rodney R., *AC6V's FM101x Using FM Repeaters*, AC6V Publications, 2003

Congratulations to August VE Candidates / Wes Lamboley, W3WL

NFARL VE Team Continues to Perform

The latest NFARL VE test session, held at Slope's BBQ, Roswell, had 6 new licenses or upgrades to licenses. These folks are most interesting and will be great to have as Club members. Please take a look and see if there is anyone you may be interesting in mentoring them in ham radio and contact them via their emails!

Name	email	Test
Phillip Giles	gilespjr@aol.com	Technician
Ben Garrett	ben@catbird.net	Extra

Ben is very interested in building antennas and has completed several.

Thomas Lariscy	plastic_boats@live.com	Technician

Thomas spent 11 years in the military and 18 years in law enforcement. Is very excited to be a ham.

Alex Hallam	alexhallam6.28@gmail.com	General

Senior data scientist at Chick-fil-A. Has several friends that have their license and decided to get his.

Darwin Gonzalez	dgonzalez@advancedwireless.com	Technician

Works on distributed antenna systems at Advanced Wireless. Is very interested in building electronics.

John Hathcock	john.hathcock@gmail.com	Technician

John does IT consulting and his friends got him interested in ham radio.

David Mold	davidmold@gmail.com	Technician

David is a computer programmer working in java script, c, c++ and others. He currently does a lot of web design and is self-employed.

Best regards,
Wes

Do You Know...? / Mike Riley, KN4OAK

Recognized Best Practice for ARES/RACES DC Power Connection

Have you paused to consider how many different power supply connectors are available for use in management of your DC power circuits? Have you ever thought that a "standard practice" would help simplify cable management in your shack? Are you aware that a best practice regarding this matter already exists?

Authorities in several U.S. states have mandated the use of Anderson Powerpole© connectors for use in DC power cable connections. Orange County, California RACES has a detailed description of the recommended configuration at this hyperlink: https://www.ocraces.org/powerpole45.html in which a simple acronym "RRTT" (Right, Red, Tongue, Top) is provided to help with remembering the housing and lead position to be used.

Dangerous Deeds

I've written many *Around the Shack* columns that required research on my part. I enjoyed those.

I enjoy learning. I enjoy teaching. I enjoy story telling.

As I began writing this month's column I was badly pressed for time. I needed a subject I knew all about. Something that required minimal research yet would be interesting and of value to readers. I found the perfect subject. A subject I can write about straight out of my head. The title is: *Dangerous Deeds*, but it could just as well have been: *Stupid, dangerous and bonehead things I have done in 60 years of ham radio.*

Without exaggeration, I am lucky to be alive, have all my limbs, sight in both eyes and not be in jail. I have had a lot of dumb, high-risk ideas that I went ahead and put into practice. Some of them are embarrassing to commit to paper. I'm writing about them here, hoping I can help someone avoid my mistakes. If I do, I will have done a good deed.

What follows is a list of dangerous and dumb things I have done. It's in random order (just like these month-to-month columns are) except for the last item. Skip to and read the last one if you get bored.

Here are my dangerous and dumb ham adventures:

Climbing. The sea belongs to fish. The air belongs to birds. Humans are land animals. When we scuba dive or climb to erect antennas we are leaving our domain and entering someone else's. People can't fly, but they sure can fall. As an early teenager I climbed trees. I fell out of a few too. By the time I was late into my teenage years I was climbing my own and others' towers – using nothing more than my pants belt as a safety belt. Wow was that dumb. Every year, without fail, I read of one or more tower related deaths within the ham community.

The answer to this is to do as the professionals do, although even they get into trouble, albeit less frequently than hams.

If you are tower climbing, have the correct gear and don't take a chance on anything less. You need a hard hat, gloves, steel-toed boots, a proper safety belt, a fall arrestor, a second safety line so that you are always tied to the tower with at least one line, a deep tool pouch, a partner and some training. You probably know this, but DO YOU DO IT?

The risk towers (and sloped roofs) pose is at least recognized. A risk area we often minimize or fail to recognize is flat roofs. Erecting a VHF vertical on the flat roof of your EOC building seems safe enough until you fall off the edge.

Another climbing issue is the condition of towers or anything you might want to climb. Towers rust and become unsafe. Tree limbs rot. Walk away from anything that looks unsafe. Guy wires deteriorate and a surprising number of towers have not been properly installed to begin with. I have seen towers guyed with white cotton clothes line - no kidding.

An illuminating story: Some years ago I asked a friend who climbs ham towers for a living to share his worst "horror story." He was hired to take down 30 feet of Rohn 25 tower. That's an easy enough task. The tower had a concrete base and was up against a house. It had a house bracket helping secure the tower although the owner said that was overkill – the concrete base was a foot thick and more than sufficient, particularly since the antennas had been removed. The house bracket was removed to facilitate disassembly and the tower fell over with my friend at the top. The "one foot thick" concrete base was about one inch thick. The result was a few days in the hospital.

If hanging wires from trees is your thing, a "potato cannon" or "tennis ball cannon" is the tool of choice. Don't climb trees. Slingshots are an iffy choice. The risk to avoid in all cases is to pull a snagged line back toward yourself. You can load a lot of potential energy into fishing line. When the weight at the far end breaks free, the potential energy becomes kinetic energy heading straight for your head. I know a ham in the Mid-Atlantic who lost as eye this way. I once broke a window (directly behind me) this way. Never pull a line back with more than the minimal force needed to nudge it over a small branch that's far away.

Exploding Capacitors. Only the intervention of providence has kept me from serious injury from exploding capacitors. I've experienced two incidents, separated by 50 years. Both had potential catastrophic consequences. In 1962 I built a 150 watt linear amplifier as described in the April, 1961 QST. It was designed by Lew McCoy – a name familiar to old timers. I was a kid with no money at that time. My "parts supply room" was junk TV sets at the local landfill. In pre-politically correct days the landfill was called "the dump." My amplifier's power transformer and power supply filter capacitor were landfill parts. My DIY amplifier had about 550 volts on a 450 volt

Continued on next page-

rated electrolytic filter capacitor.

It seemed to work fine and I spent a lot of time with my face inches above the parallel 807 tubes in that amp and, of course, directly above the filter capacitor. Through shear luck, I was 20 feet away from that amp when the filter cap exploded. What I mean by exploded is EXPLODED. The outer aluminum can turned to shrapnel. The guts of the capacitor (hot tar and who-knows-what) shot around the room at high velocity. My new amp and the ceiling of my attic ham shack were covered with molten goop. Geeez.

Using electrolytic capacitors above their rated voltage, or hooking them up in reverse, is reckless. Mayhem is sure to follow.

Also, electrolytic capacitors change with age. Sometimes gracefully and sometimes not. The changes can be subtle. The amount of capacitance usually drifts downward and out of spec. over time and that goes unnoticed. Eventually however, all the capacitance is gone and the capacitor behaves either as an open circuit or a resistor. Past the end of life, most vent. If not in use they may simply leak (goop, not current). If in use they may perform an instantaneous come-apart.

Whether in use or on the shelf, electrolytic capacitors more than 30 years old should be replaced. They should not be powered up. They should not be "aged" or "reformed" by bringing them up slowly on a Variac. Personally I find the notion of "reforming" old capacitors to be a fool's errand. It rarely works, doesn't last long if it does and results in a wholly unreliable component in use where a new one costing a few dollars could be in place. Just…replace…them! Some (but not all) can-style capacitors of a bygone era had pressure relief blow-out plugs in the base, to vent pressure before the can exploded. Why do you suppose they put those there? In my experience those blow-out plugs did not always work.

My second bad capacitor experience happened in 2010 while I was building my replica 1910 spark transmitter. Spark transmitters include a high voltage capacitor that must handle pulses of 1,000 amps or more. I found some 50 KV caps at a hamfest and used those during early bench testing while discovering the ancient arts. One of those capacitors let go just like the one had in 1962. High velocity hot goop shot across the garage and splashed against two walls. Once again I was 20 feet away and very lucky.

It's rare that hams build spark transmitters anymore, but high capacitor current shows up in a variety of applications and, like excess voltage, excess current can destroy a capacitor and potentially imperil the owner. In-rush current at power-up is one example of this.

Many hams these days are into refurbishing "boat anchors." Vacuum tube gear always has a high voltage power supply and electrolytic filter capacitor(s). These have the same potential to explode as mine did in 1962. In fact, some of the ones you will find in boat anchor gear were made around 1962. When firing up boat anchor gear for the first time in decades, it's a good idea to do it from a distance, particularly if you are insistent on leaving the old capacitors in place. This is a good segue to the next section about my bad practices.

High Voltage. A little knowledge can be a really bad thing and familiarity breeds contempt. I've repaired countless linear amps and home-brew-built several. I feel comfortable working around the 3 to 4 KV B+ supply in vacuum tube amps. I have troubleshot amps with the covers off and the interlocks jumped out since the 1960s.

I strongly recommend against doing this. I will probably keep doing it. My attorney has just advised me to explain that that last sentence was not a subtle wink to tell you that while it's not according to Hoyle it's probably an okay thing to do. It's not. Somebody has to climb towers and somebody needs to repair amps, but if you have not acquired the full skill set and tools, DON'T DO IT.

The ARRL Handbook implores you to keep one hand in your pocket when working around high voltage. That's valuable advice. Better yet is to have both hands in your pockets and be several feet away from anything you are about to power up with the covers off. I have been good about following that last piece of advice, which is why I'm still here. I can't recall a single troubleshooting test I've run where I could not place the measurement leads (scope probe, voltmeter, etc.) where they needed to go with the power off, step back 5 feet and turn the power on. It takes a little more time to do this the safe way. It's time well spent. The exception of course was my 1962 exploding capacitor DIY linear. It had no covers and no interlocks. All I can say is I was young and stupid.

It's rare anymore to find an amateur experimenting with high power amps using tubes that operate at very high plate voltage, but that was not always so. Tubes exist that are rated for, and perform best at high plate voltage. Also, there are a few of us who still might be inclined to work on such gear. It's a really bad idea to head north of about 4 KV. In addition to the chance of electrocution going up as voltage goes up, at 10 KV

Continued on next page-

and higher some glass vacuum tubes emit X-Rays. High voltage systems also produce ozone, which is carcinogenic. High current arcs (intentional or unintentional) produce UV light at levels that can be unsafe to eyes. High voltage is not your friend.

Fortunately we are well into the low voltage solid state era.

Soldering. This is mostly a good news story. I began soldering (and "artistic" wood burning) around age five. 68 years later I am still soldering. I'm guessing I've averaged well over 100 solder joints a year. That's 6,800 solder joints. Some years I built Heathkit, Eico and E.F. Johnson kits having 600 or more solder joints in a single kit. After all that soldering, I have no scars to show for it. I've burned myself countless times, but it always seems to heal up. The soldering pencil I currently use self-regulates at 480 degrees C (900 F). That's well above the threshold for third degree burns. I think the secret to avoiding permanent scars is to let go fast. Don't check me on this.

My concern about soldering has always been triggered by scraping solder splashes off my eyeglasses. All hams solder things. All hams do not use eye protection for this seemingly mundane task, but they should.

Setting fires. N4GG is a "wires-in-the-woods" ham station. It's also a "full-legal-limit" ham station. I've worried about setting the woods on fire, which would be an event with horrific consequences. I came very close to doing it about a year ago.

One leg of my 80 meter inverted vee came into contact with the 300 ohm transmission line to my 20 meter dipole. I was head-down deep into a contest at the time and did not immediately notice the telltale SWR changes. When I did, I headed outside, in the dark, and saw the 300 ohm line on fire about 30 feet above the ground. The fire was slowly working its way up the line to the supporting trees. The word terror comes to mind.

I was able to extinguish the fire by vigorously shaking the line from the ground. It's easy to set fire to 300 and 450 ohm ladder line and fortunately, it's easy (sometimes) to put the fire out with the air current created by shaking.

Had I not gone outside when I did, I might be fighting lawsuits from my jail cell. The woods out back is part of Lake Allatoona's watershed, with countless subdivisions nestled in. Under drought conditions, I could have set a 10,000 acre blaze.

The polyethylene jacket covering 300 ohm and 450 ohm ladder line burns slowly. I have used that property to advantage. To make a connection, I've stripped the end of ladder line by setting it on fire. It burns about an inch every 30 seconds and you can easily blow it out. You can get a perfect result stripping balanced line this way if you pay attention to what you are doing (away from the woods!). This may or may not be in the bonehead category. My familiarity with extinguishing intentionally lit transmission line helped me put it out when it really counted. ADVICE: Stay completely away from all of this; it gives me the creeps just thinking about it.

The woods out back keep changing. Limbs fall. New ones sprout in unwanted places. Dry leaves fall onto wires in the fall. The wind breaks wires and insulators. The new procedure at N4GG is to never operate at KW level without first inspecting the antenna farm. Every time. Are all the wires away from trees and not about to touch each other? A prior *Around the Shack* column titled "*QRO Considerations*," listed the voltages and currents that can occur at 1,500 watt power operation. It's also covered in my book: *Ham Radio Tips and Tales*. Those writings explain just how high the currents and voltages can be, but don't say much about the hazards posed and what to do about them. For starters, don't set the woods on fire.

Power Lines. I've done a good job keeping masts and wire antennas away from power lines, but the same can't be said for some of my friends. I operated a station in the Caribbean that had an 80 meter dipole strung above and across a 14.4 KV high-voltage transmission line. Noticing it, I asked about it of course. The situation greatly reduced my desire to operate that station despite the long trip to get there. The owner assured me it was safe. The antenna was made of stainless steel wire and "would not break." I did wind up operating, with deep misgivings. I would not do that again. I have not been back.

Like tower accidents, I occasionally hear of electrocution due to masts touching power lines. I know I am preaching to the choir but I am mentioning it because it keeps happening.

A side story: Near my condo in Florida a boater was trailering his sailboat out of the parking lot of the local Ramada Inn. The sailboat mast touched power lines at the street. Two people died.

Continued on next page-

RF Safety Thresholds. This is the must-read section. Paul Evens, VP9KF, has placed a valuable tool on the web. It calculates the RF field-strength for a given power level, given frequency and given antenna gain; at a given distance from the antenna. The FCC now requires amateurs to make this calculation and adhere to rules regulating maximum exposure levels. How many of us are doing this? It's easy to do with Paul's tool. Just fill in the blanks.

Here is the link to Paul's web tool: http://hintlink.com/power_density.htm

Here is a real-world case at N4GG:

Power: 1,100 watts
Antenna Gain: 4.5 dBi
Frequency: 50.313 MHz (The six meter FT8 frequency)
Distance from the antenna: 10 feet

Results:

RF power density: 7 mW/cm^2. FCC requirement: < 1 mW/cm^2 in a controlled environment and < 0.21 mW/cm^2 in an uncontrolled environment.

Ten feet from the 3 element six-meter Yagi at N4GG the field strength is above the FCC's safe limit specs by a factor of 7 and a factor of 21!

How far from the N4GG six meter Yagi would you need to be, to be compliant with the FCC specs? It's 26 feet for the controlled environment case and 58 feet for the uncontrolled environment case.

The options should be obvious if you are non-compliant. Run less power, reduce your antenna gain or stay further away from the antenna. At N4GG I have been non-compliant on six meters by a wide margin. I'm in the process of fixing that and QRT until it's fixed.

I'll stop here, as the subject of RF exposure deserves an *Around the Shack* column of its own. Meanwhile, please take this subject seriously. RF is hazardous to your health and you can't detect the deleterious effects as they are happening. The risks go up as frequency goes up.

In closing, it's embarrassing to note how many words it's taken to describe my dangerous deeds.

73,

Hal N4GG

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

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

E4B08 — Which of the following can be used to measure the Q of a series-tuned circuit?

A. The inductance to capacitance ratio

B. The frequency shift

C. The bandwidth of the circuit's frequency response

D. The resonant frequency of the circuit

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.

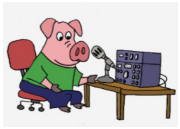
Ian NV4C and his team hold license test sessions on the second Saturday of each month.
For more information including upcoming test dates, click here.

Contest Corner

•

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 now 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.
- **Every Thursday — CW SIG –** 8:00 PM on ZOOM. Meeting ID is 815 5160 3634; password is CW-CHAT (all CAPS)
- **Every Saturday — Royal Order of the Olde Geezers "Breakfast"** - 8:45AM-10AM
  This informal breakfast group on Saturday mornings is NOW ***AGAIN*** meeting IN PERSON. **A notice that Lodge Number 1 of The Royal Order of the Olde Geezers, will convey its weekly soiree at Reveille Cafe**, 2960 Shallowford Road, Marietta 30066 in the Kroger shopping center (Shallowford Rd and Sandy Plains). The festivities commence at 8:45 am on Saturday.
- **Second Tuesday — NFARES Meeting** - **Sept 14, 2021** ***Presently- Online meetings only*** Check NFARES.org for more information.
- **Second Saturday – VE Testing - NFARL Sept 11, 2021 session**: ***COVID-19 Restrictions in place. By reservation only.*** See the "Test Sessions" web page for details & registration process. Contact Ian at nv4c.ian@gmail.com for questions / concerns / reservations.
- **Third Tuesday — NFARL Club Meeting -** Aug 17, 2021, 7:30 PM
  LIVE meeting! NEW LOCATION! Preston Ridge Community Center
  — August 2021 Meeting: 100 Watts and a Wire Contest and Wires That Go With It. *Door opens at 7PM for Social Networking. Meeting begins promptly at 7:30.* ***See Page 1***
- **Fourth Tuesday – NFARL Executive Team Meeting -** August 24, 2020, 7:00 PM
  Online meeting only
  — monitor website and NFARL Groups.io reflector for updates.
- **September 2021 SEDXC 100 Watts and a Wire DX Contest** Who: All interested Radio Amateurs When: September 1 – 30, 2021 UTC. Where: bands 6-160M. How: 100 watts maximum, wire antenna(s) only, any mode. https://t-rexsoftware.com/sedxc/100_watts_and_a_wire/

Contact Us

President	John Norris N4IHV	President@nfarl.org
Vice President	Mike Riley KN4OAK	VicePresident@nfarl.org
Secretary	Martha Muir W4MSA	Secretary@nfarl.org
Treasurer	John Tramontanis N4TOL	Treasurer@nfarl.org
Activities Chair	Fred Ackerly W4FRA	Activities@nfarl.org
Membership Chair	Wes Lamboley W3WL	Membership@nfarl.org
Past President	Daryl Young K4RGK	PastPresident@nfarl.org
Mentors / Elmers	Chuck Catledge AE4CW	Elmers@nfarl.org
Field Day 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
Webmaster	Bill Cobb K4YJJ	Webmaster@nfarl.org
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/

NFARL eNEWS is published by North Fulton Amateur Radio League, Inc.

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 E4B08)

Supporters and Affiliates

Please support our sponsors and affiliates by clicking on the logos below to visit their websites.

