"Importance of ARRL to Amateur Radio" - David Benoist, AG4ZR

ARRL, The National Association for Amateur Radio, was founded in 1914 as "The American Radio Relay League". There is a lot of interesting history associated with the organization. After all, it is a 108-year old entity. While history is important and helps one understand the present day state, the strategic direction the organization is undertaking needs to be considered to comprehend how ARRL is important to amateur radio. We've got a great opportunity during our October club meeting to become more familiar with the ARRL organization and how it operates. Our guest speaker is David Benoist, AG4ZR who presently serves as the ARRL Georgia Section Manager for the Southeastern Division. David is going to share information on the ARRL organization and its interaction with local and national entities regarding, legal, financial, regulatory, and operations aspects of amateur radio. It is intended to be a somewhat informal presentation that we want to expand into a conversation about ARRL, members, affiliated clubs and how we might better leverage available resources to enjoy our radio hobby.

David Benoist, AG4ZR, was appointed Section Manager in December 2021. David previously served as Section Manager from 2016 to 2021 before Jim Milsap, K9APD began his short tenure in October 2021. David also served as the Georgia Emergency Coordinator from 2014 to 2016. Many of us know David as he is active in and attends many Georgia amateur radio events.

Join us in person or via Zoom. We'll begin our conversation with David following the Business portion of the club meeting and annual election of club officers. The meeting location is the Preston Ridge Community Center, 3655 Preston Ridge Road Suite 100, Alpharetta, GA 30005. The doors open at 7:00 PM EDT for Social Engagement prior to the meeting. The meeting begins at 7:30PM EDT and we plan to close the meeting at 9:00PM EDT. The Zoom meeting information is below. We hope to see you at the meeting! Be sure to read the Nominating Committee article on page 2 of this issue for more information.

Join Zoom Meeting
https://us06web.zoom.us/j/87381951741?pwd=dXBmTmhja1ZFQ3pMRUNreDJ5OUFE1Zz09
Meeting ID: 873 8195 1741
Passcode: 276352
One tap mobile
+19292056099,,87381951741#,,,,*276352# US (New York)
President’s Corner / John Norris N4IHV

We had a very successful mini Hamfest in place of our September 2022 meeting. I am not sure how much was sold, but there was a lot of visiting and talking during the entire process. All who attended requested we do this again. I believe it will be even better the next time. It reminded me of pre pandemic meetings with all of the visiting and discussions.

Autumn is now showing its colors and lower temperatures. It is time think about what projects we will build over the coming months. Let us know about your projects with show and tell before and after our meetings. This is what gives the spark for our club meetings.

The October meeting is when we select the officers for 2023. Please try to attend and vote for the one you want to lead us next year.

If you have a topic you wish to have presented, please let us know and we will do what we can to accomplish it.

Ham Jam has some amazing prizes this year and we need to support our youth program by purchasing tickets. You may win one of the excellent prizes. Just go on our web page, nfarl.org, and locate the mart to order raffle tickets. Ham Jam is going to be held at our regular meeting place (Preston Ridge Community Center, 3655 Preston Ridge Road, suite 100, Alpharetta, Georgia).

Have a wonderful month and I will see you at our October meeting.

73,
John Norris, NFARL President
N4IHV

NFARL 2022 Elections- / Steve Mays, KS4KJ

North Fulton Amateur Radio League (NFARL) is an Amateur Radio Club serving Roswell, Alpharetta, Johns Creek, Sandy Springs, Milton and all of North Atlanta. The purposes of the club are to further the Amateur Radio hobby, be a social club, and provide some form of emergency services to our local communities. The club was formed under Section 501(c)(3) of the Internal Revenue Code. Club articles of incorporation and bylaws are available at our Corporate Information webpage. President, Vice President, Secretary, Treasurer, Activities Chairman, and Membership Chairman are officers identified as to be elected in accordance with the process stated in section 3.30 Elections (page 7) of the by-laws.

Club members eligible to vote are noted in the club by-laws. Eligible members wishing to vote in the election must be present in the October club meeting. The by-laws also describe minimum requirements for the elected positions. Nominees from the floor can be accepted after the Nominating Committee Chair reads the recommendations to the membership at the meeting. The nominating committee has determined the candidate slate to be as follows:

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Call Sign</th>
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</thead>
<tbody>
<tr>
<td>President</td>
<td>Mike Riley</td>
<td>KN4OAK</td>
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<tr>
<td>Vice-President</td>
<td>Steve Randall</td>
<td>KO4VW</td>
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<tr>
<td>Secretary</td>
<td>Martha Muir</td>
<td>W4MSA</td>
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<tr>
<td>Treasurer</td>
<td>John Tramontanis</td>
<td>N4TOL</td>
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<td>Activities Chairman</td>
<td>David Bisciotti</td>
<td>KO4USA</td>
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<tr>
<td>Membership Chairman</td>
<td>Wes Lamboley</td>
<td>W3WL</td>
</tr>
</tbody>
</table>

We look forward to your participation in the election. If you have any questions about the process, you may contact me or any of the present officers.

73,
Steve Mays, KS4KJ
Multiop Texas Style / Scott Straw, KB4KBS

"Multiop Texas Style” originally appeared in the October 2009 issue of QST. Scott Straw, KB4KBS is the author and you can follow the story by reading his preface and then the article starting on page 4. Scott has received permission to share this article from the ARRL. We’re presenting it in its original published format.

Preface

The other day I was reminded of something I wrote long ago. I had just experienced something rare and unique in the Ham Radio hobby (at least it was at that time). It was a fully-equipped, fully-functional, and fully engaged multi-operator Ham radio contesting station. It possessed cutting edge technology for the time. I was solely there as an observer (it was a CW contest, so that was a given), but as I watched and learned, I was forever transformed.

I wrote an essay about my experience and shared it with the club that had invited me to visit the event, and they then published it in their newsletter. Somehow somebody affiliated with ARRL HQ saw it and suggested it might be worthy of QST. I submitted it and they liked it. They asked me for some photos (luckily, I had taken a few while I was there), and in October of 2009, I became a published author in an esteemed and internationally distributed magazine!

This month marks the thirteenth anniversary of my first, and only (so far), article publication in QST. I share it with you in hopes that it will inspire and encourage you to participate in group contesting or group operating opportunities. Whether it’s Field Day, a POTA or SOTA activation, or simply a get-together on a Sunday afternoon where someone throws a wire over a tree limb and everyone takes turn calling CQ, like just about everything else in life, Ham Radio is much more fun when done with friends.

Enjoy!

Scott, KB4KBS

"Multiop Texas Style” starts on page 4 and appears as it was published in the October QST edition

QSL Card Checking to be Available at SEDXC Booth / Bob Hensey, K4VBM

QSL card-checking for ARRL DXCC Program will be available at the SEDXC booth at the Stone Mountain Hamfest. The booth time will be from approximately 10 am until noon on the Saturday. You can also try to arrange an alternate time during the Hamfest, prior to the actual Hamfest, Arrange the alternate time by contacting Verne Fowler, W8BLA via email at his vefowler@me.com address. There will be signs displayed at the Hamfest with the finalized times for the card-checking. Hope to see you all at the Hamfest! Good DX!

73,
Bob Hensey, K4VBM
Multiop, Texas Style

My visit to a contesting superstation was an Oz moment.

Scott Straw, KB4KBS/5

As a newly transplanted resident of Houston, Texas, high on my list of priorities was meeting local Amateur Radio operators and getting involved in, or at least acquainted with, a local ham organization. To that end, and on the advice of a ham in the Atlanta area from whom I had just moved, I contacted the Texas DX Society via their Web site, www.tdxs.net. A reply came quickly and I received an invitation to visit a contesting team at a Houston area multi-operator station. I was excited and warmed by the hospitality, but little did I know what I was about to experience.

I visited during the CW portion of the January 2009 North American QSO Party (NAQP) contest (www.najpweb.com). The NAQP contests in January and August are a favorite for many because they are only 12 hours long (versus 24 to 48), and have a 100 W power limit. A single operator may work only 10 hours, so a 2 hour window for dining with the family or doing chores can be scheduled before, during or after the event. This convenience adds to the lure and draw of the contest. A team of operators, either sharing a single radio or using two simultaneously, may operate for the entire contest period with limitations that I’ll explain later.

The “Shack”

I visited the shack of George DeMontrond, NR5M (www.nr5m.com). The term “shack” often refers only to a table in an unused bedroom, office or a corner of a basement or garage. Occasionally it is an entire dedicated room attached to a home or in an outbuilding. In the case of NR5M, it is a small house on a ranch populated with no less than eight 100+ foot towers flying both beam and wire antennas (see Figure 1). A large room of this house has been converted to a command center for full-on, aggressive radiosport contesting.

I arrived around 2 PM, after the contest had begun and was totally unprepared for what I was about to see. First of all, the idea of an entire house devoted to a contest station was a new concept to me. Granted, it was a small, 1600-1800 square foot building, but it was clear that it served one purpose — radiosport contesting. The living room was spartan but functional; several couches and recliners were strategically placed around the only major piece of nonham radio electronics — a large screen TV for watching football, NASCAR and other sports. The kitchen was a “come and go” facility for quickly grabbing nourishment during brief breaks in the contesting action.

The war room was beyond belief (see Figure 2). I had always read and heard about these places but I had never seen one. Even pictures I had seen in QST and on the Internet of other similar setups couldn’t compare. There is a phrase that describes something that garishly larger than life — the term is on steroids. I find even that reference inadequate when comparing an average ham radio station to this one.

There were 10 fully functional, state of the art, top-of-the-line transceivers, each connected to a dedicated computer running contest logging software with two-way data exchange between the rig and the CPU. A flat-panel monitor above the radio displayed data about the radio — frequency, mode and other pertinent information. The computers were all networked so that each operator could see all of the entries in the contest log in real time, including the other operating position’s frequencies and recent contacts.

Of course, there were a lot of other gadgets and accessories that connected the radios to the widely varied collection of antennas outside on “the farm.” A larger 40 inch flat panel served as a master display at one end of the room, displaying each station’s informa-
Multiop Texas Style / Scott Straw, KB4KBS

Continued from previous page

Operations Central

A pair of radios was dedicated to each of the HF contesting bands: 1.8, 3.5, 7, 14, 21 and 28 MHz, sharing a single transmit antenna. Operators sit side-by-side; one anchor on a frequency and CQs, inviting other contest participants to reply, while the other scans up and down the band for other CQing stations and contacts them. The ironic twist is that the anchored operator is called the running station. The other is called the sweeper or search-and-pounce (S&PP) station. The exchange is dutifully logged by the contesting software.

The NAQP rules state that a maximum of two radios are allowed to transmit at any given time with only one signal per band, so each pair of radios has an electronic transmit lockout system. Even so, a set of predetermined hand signals and close attention is mandatory for the pair to cooperate successfully. In the space of 60 seconds, each radio in a pair may transmit 8 to 10 times, but never simultaneously. The two paired teams use this system to get maximum exposure while staying within the confines of the rules.

The running station normally takes precedence over the sweeper station, but it is not uncommon for both stations to make contacts with two different stations in a choreographed manner. This is facilitated by using preprogrammed messages stored in the computer. By pressing a function key on the computer keyboard, the computer sends the message to the radio, which then transmits it. It isn’t totally automated, however. There is a keyer at each position that sees loss of use when the contacted station asks for repeats or information that can’t be satisfied with the preprogrammed messages. Additionally, the decoding of the received signals is all done manually. The most sophisticated computers and the most advanced software, even at their best, are no match for the ear of a top-notch CW contestant.

The Bell Ringers

The first thing that hit me as I entered the room was the eerie silence. Four operators in two teams were positioned at radios, all with headphones on. It was obvious they were intensely focused on listening. Their one band was poised over the computer keyboard, the other on the CW paddle as their eyes were fixed on the computer monitor. One member of the symbiotic pair, as if he were a traffic cop, would wave his hand toward his partner signaling him to either proceed or halt transmitting (see Figure 3).

At a different position, a fifth operator was scanning up and down a third band, recording the frequencies of running stations. In time, when that list of new ones reached sufficient size, one of the duo would take a break so that an operator could join the fifth and begin an assault on the third band. In the meantime, another operator would begin tuning yet another band for new stations to work.

One noise that constantly interrupted the silence was the ring of “the bell” (see Figure 4). Each time a new state, province or country was contacted, the new of the new multiplier was shared with the rest of the team by ringing this fire alarm-sized bell, similar to what would be found ringside at a boxing match.

Strategy and Tactics

One of the challenges is knowing when to abandon a daytime band and start tackling a nighttime band. This is a critical decision because the rules state that once you change to a different band and begin operating, you are committed to the new band for a minimum of 10 minutes. As the contest reached its midway point of 6 PM and the sun began to set, the band-switching decisions became critical. If you jump too soon because you hear a few stations on the new band, you are committed to it and stand the chance of missing some valuable stations on the band just vacated. If you wait too long, you’ve lost valuable time on the new band.

Because the NRSM station could have operating teams on any of the bands, they
began a carousel-like rotation through the six positions during this day-to-dusk transitional period. They would post two operators on the busiest band and put single operators on three of the marginal bands. These three would busy themselves making lists of running stations not yet worked on their respective bands, then alternate in 10 or 20 minute cycles of manning the second on-air station. In time, one of the bands would finally dry up. The operator of the now dead band would then transition to be the second operator on an opening band and the duo would voraciously attack it. The fifth operator would continue to troll through the other bands looking for stray multipliers to enhance the score.

Many more tactics were employed, some more subtle than others, but all were well within the limits of the rules. These contesters know that there are multitudes of opportunities to cheat in the game, but like golfers, they pride themselves in doing the right thing, even if it means accepting a self-imposed penalty. A win without honor is not a win. Besides, with a championship-caliber operating facility, there is no reason to cheat.

The Team and the Totals

Eventually, as the various operators “came up for air,” I was able to meet them and found them all to be a likeable lot. The operators at this contest were (in no particular order) Bill, K5GA; Roy, AD5Q; OJ, K1OJ; Mike, K5NZ, and Dennis, NT5U. George, N5RM, was the host, of course, and served as the able coxswain for this synchronized crew. Kenny, KZ5KJ, was the station’s busy technical manager.

As the night wore down and the contest neared a close, the number of stations not previously worked began to dwindle dramatically. New multipliers became scarce and the bell rang less frequently. During the last minutes, finding “fresh meat” (any new contact) became a real struggle. Then, at the stroke of midnight, it was over.

The raw score for the team was astonishing with possible records being set for the number of contacts on several of the individual bands. The multiplier total was also respectable, if not a record itself. A spot check of the raw scores posted on “3830,” an Internet “brag board,” shows that this station was one of only two that claimed over 500,000 points. (See www.contesting.com for information on 3830 and browsing the score and comment archives.)

When I finally arrived back home at 1:30 AM, I realized that I had just experienced an O2 moment. I had been to someplace special and experienced an event that will forever change how I think about ham radio. I know that with practice and dedication my skill level will improve. I would consider it a high honor to be invited to fill a seat at this station some day, but based on level of mastery that I observed at this event, I know that it will be a long road.

All photos courtesy of the author.

Scott Straw, KB4KBS, an ARRL member, was originally licensed in 1983 and holds a General class license. He moved to Houston after living in Atlanta for 20 years because of a promotion within his company. He works as a Project Engineer for AVL-SPL, an audio, video and visual display solutions designer and integrator. He enjoys all radio sport contesting but prefers the team-contesting dynamic and camaraderie. He can be reached at 7511 N Linpar Ct, Houston, TX 77040-5169, kb4kbs@mindspring.com.
Since becoming a Ham, like most, I’ve wanted a better antenna. During my search early on, I was made aware of the EFHW by Tom Jacobs, N4NFM. I bought some cores and wire and made a few that worked well. As time passed and I learned more, I became aware that there were several different types of these using coil loading, different core windings and impedances. In this article we will discuss and compare some of those differences. These are often advertised as multiband antennas, capable of 40, 20, 15 and part of 10 with no tuner. Looking at the reviews of the ARRL EFHW kit, most weren’t able to achieve this. Why?

Core material

In general, EFHW antennas are built using either type 43 or type 52 cores. The type 43 seems to be the choice when using a single core. When stacking cores to gain more power handling, the lower permeability of the type 52 seems to win out. That said I’ve built stacked cores with type 43 with no issues. All of my experiments were done with type 43 cores, using the 140-43 for the lower power version and the 240-43 for the higher power version.

Windings

Several different windings and ratios are used by different manufacturers. Some use 3 windings on the primary, some use two. The ratios used are 49:1, 56:1, and 64:1. These all can be made with 2 or three primary windings. Using two primary windings, the 49:1 uses 14 secondary turns, the 56:1 with 15, and the 64:1 with 16. Using 3 primary turns the 49:1 uses 21 on the secondary and the 64:1 uses 24. Obviously, you could get in between those values using 22 or 23 turns, but they don’t calculate to 56:1. Why so many options? Which is the best?

Antenna Wire

For my testing, I used 26 AWG silicone wire like most of our portable operators use. I soon discovered that the same wire worked well for all these, not just the same type, but the actual same wire. The difference when changing transformers using the same piece of wire was negligible. That was a surprise.

Building

For these tests I ‘3D printed’ several cases to hold the parts. I wound cores for 140-43 baluns in 49:1, 56:1, and 64:1 with two primary turns, and a 64:1 with three turns in the primary. I used 18 AWG magnet wire to wind all the cores. My logic was that for the 3 turn primary 64:1, if needed I could remove one turn at a time for further testing. In each of these I used a 100 pf 3KV capacitor across the primary as is normal to help higher frequencies and smooth out the bands a bit. Some argue about the value of this capacitor, but in my tests, this is what I used.
Well, What Happened?

My results were quite unexpected and enlightening. Surprise, they all work, but do have their differences. The most glaring difference with the 64:1 with the 3 turn primary was that 10 and 15 meters suffered, probably because of the capacitance of the extra windings. It was very good at 40 meters, and okay at 20. My suspicion is that this will make a good single band antenna, tuned with the dip where you want to operate. Then we get to the three with 2 primary turns. It became apparent that the only way to get any of these to be true multiband antennas was to tune the fundamental at near 6.995 or 7 MHZ, if no compensation coil is used. Tuning is accomplished by trimming or extending the antenna wire. Most would tune an antenna in the part of the band that gives the lowest SWR where they plan to operate. If you do this with an EFHW, it will need a tuner in most places. This is not an issue as you will still have a SWR below 1.5 everywhere in the 40, 20, 15 bands and a large part of 10 when tuned as suggested. If you tune this antenna anywhere in the voice part of the band the harmonics will not line up. I found the 49:1 worked on all the bands. The SWR was slightly higher on 40 but still usable, below 1.5 in the entire band. The 64:1 worked on all those bands as well, just not quite as well on 10 as the 49:1. It was a bit more forgiving closer to the ground. The 56:1 combined the great performance of both and is my choice for the ones I build. This is 2 primary turns and 15 for the secondary.

Counterpoise

Without getting into the weeds and boring you to death, what about a counterpoise?

An EFHW will use the braid of your coax as a counterpoise if it is long enough. I used 15 ft. of RG174 and also RG8X for testing. I also tried 30 ft. Using either length of coax, adding a 1/10 wavelength counterpoise, 4 meters, slightly lowered the SWR on 40 and 20, I mean slightly by less than .1. 10 and 15 were detuned by the counterpoise, although not so badly most tuners wouldn’t correct it. Changing the length or type of coax changed the bandwidth slightly, but not the resonant points. There is nothing wrong with using the coax shield as a counterpoise. Longer or more lossy coax as expected made the SWR seem a bit lower. It seems like that was a question on one of the exams.

Summary

My choice is the 56:1 which strangely I don’t find widely available commercially. The difference is small. A compensation coil isn’t needed if tuned properly. A counterpoise isn’t needed other than the coax. The shortest length of coax I tested with was 15 ft. and that’s certainly enough. The wire for these ended up being about 64.5 ft. long, actually 64 ft. -4 inches. That length will change slightly depending on the wire you use. If transformers are properly built, the same wire should work on any of these. They will tune and operate fine if you tune them where you are going to operate, but other bands will give you problems. The only exception is if you tuned it to the lower part of the CW band which is near 7 MHZ. If you tuned yours to say 7.050, the bands are starting to line up pretty well, but would be better at 6.995 or 7 MHZ. Are EFHWs the best antennas? The best antenna is one you can get up in the air and get on the radio with. It may be a good option for your QTH and is very popular for portable. If properly built and tuned, the EFHW is a great option for those who don’t want to use a tuner often.
Make your plans now to attend HamJam 2022. Now in its 12th year, HamJam combines dynamic speakers, opportunities to win amazing prizes, and plenty of camaraderie with your fellow hams from across Georgia and beyond.

HamJam 2022 will be held on Saturday, November 12, at the Preston Ridge Community Center, a new and beautiful facility in Alpharetta. (3655 Preston Ridge Road, behind the YMCA). HamJam is presented by the North Fulton Amateur Radio League (nfarl.org) and endorsed by multiple local clubs!

This year’s speakers are Joe Eisenberg K0NEB, Steve Goodgame K5ATA, and TJ Hardin KO4FFA. Joe is the Kit Building editor for CQ magazine. Steve is the Education and Learning Manager for ARRL. TJ was a member of this summer’s record setting Youth DXAdventure team.

Admission to HamJam is free, as is the coffee. Funds are raised by the purchase of raffle tickets for some amazing prizes. Go to http://hamjam.info/hmjm_wp?page_id=79 for an up to date to the ever-increasing list of the prizes. Net proceeds of the raffle are used exclusively for youth education, scholarships, and activities.

Raffle tickets can be purchased at the Stone Mountain Hamfest, in person at HamJam, or from the NFARL Mart (https://nfarl.org/mart/2022-hamjam-raffle-tickets/). Tickets are $5 each or $20 for 5 tickets. Though you want to experience HamJam in person, you don’t have to be present to win a raffle prize.

HamJam.info
In accordance with its by-laws, the American Radio Relay League (ARRL) is holding elections this year for the Southeastern Division. If you are currently registered as an ARRL member, you should have received a ballot including an Election Validation Number, for this election. Back on September 30, 2022, Dallas, N4DDM posted an announcement (https://groups.io/g/gaares/topic/94018237) about the election on Groups.io, which we’ve included below in case you haven’t received your ballot yet, and as a reminder to those who haven’t voted yet. Thank you Dallas!

Dallas N4DDM  Sep 30  #958

To all ARRL members,

I urge all of you to vote as we have seen new fees from the FCC and all but lost the entire 3.5GHz band, who knows what’s next...

To help you choose who to vote for I’ve looked around and found the below info on the candidates...

**For Director of the Southeastern Division:**

- Mickey Baker, N4MB, of Palm Beach Gardens, Florida
  QRZ Bio; [https://www.qrz.com/db/N4MB](https://www.qrz.com/db/N4MB)
- James Schilling, KG4JSZ, of Haines City, Florida
  Website; [https://kg4jsz-for-director.org/](https://kg4jsz-for-director.org/)
  QRZ Bio; [https://www.qrz.com/db/kg4jsz](https://www.qrz.com/db/kg4jsz)
- John Willis, KB4DU, of Ozark, Alabama
  QRZ Bio; [https://www.qrz.com/db/KB4DU](https://www.qrz.com/db/KB4DU)

**Candidates for Vice Director:**

- Jeff Beals, WA4AW, of Loxahatchee, Florida
  QRZ Bio; [https://www.qrz.com/db/WA4AW](https://www.qrz.com/db/WA4AW)
- Andrew Milluzzi, KK4LWR, of Clermont, Florida
  QRZ Bio; [https://www.qrz.com/db/KK4LWR](https://www.qrz.com/db/KK4LWR)
- Neal Sulmeyer, K4EA, of Canton, Georgia
  QRZ Bio; [https://www.qrz.com/db/K4EA](https://www.qrz.com/db/K4EA)
- Joseph Tiritilli, N4ZUW, of Deerfield Beach, Florida
  QRZ Bio; [https://www.qrz.com/db/N4ZUW](https://www.qrz.com/db/N4ZUW)
New Hams This Month
The scene was Slope’s BBQ on October 8, and there are now two new hams as a result.

Roy Rickert - KQ4DRH - got his Technician License. Roy now lives in Cumming by way of North Dakota, and is the Transportation Coordinator for Forsyth County. Roy has been interested in ham radio for a long time and decided "Now is the time!"

Chadwick Walker - KQ4DTA - got his Technician License as well. Chad is a lawyer in private practice and specializes in personal injury cases. He is interested in being ready for emergencies and wants to get involved with ARES.

Both Roy and Chad tried to get their General Class licenses while at Slope’s; both came close but no cigar. They will be back soon after studying a bit more. Both gentlemen had high praise for hamstudy.org and intend to work on their General exams there. For the record, hamstudy.org is FREE, so if you are planning to upgrade here is a good site to help you along in your journey!

Once again, we’d like to express our gratitude to the folks at Slope’s who go out of their way to allow us to utilize their facility during off-hours for this activity. On your next visit, please take a moment to personally thank the Slope’s management and staff for their hospitality and commitment to public service.

Thanks again to Ian Kahn, NV4C and the VE Team for conducting this activity! Please congratulate Roy and Chadwick when you meet them at the next club meeting.

Extra Extra! / From the Extra Class Question Pool

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

E0A08
What does SAR measure?
A. The rate of RF energy reflected from stationary terrain
B. Synthetic Aperture Ratio of the human body
C. Signal Amplification Rating
D. The rate at which RF energy is absorbed by the body

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.

Congratulations October VE Candidates! / Wes Lamboley, W3WL

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Thanks again to Ian Kahn, NV4C and the VE Team for conducting this activity! Please congratulate Roy and Chadwick when you meet them at the next club meeting.
Contest Corner

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

<table>
<thead>
<tr>
<th>Contest Name</th>
<th>Time &amp; Date</th>
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<tr>
<td>+ ARRL School Club Roundup</td>
<td>1300Z, Oct 17 to 2359Z, Oct 21</td>
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<tr>
<td>+ YLRL DX/NA YL Anniversary Contest</td>
<td>1400Z, Oct 22 to 0200Z, Oct 24</td>
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<tr>
<td>+ North American SSB Sprint Contest</td>
<td>0000Z-0400Z, Oct 23</td>
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<tr>
<td>+ SKCC Sprint</td>
<td>0000Z-0200Z, Oct 26</td>
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<tr>
<td>+ Zombie Shuffle</td>
<td>1600-2400 local, Oct 28</td>
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<tr>
<td>+ QCX Challenge</td>
<td>1300Z-1400Z, Oct 31</td>
</tr>
<tr>
<td>+ QCX Challenge</td>
<td>1900Z-2000Z, Oct 31</td>
</tr>
<tr>
<td>+ QCX Challenge</td>
<td>0300Z-0400Z, Nov 1</td>
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<tr>
<td>+ Silent Key Memorial Contest</td>
<td>0600Z-0859Z, Nov 1</td>
</tr>
<tr>
<td>+ ARRL Sweepstakes Contest, CW</td>
<td>2100Z, Nov 5 to 0300Z, Nov 7</td>
</tr>
<tr>
<td>+ ARRL EME Contest</td>
<td>0000Z, Nov 12 to 2359Z, Nov 13</td>
</tr>
<tr>
<td>+ PODXS 070 Club Triple Play Low Band Sprint</td>
<td>0000Z, Nov 12 to 2359Z, Nov 14</td>
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<tr>
<td>+ 10-10 Int. Fall Contest, Digital</td>
<td>0001Z, Nov 12 to 2359Z, Nov 14</td>
</tr>
<tr>
<td>+ JIDX Phone Contest</td>
<td>0700Z, Nov 12 to 1300Z, Nov 13</td>
</tr>
<tr>
<td>+ OK/OM DX Contest</td>
<td>1200Z, Nov 12 to 1200Z, Nov 13</td>
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<tr>
<td>+ 4 States QRP Group Second Sunday Sprint</td>
<td>0100Z-0300Z, Nov 14</td>
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<tr>
<td>+ ARRL Sweepstakes Contest, SSB</td>
<td>2100Z, Nov 19 to 0300Z, Nov 21</td>
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</table>

EAA Youth Aviation Program Equipment Sale / Joel Levine, WA4HNL

The GARS EAA Chapter 690 has several pieces of Ham Radio equipment and test equipment available. All reasonable donations will be considered with proceeds going to our Youth Aviation Program. The Chapter is a 501c3, non-profit. The equipment listed below has been checked out minimally and anyone interested is welcome to test and evaluate it on their own. All of the equipment is in need of restoration and should be priced accordingly. No reasonable donation will be refused.

Photos of the equipment can be provided off-line and/or the equipment may be seen at the EAA hangar, 690 Airport Road, Lawrenceville, GA or by prior arrangements with me, Joel, WA4HNL, jlevine@bellsouth.net or 404.394.5466. Atlanta area sales only as I don't want to deal with shipping.

   External speaker included.
2. Allied AX-190 Communications Receiver. 11 bands.
3. Allied A-2515A General Coverage Receiver
4. M.C. Jones, Model 711N Wattmeter. 300-Watt max. Works but needs calibration.
6. Homebrew Keyer
7. Leader, LSG-11 Signal Generator

All equipment needs clean-up and restoration. No additional claims are being made.
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](http://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](http://NFARL Nets) for more information and “how to”. Here’s the link to the NFARL server
  on Discord web app [https://discord.gg/spr2a9D](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.

- **Every Wednesday — CW CHAT** – 8:00 PM on ZOOM.
  [meeting link and credentials:](https://us06web.zoom.us/j/84722087419?wd=VlN2d0xvQVhKcDlUL0R4N1hQMTQ2UT09)
  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** - November 08, 2022 Presently- Online meet-
  ings only. Check [NFARES.org](http://NFARES.org) for more information.

- **Second Saturday – VE Testing - NFARL November 12, 2022 session:**
  *By reservation only.* See the “Test Sessions” web page for details & registration pro-
  cess. Contact Ian at nv4c.ian@gmail.com for questions / concerns / reservations.

- **Third Tuesday— NFARL Club Meeting** - October 18, 2022, 7:00 PM
  *Meeting Location: Preston Ridge Community Center, -
  Presentation / Discussion Topic —“Importance of ARRL to Amateur Radio”*  
  *(see Page 1)*
  *Door opens at 7:00PM for Social Networking. Meeting begins at 7:30PM*

- **Fourth Tuesday — NFARL Executive Team Meeting** - October 25, 2022, 7:00 PM.
  *Online meeting only* — monitor website and NFARL Groups.io reflector for updates.

- **HamJam 2022** - November 12, 2022. Mark your calendars now! HamJam 2022 is
  coming. Preston Ridge Community Center 8AM-1PM.
  We have the prizes! We have the speakers! HamJam Tickets are available!!
  *See page 9 for more details!!*
Contact Us

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
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</thead>
<tbody>
<tr>
<td>President</td>
<td>John Norris</td>
<td><a href="mailto:President@nfarl.org">President@nfarl.org</a></td>
</tr>
<tr>
<td>N4IHV</td>
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<tr>
<td>Vice President</td>
<td>Mike Riley</td>
<td><a href="mailto:VicePresident@nfarl.org">VicePresident@nfarl.org</a></td>
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<tr>
<td>KN4OAK</td>
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<tr>
<td>Secretary</td>
<td>Martha Muir</td>
<td><a href="mailto:Secretary@nfarl.org">Secretary@nfarl.org</a></td>
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<tr>
<td>W4MSA</td>
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<tr>
<td>Treasurer</td>
<td>John Tramontanis</td>
<td><a href="mailto:Treasurer@nfarl.org">Treasurer@nfarl.org</a></td>
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<td>N4TOL</td>
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<tr>
<td>Activities Chair</td>
<td>Steve Randall</td>
<td><a href="mailto:Activities@nfarl.org">Activities@nfarl.org</a></td>
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<tr>
<td>KO4VW</td>
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<tr>
<td>Membership Chair</td>
<td>Wes Lamboley</td>
<td><a href="mailto:Membership@nfarl.org">Membership@nfarl.org</a></td>
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<tr>
<td>W3WL</td>
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<tr>
<td>Past President</td>
<td>Daryl Young</td>
<td><a href="mailto:PastPresident@nfarl.org">PastPresident@nfarl.org</a></td>
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<tr>
<td>K4RGK</td>
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<tr>
<td>Mentors / Elmers</td>
<td>John Hathcock</td>
<td><a href="mailto:Elmers@nfarl.org">Elmers@nfarl.org</a></td>
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<tr>
<td>WE4AUB</td>
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<tr>
<td>2022 Field Day Chair</td>
<td>Steve Randall</td>
<td><a href="mailto:FieldDay@nfarl.org">FieldDay@nfarl.org</a></td>
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<tr>
<td>KO4VW</td>
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<tr>
<td>Scout Coordinator</td>
<td>Jon Wittlin</td>
<td><a href="mailto:k4wit@nfarl.org">k4wit@nfarl.org</a></td>
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<tr>
<td>K4WIT</td>
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<tr>
<td>ARES Liaison and Community Relations</td>
<td>Jim Paine</td>
<td><a href="mailto:n4sec@nfarl.org">n4sec@nfarl.org</a></td>
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<td>N4SEC</td>
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<tr>
<td>Repeater Operations</td>
<td>Mike Roden</td>
<td><a href="mailto:Repeaters@nfarl.org">Repeaters@nfarl.org</a></td>
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<tr>
<td>K5JR</td>
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<tr>
<td>Web Master</td>
<td>Bill Cobb</td>
<td><a href="mailto:Webmaster@nfarl.org">Webmaster@nfarl.org</a></td>
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<tr>
<td>K4YJJ</td>
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<tr>
<td>eNews Team</td>
<td>Help Wanted!!</td>
<td><a href="mailto:enews@nfarl.org">enews@nfarl.org</a></td>
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</tbody>
</table>

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**

<table>
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<tr>
<th>Frequency—Description</th>
<th>P.L. Tone</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>145.470 (-) EchoLink Node 560686 NF4GA-R</td>
<td>100 Hz</td>
<td>Morgan Falls</td>
</tr>
<tr>
<td>147.060 (+) Primary ARES Repeater</td>
<td>100 Hz</td>
<td>Roswell Water Tower</td>
</tr>
<tr>
<td>* 224.620 (-) Joint Venture with MATPARC</td>
<td>100 Hz</td>
<td>TBD</td>
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<tr>
<td>443.150 (+)</td>
<td>100 Hz</td>
<td>Roswell Water Tower</td>
</tr>
<tr>
<td>444.475 (+)</td>
<td>100 Hz</td>
<td>Morgan Falls</td>
</tr>
<tr>
<td>* 927.0125 (-)</td>
<td>146.2 Hz</td>
<td>TBD</td>
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* Currently off the air

**Club Call signs: NF4GA and K4JJ**

**Extra Extra answer: D** *(question E0A08)*

**Supporters and Affiliates**

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