

*North Fulton  
Amateur Radio League  
NFARL eNEWS  
April 2016*

[www.nfarl.org](http://www.nfarl.org)



**THE  
GEORGIA QSO PARTY  
IS  
IN THE BOOKS !**

**Chuck Catledge - AE4CW**

**C**ongratulations to everyone who participated with Team NFARL in the Georgia QSO Party! No matter your score I'll bet you had a good time --- and likely learned a bit about being a sought-after contact --- like being a rare DX station.

The thrill of "running", that is calling CQ and managing the multiple stations calling at once

and managing to sort out and respond to each call, is something that's hard to forget. The more you do it, the more you enjoy it and want to do more! The QSO's pass by quickly. And, before you know it, you've passed a QSO milestone and are dreaming about reaching for more! You might have been surprised to see how many states and provinces appeared in your log in short order...perhaps even "Worked All States" before the weekend was over! Great feeling right?

The results from NFARL GQP participants are still coming in, and the results have been impressive. With 40 or more NFARL stations participating, we expect a stellar result. For instance, you will be amazed at how our county rover teams performed! (Rovers work from mobile stations, traversing multiple Georgia counties over the two-day weekend handing out County contacts to stations across the US, Canada and the world.) And, our fixed-base stations piled up the contacts too. Some folks operated for a few hours, others for the entire 20 hours. And, every QSO contributes to the club score! Based on on-air and personal feedback the "Fun Quotient" was over the top.

So, welcome to contesting! The GQP is a low-key contest where everyone gets to set their own goals for number of contacts, number of states/provinces/DX or just plain enjoyment. If you enjoyed the GQP, you won't want to miss NFARL's Field Day event coming up the last weekend in June. Last year NFARL achieved the top national score in category 3A, and we hope to maintain that position in 2016. If you would like to participate as an operator, please contact John Kludt-K4SQC, field day chairman at [k4sqc@arrl.net](mailto:k4sqc@arrl.net) or one of the station captains. We would love to have more NFARLites join the fun!

And, if you want even more low-key contest fun, the very popular 13 Colonies special event in early July ([www.13colonies.info](http://www.13colonies.info)) offers the opportunity to represent Georgia as K2G to stations across North America and the world. Contact Nathan-K4NHW at [K4NHW@arrl.net](mailto:K4NHW@arrl.net) to learn how you can participate.

## ***NFARL Upcoming Events and Dates***

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- **Every Sunday — NFARES net** - 8:30 PM - 147.06 MHz (+) PL 100
- **Every Monday — Tech Talk** - 8:30 PM - 145.47 MHz (-) PL 100  
Check NFARL Nets [website](#) for "how to."
- **Every Wednesday — Hungry Hams Lunch Bunch** - 11:15 AM  
Slope's BBQ, 34 East Crossville Road, Roswell.
- **Every Wednesday — Youth Net** - 7:00 PM - 145.47 MHz (-) PL 100  
Check NFARL Nets [website](#) for "how to."
- **Every Thursday — YL Net** – 8:00 PM - 145.47 MHz (-) PL 100  
Check NFARL Nets [website](#) for "how to."
- **Every Saturday — Royal Order of the Olde Geezers (ROOG) Lodge No. 1**  
9:00 AM - Reveille Café, 2960 Shallowford Road, Marietta (at Sandy Plains and Shallowford). Everyone is welcome: You don't have to be "old" or a "geezer" to join this breakfast get-together.
- **Second Tuesday — NFARES Meeting** - 7:00 PM  
Fellowship Bible Church, 480 W. Crossville Road, Roswell.
- **Third Tuesday — NFARL Club Meeting** - **April 19th**, 7:30 PM.  
Pre-meeting activities begin at 7:00PM.  
Location: [Alpharetta Adult Activity Center at North Park](#)  
13450 Cogburn Road, Alpharetta, GA 30004  
Meeting topic: DXpeditions  
with Scott Straw KB4KBS & Tim Lemmon WK4U
- **Fourth Tuesday – NFARL Executive Team Meeting**  
April 26th, 7:00 PM  
12200 Crabapple Road, Alpharetta, GA 30004  
Meetings are open to all NFARL members. Space available on a first arrival basis.
- **Second Saturday – VE Testing**  
NFARL provides Amateur (Ham) Radio test sessions once per month at the Alpharetta Adult Activity Center. Please check our [website](#) for up to date testing information.

## ***President's Message / Mark Schumann, KK4FOF***

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At the March meeting, Chuck Catledge, AE4CW our resident Antenna expert gave a world class presentation entitled "Antennas: Hints and Kinks". Chuck discussed antenna history, theory and presented several multi-band antenna designs that can be affordably home brewed. In case you missed the meeting, you can download Chuck's informative presentation in the Meeting section of the NFARL website.

In March, NFARL participated in Atlanta Science Festival events.

On March 8<sup>th</sup>, the ARISS program and Dr. John Kludt K4SQC coordinated a amateur radio contact with the ISS at Fernbank Science Center. NFARL, under the guidance of Mike Cohen AD4MC and John Kludt provided support exhibits at the science center. John and Mike were assisted by Martha Muir W4MSA, Lori Young K4UPI, Daryl Young K4RGK, Pavel Anni AC4PA, Chuck Catledge AE4CW and Wes Lamboley W3WL. Everyone did a fantastic job of representing NFARL and Amateur Radio at this educational event.



On March 26<sup>th</sup>, NFARL participated at the annual Atlanta Science Festival Expo at Centennial Olympic Park in downtown Atlanta. I understand the event was well attended and a great success.

The Georgia QSO Party was April 9<sup>th</sup> and 10<sup>th</sup>. John Tramontanis N4TOL has coordinated NFARL's participation in this fun and friendly competition for the last several years, and he did a fantastic job again this year. At last count, we had 40 NFARL members expected to submit logs in the 55<sup>th</sup> GA QSO Party annual event. While I got a late start and band conditions were not the best, I made contact with many of our club members on Sunday.

Remember, the deadline for submitting your GQP logs is May 15<sup>th</sup> and the deadline for submitting those logs to NFARL for awards is May 1<sup>st</sup>. We plan to present awards at our June club meeting. John N4TOL has posted detail log submission instructions on the NFARL email reflector.

Looking forward, NFARL is conducting a Technician HamCram at Mill Springs Academy on June 18<sup>th</sup>. Anyone interested in getting their Technician license can sign-up on the NFARL website. We are also planning a General License HamCram session for this summer. If you are interested in attending, please email me at [kk4fof@nfarl.org](mailto:kk4fof@nfarl.org).

I look forward to seeing everyone at our next meeting on April 19<sup>th</sup> at 7:30PM!

## ***Vice President's Message / Mike Birmingham, K4LJG***

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We have a great lineup of speakers so far for 2016.

### **April**

Scott Straw, KB4KBS and Tim Lemmon's, WK4U presentation has changed. There were technical glitches with their presentation on digital communications. Not to be deterred, they are now going to present on DXpeditions. In true democratic form the club will vote on which DVD; the 2015 K1N Navassa Island DVD or the 2014 FT5ZM Amsterdam Island DVD. Both sound excellent so it may just be a hard choice!

### **May**

Tim, K4RA, did such a great job in January that we have asked him to return in May and discuss D-Star.

### **June**

Of course, the June meeting is about Field Day. Dr. John Kludt, K4SQC, the field day chairman, will discuss Field Day, 2016. John did a fantastic job last year and I can't wait to hear what he has to say about this year's Field Day.

### **October**

Barry Kanne, W4TGA, will present "Stone Mountain Holiday Present". "It tells the story of the RF interference caused by the holiday decoration lights on the TV tower. It details how we found out about the problem, how we defined the extent of the problem and the measurements and impact on operations on the mountain."

We are looking for ideas of what you, the membership, would like to hear at the June, July, August and September meetings. This is your time so let me know what you are interested in. You can email me at [k4ljg@nfarl.org](mailto:k4ljg@nfarl.org) with any idea of topics and/or speakers.

## ***GQP—Turn in Your Scores / John Tramontanis, N4TOL***

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By the time you are reading this, the 55th running of the Georgia QSO Party (GQP) will already have taken place. Early indications suggest a record level of club participants.

However, the fun of the GQP continues!

Be sure to submit your logs to the GQP by May 15 and to indicate your club affiliation with the North Fulton Amateur Radio League. See details and instructions for GQP log submission under the rules tab at [georgiaqsoparty.org](http://georgiaqsoparty.org)

Also, after sending your log to the GQP, please be sure to submit your GQP data to NFARL to qualify for the special NFARL awards/certificates. Please click on the Radiosport tab at [NFARL.org](http://NFARL.org) for details.

Last year, club members were recognized for key accomplishments in select categories and the highly coveted NFARL GQP certificates were awarded to many operators. So be sure to submit your scores to be eligible for a NFARL award.

73 John Tramontanis N4TOL

# A Bright & Sunny Day / Martha Muir, W4MSA



It was a dark and stormy night, no, it was a dark and potentially dreary day but none the less, Amateur Radio shone bright at the Atlanta Science Festival's Exploration Expo. "Amateur Radio is Science" was the theme of the American Radio Relay League – Georgia Section booth at this year's Expo held at Centennial Olympic Park on March 26. This booth was a joint project of the North Fulton Amateur Radio

League, the Gwinnett Amateur Radio Society, the Alford Memorial Radio Club, and the Atlanta Radio Club.

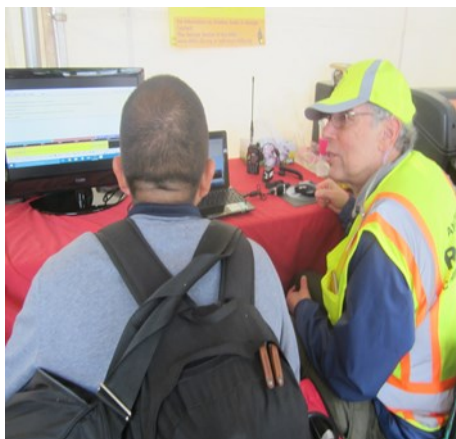
Coordinated by Norm WA4ZXV, representatives from the four clubs enthralled the 15,000 visitors to the culminating event of this year's Atlanta Science Festival despite the rain, mist, and fog.

Thanks to Pavel AC4PA, Ruth KM4LAO, and Jim N4BFR, our guests had the opportunity to tap out their name in CW. Debbie KM4MVL, Josh KM4MVK, and Grace KM4QIW hosted endless throngs of younger guests who wanted to

make a bracelet that spelled out their name in CW with colorful beads.



Mike AD4MC and his wonderful 'digi-mates' crew Lori K4UPI, Daryl K4RGK, and Fred KK4JYO, exposed our guests to the magic of digital radio communications by helping them send and receive messages via a digital radio station.



Scrunched into a corner of our jam packed booth, John K4SQC gave our guests a chance to simulate driving one of the Mars rovers by sending it a series of commands which are sent via radio waves. Our guests also had

the opportunity to pick up literature, including a list of upcoming events offered by local clubs.



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Steve N4TTY brought his mammoth and beautiful teletype and teletape machines which totally wowed the crowd with their merger of old and modern technology. Pam WB1AKQ and Martha W4MSA alternated helping Steve with his crowds and playfully shocking our guests with the ever popular Wimshurst machine.

As the crowds increased, Jay KC4JD took over operating the Wimshurst, leaving Norm as the main

'ambassador' encouraging more folks to enter our booth.



Our ARRL booth at the Atlanta Science Festival Exploration Expo was packed from before the official opening of the Expo until after closing. Both young and older guests got actively involved in all we had to offer, leaving us with their smiles and kind words of thanks.



## ***NPOTA Update / Jim Paine, N4SEC***

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If you have been on the HF Bands recently, particularly 20 and 40 meters, you have no doubt heard stations calling CQ with a National Parks On the Air identifier. Usually that is followed by a pileup. What's this all about? Throughout 2016, Amateur Radio will be helping the National Park Service celebrate their 100<sup>th</sup> anniversary. Hams across the country will activate NPS units, promote the National Park Service and showcase Amateur Radio to the public.

There are 483 total NPS units, including National Battlefields, Historic sites, Monuments, Rivers and Scenic Trails, to mention a few. There are eleven sites in Georgia, with four in the Metro Atlanta area. Check out this link for all of the details: <http://www.arrl.org/npota> On FaceBook check out ARRL National Parks on the Air. There are many great stories and photos of interesting setups in the field.

North Fulton Amateur Radio League has taken on the challenge of participating in this national event! There are two ways to participate on behalf of NFARL, and that's as a Club Activator, or a Club Chaser ... or Both! You would use our Club call NF4GA. If you are interested, contact our Club Call logging coordinator Dave Higdon (KD4ICT), [dhigdon@bellsouth.net](mailto:dhigdon@bellsouth.net), who is logging to LoTW. Next, contact Terry Joyner (W4YBV) at [w4ybv@yahoo.com](mailto:w4ybv@yahoo.com) to report your contacts as he is keeping our Club records for the NFARL Awards and Prizes.

One of our NFARL Club objectives is to activate all eleven Georgia NPS Units this year with our Club Call, NF4GA! We need volunteers! JOIN THE ACTIVATOR TEAM! Contact Terry (W4YBV) at [w4ybv@yahoo.com](mailto:w4ybv@yahoo.com)

Additionally, take part in our club station on August 20 and 21 when we will setup our station in the Chattahoochee River National Recreation Area in Roswell.

Remember, this event lasts all of 2016! During our NFARL Meeting in January 2017, awards will be presented for making the most contacts, trips to Parks, most miles traveled and other awards, while using the club call!

Join the team! What a great way to keep having fun with ham radio!

## ***North Fulton ARES / Mike Birmingham, K4LJG***

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At the last ARES meeting we had twenty-one people in attendance. It was a great meeting and I hope that you will consider joining us at any of our ARES meetings.

On our weekly ARES net we continue to practice and learn more about digital communications. We have expanded now to D-Rats and Winlink, as well as Fldigi. Join us on Sunday nights at 8:30 PM on the 147.06 repeater, PL tone 100. You do not have to be a member of ARES to participate.

The second Tuesday of the month is the ARES meeting at seven o'clock at the Fellowship Bible Church. It is easy to get to and ample parking is always available. Everyone is welcome! Check out our website at [www.nfares.org](http://www.nfares.org) for details.

## ***It's Your Turn to Get On The Air - Again ! / Mike Cohen, AD4MC***

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The first day of this year's Atlanta Science Festival was held at the Fernbank Science Center (See March 2016 eNews) and the last day, Saturday, March 26<sup>th</sup> from 11 AM – 5PM, was held at Centennial Olympic Park.

This final event was called EXPLORATION EXPO, <http://atlantasciencefestival.org/expo>. The NFARL Digital Demo Team (That's Demonstration, not Demolition) of Lori-K4UPI, Daryl-K4RGK, Fred-KK4JYO and Mike-AD4MC **again** gave many visitors the chance to send and receive digital messages "on the air" using four digital stations, two at the ARRL tent and two in Daryl's & Lori's superbly outfitted van. The van was parked about 100,000 millimeters away from the Park (That's about the length of a football field using April Fool's numbering.) **Again**, we asked the visitors if they thought that text messages could be sent without a cell phone or without the Internet. **Again**, as we expected, the typical answer was an emphatic "**No way!**" Well, we clearly demonstrated that there is a way. **Again**, It's safe to say that every visitor had a big smile when they finished using our digital stations.

One definition (to us) of whether the event was more than just entertaining is when visitors show an interest in becoming a ham. One 11-year old future YL convincingly promised to get her license. Her mom was with her and said that her daughter does what she says she is going to do. The future YL got the chance to talk with licensed MSA students which should help seal the deal.

It's always fun to show how ham radio is linked with the latest technologies to continue to be relevant.

## ***SOTA Meeting and Activation / Kevin Kleinfelter, K4KPK***

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### **Summits On The Air Announcement!**

The 2016 annual Atlanta SOTA Seminar will take place on June 9 and 11.

The seminar is designed to help the aspiring SOTA activator experience his/her first successful activation. On June 9, we will hold an online meeting to prepare and plan for our activation. On June 11, we will activate Black Mountain [W4G/NG-022](#).

## ***Multi Club Fox Hunt - First Round / Daryl Young, K4RGK***

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Late breaking News!

The area wide fox hunt took place this weekend, Saturday April 16th. A great time was had by all and rough estimates have 40 or more participants in the hunt! I had the honor of riding with a seasoned fox hunter, Tim WK4U. Mark KK4FOF and Lori K4UPI joined in Tim's doppler equipped van and off we went. Preliminary results show NFARL won the Doppler assisted classification thanks to the expert team of Bob KI4SBL and Pat N4ZAX. Congratulations guys and congratulations to NFARL !

We extend our gratitude to Kyle W4KDA and GARS for organizing and sponsoring this event. Many thanks go to Tim WK4U and John K4SQC for organizing the NFARL effort and encouraging our participation.

First Round? That's right, much enjoyment was had by all and additional fox hunts for this year are already being considered. Don't miss out on the fun !



### **Getting Started**

So, you have finally decided to start stocking the pantry for a possible emergency, great! This is easy if you do just a bit of planning and start slow. Yes, you can order pallets of food and emergency supplies all at one but this can cost a bunch of money. If you start slow and gradually build what you need, it will be much less painful. So the big question is: What do I really need? If we start with the premise that FEMA is correct and we need 14 days of food and water at home, you need a minimum of 1 gallon of drinking water per person, 2 gallons is better and more realistic. Do you live on a lake, stream or have a well? If the answer is yes, then your water requirements just went way down. You will still need a good quality water filter. If you do not live near a water source, then you need a way to store some fresh water. Bottled water is a good way to store water if you need it to be portable. I buy the 16.9 ounce bottles of water from Sam's Club. These bottles are less than 15 cents each if you buy the off brand. Name brands cost more but do the same job. Storing water in clean barrels is a great way to have more stored at your house but that water needs to be treated to make sure it does not start growing algae during storage. Remember to aim for 2 gallons of water per person per day. You will need it for drinking, cooking, bathing and brushing teeth etc. You can't live long without fresh drinking water.

Food on the other hand is a highly personal decision on what to get. The goal here is to stay alive and not have gourmet meals while you are house-bound during the ice storm or lengthy power outage. I recommend that you have as much as possible that does not require a freezer or refrigeration. Refrigeration tends to go out during an emergency. Foods like rice, pinto or black beans, honey and peanut butter are great for emergency storage because they last a long time without being kept cold. Dehydrated food is also good for long storage but these meals will need water to re-hydrate before you can eat them in most cases. Dehydrated fruit is the exception and can be eaten like a snack or put on cereal to spruce up the flavor. You can also stock up on canned products that can be eaten right out of the can in a pinch. If you are going to boil water or warm up dinner, you will need a heat source. Do you have something that is not run by natural gas or electricity? If your house runs on propane, you are all set. If not, invest in a Coleman camp stove or get a BBQ grill that has a side burner and runs on propane. Get a few extra propane cylinders; you will need them in a crisis.

Here is a getting-started shopping list for you: Start by picking up 20 lbs. of white rice, brown rice is good but does not last long in storage so if you prefer brown rice, rotate it frequently. Get 20 lbs. of Pinto or Black beans. These need to be cooked before you can eat them so make sure you have a stove and a way to boil the beans. 10 - # 10 cans of vegetables get what the family will eat. 10 to 20 cans of canned fruit. Make sure to get several large containers of pure honey and peanut butter, you can add your favorite jelly, jam or preserves as well. Pasta and spaghetti sauce, these items are cheap and will feed a small army if necessary. I just paid \$1 a box for spaghetti at Kroger and Kroger brand spaghetti sauce was \$1.25. Stock up, this stuff keeps for quite a while. Soups, canned chili or stew are good as well and can provide variety. Don't forget tea bags and coffee, these things are easily forgotten but are greatly missed if you are shut in for a few days. The quantities I mention here are a starting point. Feel free to raise or lower as necessary.

The last thing to remember are candles and a few LED flashlights. If the power goes out, you need to see around the house. I have pets so I'm not big on candles but I just love a good flashlight.

There are tons of things you can stock up on, start with what you normally eat. Take a Sharpie marker and write the month and year you bought the items on the lid or package, this tells you when to rotate the stock. Always put the new supplies in the back and move the older stock to the front. If you pick up some snack bars, check the stock often, the kids will find them and poof, they are gone when you need them most.

### INCREASE YOUR TRANSMIT SIGNAL WITHOUT AN AMPLIFIER OR BEAM

A few months ago, my name was called as the lucky winner for a nice CW paddle at a local Ham Jam event. Turns out I was very sick that weekend, and the prize went to another lucky ham. But that got me thinking about how I would use that second identical paddle? Would I use the left hand to send dits and the right hand to send dahs!? Obviously that wouldn't work well, but my curiosity didn't stop there.

Most hams have two or more transmitters (or transceivers). The same goes for antennas. Why not use one transmitter to send dits, and another transmitter to send dahs? With reduced duty cycle, the power output on each transmitter could be turned up higher than normal. Talking with friends and doing Internet searches show many examples of rigs capable of power output up to 175 watts! Most radios only need an internal tweak of the transmitter to get additional output. That's not quite a 3dB improvement, so what else can you do?

Further research shows a common final transistor that is a good swap for almost 80% of modern radios. The MRF-807 transistor is a good substitute and very easy to swap. Only three solder connections for each transistor. With new finals, now you can turn your power up to over 300 watts! That's a 5dB improvement. Don't worry about heat. Remember each radio is running reduced duty cycle. Cool, huh?

Here's the easy part. Configure both transmitters for straight key use. Then simply rewire your favorite CW paddle so dits make one transmitter work, and dahs make the other transmitter work. Each transmitter is hooked up to its own antenna. No damage to either receiver (if using transceivers) has ever been observed. Think Field Day. Here's an added benefit. If you are using two transceivers, feel free to use both receivers at the same time giving you diversity reception! Helps pull in the weak ones.

Actually the duty cycle between two transmitters running CW will not be exactly 50% each. Turns out the dit transmitter will be used approximately 28% and the dah transmitter 72%. While I have never noticed any problem with my dah transmitter getting too hot, you might consider decreasing the output power of the dah transmitter by 20% - 30%. Folks on the other end will never hear the difference.

Currently I'm working on a simple two diode circuit splitting audio into positive and negative wave forms. Why not feed positive wave form audio into one transmitter and negative wave form audio into another transmitter? Now you can experience the same boost in transmitted signal using voice or any of the digital modes!

It's important for us to be frugal these days. Cheap substitute transistors and a few minutes of work will make the difference between you easily making those coveted DX contacts vs. sending your call sign over and over again. Best of luck to you all, and good DX.

APRIL FOOLS !

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## Club Repeaters

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Frequency—Description	P.L. Tone	Location
145.470 (-) EchoLink Node 56086 NF4GA-R	100 Hz	Sweat Mountain
147.060 (+) Primary ARES Repeater	100 Hz	Roswell Water Tower
224.620 (-) Joint Venture with MATPARC	100 Hz	Sweat Mountain
443.150 (+)	No Tone	Roswell Water Tower
444.475 (+)	100 Hz	Sweat Mountain
927.0125 (-)	146.2 Hz	Sweat Mountain

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