NATIONAL PARKS ON THE AIR / Jim Paine, N4SEC

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 100th 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

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, who is logging to LoTW. Next, contact Terry Joyner (W4YBV) at 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. Additionally, take part in our club station on August 20 and 21 when we setup our station in the Chattahoochee River National Recreation Area in Roswell.

An example of an activation is Terry Joyner (W4YBV) and Dave Higdon (KD4ICT) recently visiting the Chattahoochee National Recreation Park in Roswell (Designator RC-04). Not only did they have a fun afternoon, but they made over 100 contacts in a little over an hour using our club call NF4GA! This included contacts with Portugal, Croatia, and several Canadians.

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 and stories, while using the club call!

Join the team! What a great way to keep having fun with ham radio!
NFARL Upcoming Events and Dates

- **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** - March 15th, 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: “Antennas: Hints and Kinks” - presented by Chuck Catledge, AE4CW
- **Fourth Tuesday — NFARL Executive Team Meeting**
  Special Date: March 23rd (Wednesday), 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.
**Program Update / Mike Birmingham, K4LJG**

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

**March**
Chuck Catledge, AE4CW, is the NFARL guru on antennas! I always look forward to Chuck’s presentation on antennas.

**April**
Scott Straw, KB4KBS and Tim Lemmon’s, WK4U presentation will be on digital communications.

**May**
Tim, K4RA, did such a great job in January that he will return again in May to 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.”

That is all the speakers I have so far. I am looking for ideas of what you, the membership, would like to hear for the rest of the year. This is your time so let me know what you are interested in. You can email me at k4ljg@nfarl.org with any ideas of topics and/or speakers.

---

**Field Day Is Coming Soon! / Wes Lamboley, W3WL**

**ONLY THREE MONTHS TO FIELD DAY!!!**

As many of you know, I really look forward to Field Day! It was my introduction to Ham Radio back in 1954, and I have never looked back. It gave rise to a career in electronics and lead to many adventures along the way to today. What a great hobby!

This year, under the leadership of John Kludt – K4SQC, we are going to do much the same as last year. We will participate in the contest-like event and try to maximize our score, but also do all the public relations and picnic and message handling and demos as we have in the past. We will also try to improve on our amazing score of last year and provide a platform for new operators to discover and enjoy the thrill of a major aspect of ham radio - contesting!

For the record, our winning of the 3A category is truly a profound achievement. The 3A category is the second most hotly contested category during Field Day, and we won. All who took part in the 2015 event have accomplished a feat that is truly difficult, and it was indeed a major team effort.

We intend to have another Contesting SIG (Special Interest Group) training session soon, to introduce the concepts of contesting and how to experience the thrill of many stations calling YOU at the same time. Please let me know if you are interested in learning more about contesting!

73, Wes – W3WL – welamb@aol.com
Special Use Permits For Ham Radio / Terry Joyner, W4YBV

At the beginning of 2015 when the U. S. Islands Program announced the first one day getaway on May 9, I was excited. I took out my list of about 15 islands I had identified in Florida and Georgia that I planned to activate over the next few years. I knew I wanted to do something special for the One Day Getaway. I focused my attention on Middle Island in the middle of the Okefenokee National Wildlife Refuge in South Georgia. Middle Island is located next to Stephen C. Foster GA State Park at the head of the Suwannee River. It has always been my policy to go and check out an island before the day of operations to make sure I have access to the island.

On March 27, 2015 I paid my first visit to Middle Island and signed the visitor log at the entrance of the refuge. The drive was about 1 ½ miles down a one lane paved road to a parking lot and boat ramp. Access to the island was over a bridge that had a locked gate to keep vehicles out. As I walked across the bridge, I noticed alligators in the water on both sides of the bridge. Once on the island, I located a 50 ft. clearing that would be great to put up my Tri Band Beam on a 20 ft. mast.

As I was looking around for a good spot to set up my rig, I noticed a pickup truck had stopped at the gate on the bridge and someone was unlocking the gate. After the truck came across the bridge, I noticed a wildlife refuge seal on the door so I flagged the driver down. She introduced herself as Sara Aicher, a biologist for the Okefenokee National Wildlife Refuge. At this point I told her I was a Ham Radio Operator and was planning to set up my ham radio station on May 9, in the area where we were standing. I explained to her I had driven by to check out a good location to set everything up.

Ms. Aicher was very nice about what I wanted to do but informed me I would need to get a special use permit for my ham radio station.

I explained to her I had set up stations all over the South and this was the first time I had needed to apply for a special use permit. Continuing to be very helpful, Ms. Aicher asked me to email her with all the information as to what I wanted to do and she would try to help me out. After returning home, I sent Ms. Aicher an email requesting a special use permit for May 9, 2015. About a week later, I received an email from Ms. Aicher stating the management team had discussed my request and decided to allow me to set up on Middle Island and I would soon be hearing from Ms. Susan Heisey, Supervisory Refuge Ranger for the Okefenokee National Wildlife Refuge.

On April 9, I received an email from Susan telling me she would be working with me on my special use permit. First, she needed more information about my activity. Five items were requested: date of activity, type of activity, location of activity, equipment being used for the activity, and the organization I would be representing. I quickly responded to her request with all of the information, and sent a copy of the U. S. Island program press release and some photos of other islands I had set up on.

(Continued on page 5)
On April 24, I received my Okefenokee National Wildlife Refuge General Activities Special Use Permit, containing 6 special conditions. I was finally ready for the one day getaway on Middle Island. My experience working with the staff of the Wildlife Refuge was educational and positive. They were very understanding about what I wanted to accomplish with my radio and wanted my outing to be a success.

I need to point out if you are going to operate in a National Wildlife Refuge you need to work with the refuge staff. Furnish them with all the information they request and most important, give them all the time they need to process your permit. My island activity for the one day getaway was very successful with over 76 QSO’s.

Please remember the refuge has over 10,000 to 20,000 alligators and endangered species of snakes and birds. Be careful on the island!

**Georgia QSO Party / John Tramontanis, N4TOL**

The 2015 Georgia QSO Party will be held on April 9-10 with **two operating periods**: 1800Z (2:00 pm EDST) Saturday until 0359Z (11:59 pm EDST) Sunday and 1400Z (10:00 am EDST) to 2359Z (7:59 pm EDST) on Sunday.

This is your chance to “be the DX.” It is a real opportunity to practice "running,” calling CQ and letting other stations come to you. Special "coveted" NFARL certificates will be awarded to all club members for participation in the contest and also certificates awarded for key accomplishments in select categories.

Also, a strong effort may earn you a "GQP" Award Plaque from the contest sponsors. There are many categories in which to compete at various power levels and modes. Several NFARL members have etched their names into GQP contest history with such an accomplishment.

Please visit the contest website for details: [http://georgiaqsoparty.org/](http://georgiaqsoparty.org/)

The site will provide information such as: the contest rules, categories and awards, county lists, and many other details. Just click on the various buttons on the left hand side of the page.

Please feel free to contact me at n4tol@arrl.net with any questions.

I look forward to working you in the contest.

73 John N4TOL
NFARL and Amateur Radio are Hits at the Atlanta Science Festival ARISS!

NFARL and Amateur Radio were very well represented at the Atlanta Science Festival’s ARISS Radio Contact on March 8. Nearly a year ago, John K4SQC, Norm WA4ZXV, and Martha W4MSA went down to meet with Jordan Rose, co-director of the Atlanta Science Festival. John wanted to suggest that Jordan apply for an ARISS Radio Contact in conjunction with this year’s Atlanta Science Festival’s activities. Jordan quickly became excited at this possibility and began working on his ARISS application.

The request for an ARISS Radio Contact for the Atlanta Science Festival was approved and work began on putting things in place for this to happen. John handled all the technical issues. Since Jordan wanted this ARISS on a specific day and time, rather than when the ISS happened to be overhead, this meant that this ARISS would require a telebridge.

Metro Atlanta teachers were invited to submit a lesson plan based on some topic related to the science or engineering related to an ARISS in a contest to determine which schools would be invited to bring students to this event. Students of those winning teachers were allowed to submit possible questions to ask the astronaut. Authors of the questions judged to be ‘the best’ were selected as those who would actually talk with the astronaut.

The astronaut for this ARISS was Commander Timothy Kopra, an alumnum of Georgia Tech (and other schools). The direct contact for this ARISS was an Amateur Radio operator in Maryland, who then relayed it to the Fernbank Science Center. Amazingly – no thanks to John’s work, these contacts worked smoothly. All 19 students were able to ask and get their questions answered in the time available. There was even time at the end available for Jordan to talk to Commander Kopra as well.

Since ARISS Radio Contacts only last about ten minutes, organizers of ARISS events like to have supplementary activities planned to run before and/or after the actual chat with the astronaut. The ASF ARISS application talked about having activities related to Amateur Radio and other space themes for the guest students to enjoy. Members of NFARL including some students from Mill Springs Academy came up with six different Amateur Radio related activities for our guests but we were told there would be room for only five of them. Five of the eight exhibits were operated by NFARL!

Mike AD4MC organized an exhibit that allowed our guests to make digital radio contacts. Please see his article following this one.

Pavel AC4PA taught an introduction to CW to students by teaching them how to send the letters in ESTONIA along with the many words and phrases that can be made from those letters. As it was at the Stone Mountain hamfest, this station was a hit with the student visitors. Josh KM4MVK helped as Pavel’s assistant.

Wes W3WL and Ruth KM4LAO gave visitors a chance to tap out their names in CW. Guests had

(Continued on page 7)
Debbie KM4MVL, mother of Josh, along with Grace KM4QIW, Megan K4MCB, Alexa and Morgan all helped our guests round out their experiences with CW by making bracelets that spelled out their names in CW. Wes even took a turn at making a bracelet for himself!

Steve N4TTY brought his beautiful and mesmerizing teletype machines. Working with other Alford Memorial radio club members Nick Nikley, N4NCQ and Gene Blackburn, N4UJ as well as Mill Springs’ hams Eli, KM4HFZ and Zach, KM4QIV guests had the opportunity to send and receive ‘text’ messages using a mix of that ancient technology and cell phones as well as create personal messages that were spelled out in ticker tape ribbons. Like all our exhibits, this one drew big and excited crowds.

Jordan thanked all the members of NFARL who helped with these experiences, especially John, for making lifelong memories for all involved.

Now It’s Your Turn To Get On The Air / Mike Cohen, AD4MC

The first day of this year's Atlanta Science Festival was held at the Fernbank Science Center. Before and after the always exciting ARISS contact, (Thanks, John, K4SQC !!) over 300 students got the chance to send and receive digital messages “on the air” using two NFARL digital stations.

We asked several students if they thought that text messages could be sent without a cell phone or without the Internet. As we expected, the typical answer was an emphatic “No way!” Well, we clearly demonstrated that there is a way. Working with the students was Trey Reid, KK4QJB and Lori Young, K4UPI. Lori was happy to explain to many students how she got involved with amateur radio, which will most likely result in many future licensed YLs and OMs (Young Men, in this case). It’s safe to say that every student had a big smile when they finished using our digital stations.

Working at the “hidden” digital stations were Fred Ackley, KK4JYO, and Daryl Young, K4RGK.

Using the adage that no ham can have too many HTs, we used a total of 11 HTs for the digital stations, voice communications between the station operators and low volume copy of the digital transmissions at the “hidden” location. Maybe we “need” a few more.

We’ll have the opportunity for a repeat performance of the digital stations at Atlanta Science Festival’s EXPLORATION EXPO at Centennial Olympic Park on Saturday, March 26th from 11 AM – 5PM. This event is open to the public, so stop by the ARRL tent when you visit. http://atlantasciencefestival.org/expo
Spring has sprung and it is time for outdoors activities! I am not talking about yard work! I am thinking about NFARL and ham radio activities. While Atlanta winters are not as harsh as our friend’s up north, spring is the time to take inventory of our antennas, feedlines and ground system or maybe build a new antenna. Speaking of building antennas, NFARL antenna guru Chuck Catledge AE4CW will be presenting Antennas: *Hints and Kinks* at the March meeting.

In case you have been hibernating the last few months, NFARL is participating in the ARRL National Parks on the Air (NPOTA) contest to celebrate the National Parks Services 100th anniversary. Terry Joyner W4YBV, Jim Paine N4SEC and Mark Bundy KM4PEG are co captaining the club’s efforts. The participation from the amateur community has been awesome and the pileups massive! If you are planning to visit a National Park, you can participate and contribute to the club’s efforts using the club’s call sign. I am looking forward to Jim Paine’s update at this month’s meeting.

NFARL started the month with an ARISS contact at the Atlanta Science Festival at Fernbank Science Center. John Kludt K4SQC coordinated a successful ISS contact and Martha Muir W4MSA, Mike Cohen AD4MC and Daryl Young K4RGK coordinated the youth education and NFARL exhibit efforts.

The 55th nearly annual Georgia QSO party is April 9th – 10th. Once again NFARL is going to compete for the gavel and John Tramontanis N4TOL will be capturing the clubs efforts. So whether you participate from your QTH or mobile, you have the opportunity to contribute to the club efforts and win certificates of achievements.

NFARL is also participating in the Atlanta Science Festival’s Exploration Expo at Centennial Olympic Park. NFARL along with other area clubs will be manning a booth on Saturday March 26th from 11am – 5pm. This a great opportunity to volunteer and participate in NFARL’s youth and community Ham Radio educational efforts.

Also, mark your calendars for the annual ARRL 2016 Field Day June 25th – 26th. Field Day is the Superbowl of amateur radio and John Kludt, K4SQC is our Field Day Chairman. John and team have been hard at work planning and coordinating the club’s efforts to defend our 3A title for 2016. We will dedicate a portion of the April meeting to update members on John’s Field Day plans.

NFARL is on the move and there are plenty of opportunities for members to get involved, volunteer and contribute. I look forward to seeing you at the March meeting and at one of the upcoming events!

Mark Schumann
NFARL President
KK4FOF
How Do I ... ? / Fred Moore, N4CLA

Members! Do you know that you, yes this means you, can change your own email address, passwords, userID, callsign, expiration date, license class, street address, phone numbers, et cetera?

Below are some step by step instructions to...

Change my NFARL email address of record
To change the email address used for club correspondence:
Sign into your Mart account.
Click on "My Account" in the menu at the left.
When your account page is displayed, click on "edit" at the top of the page.
When the next page is displayed, you will be able to change your email address.
If you do not see your email address, make sure the "Account Settings" tab is selected. It should be selected by default, but if it is not, select it and try again.

Change my personal information
To change your personal information:
Sign into your Mart account.
Click on "My Account" in the menu at the left.
When your account page is displayed, click on "edit" at the top of the page.
When the next page is displayed, click on the link representing the type of information you wish to change. Choices (shown in tabs shown below the edit button at the top of the page) will include:
1. personal info
2. license info
3. NFARL info
4. ARRL info
Change the information
Optionally, click the "preview" button to preview your revised information before posting the change.
Click the "submit" button at the bottom left of the page to change the information in the database.
Changing information in each section is a separate operation. For example, if you desire to change both your personal info and your ARRL info, go to the personal info page, make the changes, and submit the changes. Then go to the ARRL info page, make your changes, and submit those changes.

Find out when my NFARL membership expires
To see when your NFARL membership expires:
Log into the Mart.
Click on "My account".
When your account page appears, scroll down the page until you can see the "Memberships" heading. Beneath it you will see something akin to the following, adjusted to fit your membership type and expiration date:
Paid NFARL Full Member
This membership will expire on 12/02/2011 - 12:10am
Your membership will automatically expire at the specified time unless you renew beforehand. You can renew at any time before it expires; the renewal membership time will be added to the expiration date.
If you purchase a renewal membership after your current membership expires, your membership will start at the date and time it is purchased.
Families with multiple members: be sure that you are logged into the proper account when you purchase a membership. If you purchase multiple memberships under one account, they will all...

(Continued on page 10)
be awarded to the account under which you are logged in.

Purchase or renew NFARL or ARRL memberships

**To purchase or renew a NFARL membership:**

Log into a Mart account.

Make sure you are logged into the account of the person whose membership you are trying to purchase or renew. You may confirm that you are logged into the correct account by clicking on "My Account" in the menu bar to the left. The account name appears at the top of the page.

If the person for whom you are purchasing a membership does not have an account, click on "Create Account" in the menu bar to the left. You will need an account for each person for which you wish to purchase a membership.

Each account requires a unique email address. If you need to set up an account for someone who does not have a separate email address, ask our Webmaster to set up a forwarding email address for that person. Contact the Webmaster using the "Contact Us" link in the menu to the left. Send him a suggested email address for your @nfarl.org forwarding account and a destination email address. Multiple forwarding accounts may be forwarded to a single destination email address; e.g., if you need two forwarding accounts, both could be forwarded to your email address. Our Webmaster will send a set-up confirmation to the new address when each forwarding email address has been set up.

Select the type of membership you wish to purchase or renew. View the types of memberships available by clicking on "Catalog" in the menu bar to the left.

Add the selected membership(s) to your cart. You may purchase a NFARL membership and ARRL membership in the same order as long as they are for the same person.

Complete the purchase by checking out. During the checkout process you have the option of paying for the membership(s) via PayPal or by sending our Treasurer a check. After we receive your payment (which will be instantaneous if you pay via PayPal), the Mart will update your account record with the membership(s). Membership will be set to expire: "x" years from the date we receive your payment (if you purchase a new membership), or "x" years from the expiration of your existing membership (if you renew an existing membership early). "x" is the number of years of membership you purchase.

ARRL membership expiration dates are also set as described above. We are not able to electronically communicate with ARRL to relay membership information so the first time you purchase an ARRL membership through NFARL we will manually correct the expiration date based on information we receive from ARRL. If the ARRL expiration date we show varies from your records, email the Treasurer and ask him to correct the date.

You may confirm that your membership has been added or extended by clicking on "My Account" in the menu bar to the left and scrolling down to the bottom of your Account page where membership information is shown.

**See orders I have placed at the Mart**

To see orders you have placed at the NFARL Mart:

Click on "My Account" in the menu to the left. If you are not logged in, you will have to log in to see your account information.

Click on "Orders" in the upper portion of the page.

A list of your orders will be displayed. Click on an order to view its products, date, et cetera.
I played in last weekends ARRL DX CW contest. For me I've always enjoyed contests in Morse Code, because that mode gave my little signal an edge. Now that I have an RF amplifier, I could easily operate either mode, but with Morse Code, that edge is a lot bigger!

I decided to concentrate on just 40M this time around. Full power of course, and just me as the operator. Things were going well. The point of this contest is to only work stations outside of North America. No stations in the USA or Canada. Everyone else only works North America. 40M only lets us do this at night, so my time to play was after the sun set.

Things were going well for me. I was making tons of contacts with many different countries around the world. Europe, Asia, Africa, Middle East, Central America and South America. Even both Hawaii and Alaska (which are considered DX in this contest).

Around 10pm Saturday night, I noticed a slight burning smell. Didn't give it much thought, since I was running a frequency calling CQ and getting lots of callers. Maybe they're making something upstairs in the kitchen and it burned a little bit? Anyway, the amp was really putting out a loud signal for me! I was having fun. Later on, I heard a pop noise of some sort. I was wearing very nice Radio Sport headphones, so I couldn't hear where it was coming from. Nobody knocking at the door. So I kept calling CQ. A few minutes later, I noticed a very small stream of white smoke coming out the amplifier. I was still transmitting 1500 watts, so I figured whatever it was would soon stop and all would be OK. So I kept calling CQ. Stations kept calling me left and right. I was having a ball.

Later on, I looked over at the amp and noticed that small stream of smoke was now bigger than before. In fact, it was starting to fill up the room. I had to open a window! I'll admit at this point I was starting to get a little concerned about that amp, but I figured it would be OK. I still had full power and people were calling me. I was having a great time. So I kept calling CQ. A few minutes later, I heard another rather loud pop noise. Again with the headphones I couldn't tell where or what it was, but noticed our cat playing rough in the room. He must have hit the door playing with that toy. Bless his little heart. So I kept calling CQ.

Wouldn't ya know it, I was working a really weak one (and an ATNO for me). We had to repeat our exchange a few times for each of us to copy it. During the beginning of this contact, I heard another pretty loud boom and even saw sparks coming from the back of my amp! I'll admit at this point, I was starting to get more concerned about that amp, but needed to finish this contact. My power output was still good, but the smoke in the room was making me cough. Anyway, I'm not sure if the other guy copied my exchange or not. During my 3rd try to send him my information, I heard a sizzling sound and my concern elevated to the point that I thought it would be best to stop transmitting. So I turned the amp off. Right in the middle of working an ATNO too! A few minutes later, I tried to turn the amp back on, but it wouldn't work. I made sure the 240 volt line was good, and the main fuse wasn't blown.

So my conclusion is this. They sure don't make amplifiers like they used to. Probably made in some 4th world country I suppose? Ohh, does anyone know of a good repair guy for amplifiers?
Emergency Preparedness: Are you ready for spring?

As Georgia wraps another winter season, it looks like we have dodged a bullet. The weather forecasters predicted a worse-than-normal winter. We never saw the snow and ice that was predicted so I feel we are pretty lucky. Well, spring is coming and we need to start thinking about being prepared for spring storms.

Spring thunder storms can bring flooding, power outages and severe outdoor conditions. Let’s start with the car, are your windshield wipers in good working order? If they squeak when they move across the windshield, replace them. New wiper blades sell for $5 to $30 each. Pick your price point here but make sure you can see what is in front of you when the really hard rain starts.

How are those tires? If you use a penny to check the tread depth, the tread needs to be deeper than the space between the edge of the coin and the top of Abe’s head. That is about 2/32”. Less tread than that and you run the risk of hydroplaning when you hit standing water on the roadway. Hydroplaning is a nice way of saying that you are out of control and are just sliding across the roadway. Driving on less than 2/32” of tread depth is also a violation of the law in most states.

Enough said about tires. How about your brakes? When was the last time you had the car in for service? Any squealing or grinding when you apply the brakes means you need brake work. Don’t put that off because it only gets more expensive if you wait. How about that emergency bag for the car? Do you have snacks, water and maybe a Pair of shoes you can walk in if necessary? Get the car ready now. Change out the winter supplies for summer food/water and clothes. Toss in bug spray, sun screen and a rain jacket or poncho of some type. While you are checking the car, make sure you have a spare tire and it has the correct air pressure in it. Also make sure you have the lug wrench to be able to change the tire if you get a flat. Every driver should be able to change a tire, if you don’t know how, ask for help so you can learn how.

Are you prepared at home for big storms? Are you in a low area and may need to monitor nearby creeks or rivers? How are you going to do that? Do you have an emergency weather radio at home or do you have a radio that can receive emergency broadcasts? Are you in a city that broadcasts alerts on a system like Nixle? Roswell and Woodstock both use this free system, all you need to do is go their web site (http://www.nixle.com/) and register and you will get the alerts.

Do you have a place in the house that is your tornado shelter? Is it the closet that is so full of stuff that you can’t get in there? Take the time to make a place now. When a tornado drops out of the clouds, you only have seconds to get into a place that will protect you. If you have a basement, use it for the best storm protection. If your home does not have a basement, use the room near the center of the house on the first floor, someplace with no windows. A small bathroom works well for this.

Are you ready for a power, natural gas or water outage? How will you deal with outages? If you have a well but no power, how can you keep fresh water flowing? Do you have spare propane cylinders for the gas grill just in case all else fails? How about a food reserve? If you have canned food, don’t forget the can opener with your food. Have you checked the fire extinguishers recently? Do you have a few of these around the house? These are all things that should be considered when getting ready for spring storms.

Don’t forget to teach the kids to stay away from downed power lines! Even if they look like there is no power, they can come back on at any time. Stay away from all downed lines until (Continued on page 13)
the utility company can get there and remove the lines. You only get one chance to get this right. Energized power lines can come off the ground like a snake and shoot sparks and voltage in all directions. You do not want to be anywhere near that much voltage.

Don’t forget my personal favorite emergency prep item, a good LED flashlight. When the lights go out you still need to see. Have extra batteries for your critical appliances and flashlights as well. Candles are ok but pose a fire risk so I prefer a good LED flashlight.

Be safe, plan ahead and live well.

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

The Georgia Yearly ARES meeting was on February 13 in Forsyth, GA. I rode down to the meeting with Roger Shaddick, N7BU. Roger is the new DEC of the Georgia State Defense Force.

The theme for the State ARES meeting on February 13, 2016, at GPSTC, was “Critical Infrastructure & Key Resources (CIKR), Vulnerabilities, and how it affects us”. It was day full of presentations and during lunch there were digital demonstrations in the cafeteria area.

The presentation by K4TNP, Thomas Powell, P.E., Reliability Engineer, GA Power was very interesting and sobering. He discussed – “Smart Grid; Lightning strikes; cascade failures; power line noise – causes, detection, cures; cyber security; down wires safety & issues if help is days away; BPL; power lines in snow, ice, & wind; EMP.”

Our weekly ARES net is attracting more attention as we continue to practice and learn more about digital communications. Join us on Sunday nights at 8:30 PM on the 147.06 repeater, PL tone 100. You don’t have to join ARES to participate.

The second Tuesday of the month is the ARES meeting at seven o’clock at the Fellowship Bible Church. Thanks to Tim, K4RA for this great location. It is easy to get to and parking is never an issue. Everyone is welcome! Check out our website at www.nfares.org for details.

We have 25 active North Fulton ARES members and among them are seven AECs. If you have any questions about ARES let me know or contact any of our AECs.

Mike Cohen, AD4MC, Stuart Williams, AK4EX, Tim Romashko, K4RA, Wayne Chapman, KG5WU, Mike Clark, KK4YDQ, Jim Payne, N4SEC, and Tom Koch, W4UOC. Talk to any of us if you are interested in getting more involved in NFARES.
<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Mark Schumann</td>
<td><a href="mailto:Mark@nfarl.org">Mark@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:President@nfarl.org">President@nfarl.org</a></td>
</tr>
<tr>
<td>Vive President and Program Chairman</td>
<td>Mike Birmingham</td>
<td><a href="mailto:Mike@nfarl.org">Mike@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:VicePresident@nfarl.org">VicePresident@nfarl.org</a></td>
</tr>
<tr>
<td>Secretary</td>
<td>Lori Young</td>
<td><a href="mailto:Lori@nfarl.org">Lori@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:Secretary@nfarl.org">Secretary@nfarl.org</a></td>
</tr>
<tr>
<td>Treasurer and Repeater Trustee</td>
<td>Fred Moore, N4CLA</td>
<td><a href="mailto:Fred@nfarl.org">Fred@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:Treasurer@nfarl.org">Treasurer@nfarl.org</a></td>
</tr>
<tr>
<td>Past President</td>
<td>Bob Beeman</td>
<td><a href="mailto:Bob@nfarl.org">Bob@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:PastPresident@nfarl.org">PastPresident@nfarl.org</a></td>
</tr>
<tr>
<td>Activities Chairman</td>
<td>Daryl Young</td>
<td><a href="mailto:Daryl@nfarl.org">Daryl@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:Activities@nfarl.org">Activities@nfarl.org</a></td>
</tr>
<tr>
<td>Membership Chairman and HamCram</td>
<td>Pavel Anni</td>
<td><a href="mailto:Pavel@nfarl.org">Pavel@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:Membership@nfarl.org">Membership@nfarl.org</a></td>
</tr>
<tr>
<td>Mentors / Elmers</td>
<td>Chuck Catledge, AE4CW</td>
<td><a href="mailto:Chuck@nfarl.org">Chuck@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:Elmers@nfarl.org">Elmers@nfarl.org</a></td>
</tr>
<tr>
<td>Field Day Chairman</td>
<td>John Kludt, K4SQC</td>
<td><a href="mailto:John@nfarl.org">John@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:k4sqc@nfarl.org">k4sqc@nfarl.org</a></td>
</tr>
<tr>
<td>Scout Coordinator</td>
<td>Jon Wittlin</td>
<td><a href="mailto:Jon@nfarl.org">Jon@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:k4wit@nfarl.org">k4wit@nfarl.org</a></td>
</tr>
<tr>
<td>ARES Liaison and Community Relations</td>
<td>Jim Paine, N4SEC</td>
<td><a href="mailto:Jim@nfarl.org">Jim@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:n4sec@nfarl.org">n4sec@nfarl.org</a></td>
</tr>
<tr>
<td>Repeater Operations</td>
<td>Mike Roden, W5JR</td>
<td><a href="mailto:Mike@nfarl.org">Mike@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:Repeaters@nfarl.org">Repeaters@nfarl.org</a></td>
</tr>
<tr>
<td>WebMaster</td>
<td>Bill Cobb, K4YJJ</td>
<td><a href="mailto:Bill@nfarl.org">Bill@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:Webmaster@nfarl.org">Webmaster@nfarl.org</a></td>
</tr>
<tr>
<td>NFARL eNews Publisher</td>
<td>Bob Beeman</td>
<td><a href="mailto:Bob@nfarl.org">Bob@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:k4bb@nfarl.org">k4bb@nfarl.org</a></td>
</tr>
<tr>
<td>NFARL eNews Editor</td>
<td>Daryl Young</td>
<td><a href="mailto:Daryl@nfarl.org">Daryl@nfarl.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:k4rgk@nfarl.org">k4rgk@nfarl.org</a></td>
</tr>
</tbody>
</table>
Club Repeaters

<table>
<thead>
<tr>
<th>Frequency—Description</th>
<th>P.L. Tone</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>145.470 (-)</td>
<td>100 Hz</td>
<td>Sweat Mountain</td>
</tr>
<tr>
<td>EchoLink Node 56086</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 Hz</td>
<td>Roswell Water Tower</td>
</tr>
<tr>
<td>Primary ARES Repeater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>147.060 (+)</td>
<td>100 Hz</td>
<td>Sweat Mountain</td>
</tr>
<tr>
<td>Joint Venture with MATPARC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>224.620 (-)</td>
<td>100 Hz</td>
<td></td>
</tr>
<tr>
<td>443.150 (+)</td>
<td>No Tone</td>
<td>Roswell Water Tower</td>
</tr>
<tr>
<td>444.475 (+)</td>
<td>100 Hz</td>
<td>Sweat Mountain</td>
</tr>
<tr>
<td>927.0125 (-)</td>
<td>146.2 Hz</td>
<td>Sweat Mountain</td>
</tr>
</tbody>
</table>

Supporters and Affiliates

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

Arbor Terrace
AT CRABAPPLE
Assisted Living & Memory Care for Seniors
An Arbor Company Community

Ham Radio Outlet

Elecraft

SOUTHEASTERN REPEATER ASSOCIATION
MEMBER

FlexRadio Systems
Software Defined Radios

Kenwood
Listen to the Future

Slope's BBQ