eNEWS  Jan. 2011

www.nfarl.org

eNEWS is “what’s happening” in North Fulton! Check the headlines of each item and mark your calendar. Go to arrl.org or eHAM.net for the national news, but here is your North Fulton ARL eNEWS for January, 2011.

Summary of Upcoming Events and Dates

- Every Wednesday - Hungry Hams Lunch Bunch - 11:30 AM - Slopes BBQ
- Every Sunday - NF ARES net - 8:30 PM - 147.06 MHz (PL 100)
- Every Monday - Tech Net - 8:30 PM - 145.47 MHz (PL 100) - Check Web site for “how to”
- Every Friday - Youth Net - 5:00 PM - 145.47 MHz (PL 100) – Join Frances Doyle AJ4JQ and others...
- Second Tuesday - NF ARES meeting – 7:00 PM at the Sandy Springs City office complex
- January Club Meeting – January 18 – Neil Foster N4FN on Ham Radio Deluxe software
- Dalton Hamfest - February 26 – Ham help needed
- Mid-Month Madness - Orlando HamCation February 12-14 & TBA Construction Project
- February Club Meeting - February 15 – Don Nesbitt N4HH on basic phone and voice operation

President’s Corner for January

I am very excited about having the opportunity and privilege to serve as your new president for the 2011 calendar year. First of all, I would like to thank the outgoing officers and members of the executive board, along with the enthusiastic membership that achieved so many great accomplishments for the club in 2010. Under Chuck Catledge’s direction and leadership our club continued to thrive and provide various opportunities for members to grow in and enjoy our wonderful hobby. Chuck AE4CW has compiled a fine summary of the highlights of the past year summarizing how much we progressed as a club and recognizing those who contributed. You can find Chuck's article immediately following the President's Corner.

The new club officers and executive team for 2011 are as follows:

John Tramontanis N4TOL - President
Wes Lamboley W3WL - Vice President
Bill Reed K4YJI - Secretary and Community Service Projects
Fred Moore N4CLA – Treasurer
Chuck Catledge AE4CW – Past President and Special Events
John Kludt K7SYS – Program and Mid-Month Madness Chairman
Ian Kahn AK4IK – Field Day Chairman
Jim Paine N4SEC – ARES Liaison and Community Relations
Mike Roden W5JR – Repeater Operations
Bill Cobb K4YJJ - Webmaster

We are here to serve you and the north metro ham community. Feel free to contact any of us at any time. Our e-mails are “our call signs @nfarl.org.”

Our goal is to continue to keep NFARL on a progressive track by providing programs of interest to the membership and activities to further develop our amateur radio skills. In addition, we want to continue to be prepared to serve the community in any time of need with our communications skills and resources. Of utmost importance, however, is to enhance the enjoyment and fun that amateur radio provides to all our members!

73 and Happy New Year!

John N4TOL

2010 in Review: Another Big Year for NFARL / Chuck Catledge AE4CW

From beginning to end, 2010 marked another “radio-active” year filled with activities and fellowship for North Fulton Amateur Radio League members. Here’s a recap of some of the highlights.

- NFARL kicked off the year at the GARS TechFest with a demonstration of Surface Mount Technology soldering techniques led by Mack McCormick WB4MAK. TechFest attendees were able to try it for themselves and discovered that it’s not so hard after all!
- Special Interest Groups played a big role. The CW SIG led by Jim Stafford W4QO, the Antenna SIG led by Wes Lamboley W3WL and Chuck Catledge AE4CW, and the Kit Building SIG led by Mack WB4MAK, all gathered large and eager groups of hams ready to expand their technical skills.
- Club programs were the cornerstone that attracted members to come in record numbers to the meetings on the third Tuesday of each month. In January, Pete Riker K4BKD presented “The Ten Top Reasons to Try Morse Code,” followed in February by Jim and Shelly Phillips, AB2CD and AB1CD, presenting “Electricity’s Greatest Hits,” a program specially designed for youth. More than 20 young people were in attendance! In March, George Lane KI4DSO introduced us to APRS (Automatic Position Reporting System) and the ways it can be applied to our hobby and everyday life.
- Hamfests are always a big attraction for NFARL members. More than 10 members took a road trip to the Orlando Hamcation in mid-February and even more made the trek up to the Dalton Hamfest later that month (burr!). The Huntsville Hamfest in August called for another road trip by an ever-growing group of NFARL trekkies. All three were excellent events, and many great bargains found new homes. Closer to home, the Kennehoochee Hamfest in March and the Atlanta Radio Club Hamfest in June were huge hits that attracted a large number of NFARLites.
NFARL inaugurated a very successful club “cafe” venue at the Lawrenceville Hamfest with tables, snacks and drinks for engaging visitors in a friendly atmosphere.

- The REALLY BIG NEWS for the year was NFARL’s selection as the Dayton Club of the Year and Jim W4QO’s selection as Amateur of the Year. These two awards are arguably the most prestigious that can be presented to a club or an individual ham. A record number of NFARL members traveled to Dayton in mid-May to receive the awards and celebrate our success. To top it off, W4QO was inducted into the QRP Hall of Fame at the annual QRP ARCI meeting also held in Dayton.

- The April club meeting saw the first public performance of the Blue Lightning spark gap transmitter constructed by Hal Kennedy N4GG, along with his presentation of “King Spark – The History of Spark, 1900 – 1920.” Gary Bush W6GB followed up in May with an extraordinarily entertaining and educational presentation of “Vertical Antenna Modeling with EZNEC”.

- Guess which club took top honors in the Georgia QSO Party for the second year in a row?!! Twenty-eight members submitted logs and even more participated. Five of our members won their individual categories ... way to go!

- If it’s June, it must be Field Day. And so it was! For the second straight year, NFARL had the largest Field Day participation in the nation. And the operating teams earned the top score in the Southeastern Division. New hams were introduced to HF and older hams had a great time honing their skills and having fun “in the field”.

- TechNet continued as a unique experience for sharing technical information while expanding its coverage through the DoDropIn Web conference to include hams from across the country. And, our youth operators gained experience in net control operations via the weekly NFARL Youth Net.

- NFARL moved to a new meeting location in June at the Alpharetta Adult Activity Center. The new facility provided more room for our growing club and facilities to accommodate VE testing and other club activities.

- Pre-meeting Show and Tell became a regular event at the monthly club meetings. Themes ranged from Vintage CW and AM Rigs to Electrical Circuit & Gadgets to Favorite QSL Cards to Kit-Build SIG Results to Mobile Rig Installations to a Ham Garage Sale and much more.

- HamCrams were a focus for training new hams and upgrading veteran hams. A Technician HamCram in May introduced 20 new hams to the hobby of which about a third were youth! A follow-on General HamCram in August resulted in upgraded licenses for about 18 hams.

- To encourage members to upgrade their licenses, Vern Fowler W8BLA conducted quarterly VE test sessions that resulted in over 100 new and upgraded licenses.

- At the July meeting we heard from Jim W4QO and Mack WB4MAK about their visit to Ham Radio 2010 in Friedrichshafen, Germany, the major European hamfest. In August, Bob Mantell K4ESA treated the club to “VHF/UHF for Beginners” (aka “VHF and UHF Are Not Just for Repeaters”). And, in September, Mike Roden W5JR shared his wealth of mobile knowledge in a program titled “Mobile Rig Installation.”

- Mid-Month Madness events kept things interesting between monthly meetings. Undoubtedly the most memorable was NFARL Day with the Atlanta Braves sponsored by Bob Citronberg KI4GHT. Nearly 50 NFARL members and their families turned out for a great day at the park.
• Hams Helping Hams continued to be the hallmark of NFARL. From hanging antennas to fixing broken rigs to coaching new hams on operating techniques to teaching SIG classes to sharing contesting or DX skills to much, much more, NFARL members helped other hams. The NFARL Mentor/Elmer program was enhanced with 13 additional volunteers joining the ranks.

• Youth took on a much larger role in 2010. Youth Night in February with Jim and Shelly was followed by Youth Night in October. This very special program was presented by Edward Doyle KJ4NRR, Chris Howard WA4YG and Frances Doyle AJ4JQ. Their presentation, poise and humor were outstanding and made a lasting impression on the entire club.

• NFARL enjoyed a close and supportive relationship with the NFARES organization. In addition to regular monthly activities, more than 30 NFARL members provided support for the October Simulated Emergency Test.

• NFARL members made sure the public was aware of ham radio. Our Sidewalk Radio booth at Roswell’s Alive After Five events drew continuous crowds and attracted quite a few youth. NFARL members provided communications for a variety of public events throughout the year. And, Field Day provided a venue to invite public officials and the media to see and experience the value of ham radio.

• HamJam 2010 was the premier interclub event for ham radio in the Atlanta area. Organized by Mac WB4MAK, the event feature Joe Taylor K1JT, a Nobel laureate speaking on Weak Signal Modes, Ward Silver N0AX discussing New Contesting Ideas and Hal N4GG demonstrating his Blue Lightning spark gap rig. The event received national attention in several publications.

• The club wrapped up the year with a fabulous holiday party at the Alpharetta Adult Activity Center catered by Oscar’s Villa Capri restaurant and hosted by an amazing group of NFARL volunteers.

---

**Program Update**

**Ins and Outs of Ham Radio Deluxe**

This month Neil Foster N4FN will be sharing with us “hints and kinks” on the use of the very popular (and free!) Ham Radio Deluxe rig control and logging program. Neil is a longtime beta tester for HRD and really knows his way around the software. First licensed in 1960, Neil upgraded in 1984 to 20 wpm Extra and when vanity licensing became available, he became N4FN (his initials reversed). He has been active in the Atlanta ham community for many years as an officer and member in several metro organizations. As an active DXer, he is on the DXCC Honor Roll, with 322 countries confirmed. He also has operated from 13 DXCC countries. Neil’s main current interest is PSK. He celebrated 50 years of ham radio on January 1.

Before the meeting will be a perfect time for you to show off that slick new radio toy you got for Christmas. Or, maybe over the holidays you finished a project that you have been working on forever. In either case, bring your goodies along for show and tell at 7:00 PM.

Looking ahead to February, Don Nesbitt N4HH, a respected and accomplished DX operator, will be sharing his tips and tricks on becoming a successful SSB operator. Show and tell that month will allow you to bring in your oldest piece of radio-related gear to show to your fellow hams. And, February Midmonth Madness will be the Dalton Hamfest on February 26.

John Kludt K7SYS, Program Committee Chair
TechFest 2011 a Huge Winner All Around / Jim Stafford W4QO

Hundreds of people checked out a dozen or more booths featuring some very interesting technology at the Gwinnett Amateur Radio Society TechFest on January 8. For 25 kids, the main event was the NFARL Youth Build-athon.

The youngsters signed up for one of two kits – an AM radio and an LED flip-flop circuit we called the Winky Blinky. Builders ranged in age from 8 years old to just over 18. A total of seven soldering stations were set up by NFARL and at least 16 members acted as Elmers for one-on-one supervision of our young builders.

Builders’ eyes lit up when their LEDs flashed or an AM station was received on a kit that had just been completed. Elmers reported great satisfaction in observing the reaction of the youngsters. Only one junior builder suffered the dreadful soldering iron burn. Fortunately, it was not serious and now he has been initiated into that truly unique fraternity at age 8!

One young AM radio builder (unlicensed at present) summed up his experience as his “best day ever!” And he is now on his way to being licensed!

Thanks to GARS for another very successful TechFest, thanks to the volunteers who helped (especially Bill Reed K4YJI, who coordinated the NFARL event), and thanks to all the kids who made it our “best day” too!

Make Plans Now for the Georgia QSO Party 2011

This year marks the 50th anniversary of the Georgia QSO Party.

The objective for amateurs outside of Georgia is to contact on Phone and/or CW stations in as many of the state’s 159 counties as possible.

The objective for Georgia stations is to work on Phone and/or CW as many stations outside Georgia and/or as many Georgia stations in as many of the 159 Georgia counties as possible.

Here’s your chance to be that “rare DX” station with the other stations calling for you in the pileup!!!! And you can be especially rare if you operate from a county where few hams live and operate. You can also add to the fun by operating as a “rover” by taking your station mobile to make contacts while located in different counties. Even if you stay home, the GQP is a great chance to make a
LOT of contacts in a short period of time. You can get very close to (and possibly complete)
Worked all States in one weekend.

The North Fulton Amateur Radio League is the defending Georgia Club Champion in the Georgia
QSO party contest. NFARL has been the club champion for two straight years. Our goal is to make
it three in a row!!!

We encourage all club members to participate, not so much to defend our title, but to promote the
contesting aspect of our hobby. Contesting provides a means of building technical knowledge by
putting our stations to the test from rig to antenna and improving operating skills by making
contacts under a variety of conditions. The Georgia QSO Party is a great opportunity to get
involved in contesting. Click here for more details: http://gqp.contesting.com/index.htm

**Dates:** April 9 and 10

**Times:** 1800Z Saturday until 0359Z Sunday

1400Z to 2359Z on Sunday

Georgia stations work everyone on Phone, CW, or both modes.

The GQP is on 160m, 80m, 40m, 20m, 15m, 10m, and 6m only.

**Suggested operating frequencies are:**

Phone: 1.865, 3.810, 7.225, 14.250, 21.300, 28.450, 50.135


---

**Wes Lamboley W3WL to Operate From South Orkney**

NFARL Vice President Wes Lamboley W3WL will be taking part in the DXpedition to the South Orkney
Islands, using the callsign VP8ORK. Plans are for the operation to run from January 27 to February 8. Wes is
challenging fellow NFARL members to see how many contacts they can make with the expedition! The
South Orkneys are almost due south of Atlanta and lie off the east coast of the Antarctic Peninsula. It should
be easy to contact the DXpedition, but you will need to be on HF. Ten meters should work fine if you have a
Tech license, and the Expedition will be operating in the General bands as well. Wes suggests
that CW is a better way to make contact, and it's easy even if you are not much of a CW operator.
All you need is to be able to send and recognize your own call when it is sent by the DXpedition
operator. The usual QSO (contact) pretty much goes like this on CW:

**TU VP8ORK up 5:** The DXpedition station is thanking the person just worked and requesting
others to please call at a transmit frequency 5 KHz higher (“up”). You will need to know how to
work “split,” using your receive and transmit frequencies in order to do this. You should NEVER
call the station on his own frequency!
Then you immediately send your call one time (W4QO, for example) on the 5 KHz higher frequency and listen to see if VP8ORK comes back to you.

If the VP8ORK operator plucks you out of the pileup, he will send your call one time and give you a signal report. In order to save time, the signal reports will all be the same, 5NN indicating 599. It will sound like this in Morse: W4QO 5NN

As soon as you hear this, send R 5NN (R indicating "roger, I have received you and 5NN indicating your signal report to VP8ORK).

The VP8ORK op will then acknowledge that your call sign is in the log and send TU or R and start listening for other calls immediately.

Congratulations, you have just contacted one of the 10 rarest DX places in the world! Pretty simple, eh? Just a little code will work and, who knows, you may be bitten by the CW bug! Sign up for CW SIG now and get a head start!

You can use the same technique for voice as well, but unless you are running lots of power your chances on CW are a lot better. Many QRP stations running less than 5 watts will get in the logbook on CW.

If you want to try contacting VP8ORK and are new to DX chasing, ask for help at the next club meeting. You will be overwhelmed with offers! (See our Web site for more information about the DXpedition at www.vp8o.com).

Good luck, and good DX!

---

**CW SIG classes start January 20 / Jim Stafford W4QO**

The CW SIG will again be holding its CW class for six Thursday evenings beginning on January 20. We still have some seats left. The class will be held at my house beginning at 7:00 PM and will run for 75 minutes. If you want to learn CW or have struggled with CW, this is the class for you. Just send me an email at w4qo@nfarl.org to let me know you want to take one of the eight seats in the class (and we can add a couple more around the fringes). In the meantime, and to get a jump on the class, download Just Learn Morse Code and force in the letters for ESTONIA. Learn them before the first class and you'll be way into it! If you can't figure out how to make this work, go to w4qo.blogspot.com and read my article on learning the code.

Dah di di dah dit W4QO
QUICKIE QSO
A monthly feature aimed at helping NFARL members get to know each other

Name, call: Clyde McClain KJ4MIJ

QTH: Dunwoody

Personal: Native of Toccoa and a lifelong Georgia resident

First licensed/other calls: May 2009 as Technician Class; earned General the same day

Main equipment: Kenwood TS-820S, TS-520S, Yaesu FT-8800R dual bander, Yaesu FT-60 HT

Favorite hangout: Hungry Hams

Favorite activities: Bicycling, hiking, backpacking in the Grand Canyon, tennis

I'd like to know more about: Being a parent

Fantasy: Wife and daughters asking a question about ham radio

Memorable on-the-air moment: DX with Mal in Perth, Australia, running 5 watts QRP and getting a 53 signal report

My Elmer: Anyone at Hungry Hams

When not in the shack: Family time

Something you might not know about me: Just retired from firefighting/EMT with DeKalb Fire Rescue last year
Cold? Snow? Ice? Let’s talk Field Day! / Ian Kahn AK4IK

It’s time again to begin preparations for NFARL’s Field Day activities. We have a core team assembled to handle this year’s event, but we are always looking for new members. This is an especially good opportunity for new hams/new club members who want to get involved. You will work with a group of seasoned veterans who have put together the past several highly successful Field Day activities, and learn how we run one of our premier annual events. Our emphasis is always on having fun and getting as many people as possible to attend. Field Day is the perfect opportunity to expose new people to ham radio, to show how much fun it is, and showcase what we do for the community.

For more information, or to join the team, please contact Ian Kahn AK4IK at ak4ik@nfarl.org or 404-626-1566.

Service Opportunities

February

Chattahoochee Challenge Annual Road Race, February 12. Contact Charles Turner K0CZR at k0czr@bellsouth.net for more details and to volunteer.

March

Kenhoochee Amateur Radio Club Hamfest, Saturday, March 19. We need NFARL volunteers to set up the NFARL booth at 7:30 AM, tend the booth from 8 AM to noon and take down the booth at noon. We need at least two volunteers in the booth each hour and five volunteers to set up and take down the booth. Contact Bill Reed K4YJI at k4yji@nfarl.org for more information and to volunteer.

North Fulton ARES Update / Jim Paine N4SEC

The January 11 NFARES meeting was canceled because of safety concerns caused by the metro area’s snow and ice storm. In place of the NFARES meeting, a training session was held on the repeater.

The next scheduled NFARES meeting will be at 7:00 PM Tuesday, February 8, at the Sandy Springs City Office complex. The program will be on utilizing FLdigi and FLmsg programs.
**NFARL Elmer Program**

An Elmer is a person you can call up and get help on any ham radio subject you may have questions about. We have at least 13 Elmer volunteers in the club: Bill Reed – K4YJI, Neil Foster - N4FN, Gary Bush - W6GB, John Kludt - K7SYS, Tim Lemmon - WK4U, Joe Camilli - N7QPP, Bill Hampton - W4OO, Mike Roden - W5JR, Steve Mays - KS4KJ, Jim Stafford - W4QO, Wes Lamboley - W3WL, Chuck Catledge - AE4CW, and Mack McCormick - WB4MAK.

We need additional volunteers. Contact Wes, W3WL at w3wl@nfarl.org to volunteer.

The NFARL’s motto is "Hams helping Hams" - give it a try if you have not already!

---

**Name Badges**

If you have been considering ordering a NFARL name badge, now would be an ideal time to do it. These badges have magnetic backs so they will not poke holes in your clothing. They are NOT etched badges, they are made using a photographic full-color process and the information on the badge will NOT wear off. To the right is an example of what the badge will look like, but with rounded corners and NO black border. If you are interested, the badges are $9.00 ea. All you have to do is go to NFARL Mart and click on the badge icon after you log in. We accept PayPal, personal credit cards, and checks sent to the club mailbox: NFARL, PO Box 1741, Roswell, GA 30077. See Fred Moore N4CLA at the meeting or go to the Mart and place your order.

---

**NFARL Membership**

We have 259 active members as of the writing of this newsletter. The following members have joined since November 2010.

<table>
<thead>
<tr>
<th>Call</th>
<th>Fname</th>
<th>Lname</th>
<th>License Class</th>
<th>Mbr-Since</th>
</tr>
</thead>
<tbody>
<tr>
<td>W8KHK</td>
<td>Richard</td>
<td>Maxwell</td>
<td>Amateur Extra</td>
<td>2010-11</td>
</tr>
<tr>
<td>N2EYI</td>
<td>Brian</td>
<td>Mallard</td>
<td>General</td>
<td>2010-11</td>
</tr>
<tr>
<td>KS4EJ</td>
<td>Norris</td>
<td>Gaynor</td>
<td>Advanced</td>
<td>2010-11</td>
</tr>
</tbody>
</table>

Please greet our newest members and welcome them to the organization the next time you see them.
ARRL Membership

Thank you for supporting the ARRL, our national organization. Our current percentage of ARRL membership in the club is 69.9%. That represents 181 ARRL members out of 259 club members. We highly encourage you to become an ARRL member and support your national organization. These are the people who help protect our/your frequency allocations with the FCC. They also provide QST, a nice monthly publication, along with your membership. If you are not a member of the ARRL, please consider supporting the organization. You can join or renew your ARRL membership through NFARL. You can make ARRL membership renewals at www.nfarl.org/mart. If you renew directly with the ARRL, thank you.

NFARL and ARRL Renewals

This is just a friendly reminder regarding NFARL and ARRL memberships. It has now been more than a year and a half since we moved our membership records to the www.nfarl.org Web site from the QuickBooks environment. We continually are trying to improve the MART and assure that all the bits and bytes are in their proper places for each member record. You should also be receiving automatic renewal notification for your NFARL and ARRL memberships 30 days before your membership expires, and then one more after it does expire. This should give you plenty of time to renew online before your expiration occurs. As with all database migrations, there will be exceptions. So if you feel that your name is not on the membership rolls, and should be, or it is incorrectly categorized, please send a note to n4cla@nfarl.org. Your membership is good for 365 days from the date you last renewed or joined. The other piece of this is that your name will automatically fall off the membership rolls after the 365 days if you do not renew. You can, however, renew your membership at any time before the expiration and the renewal is then just added to the current expiration date. Please, if you change your email address or are not sure that your email address is correct, or you have a question about why you are not receiving notifications or the eNEWS, please log in to your account at www.nfarl.org/mart and ensure your email address is correct. There is a process in place for receiving password information automatically via the Web. However, if you forgot your USERID, you will have to contact me directly. Please do not create another user profile. Please send an email to n4cla@nfarl.org and I will do everything possible to fix your problem. We DO NOT ask for any credit card numbers or bank account numbers. All we need are your phone numbers, email addresses and snail-mail addresses.

Click any of the logos above to visit our NFARL supporters and affiliates
### Contact Us

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>John Tramontanis N4TOL</td>
<td>770-789-9188</td>
<td><a href="mailto:n4tol@nfarl.org">n4tol@nfarl.org</a></td>
</tr>
<tr>
<td>Vice-President &amp; Training and Education Leader</td>
<td>Wes Lamboley W3WL</td>
<td>770-993-5758</td>
<td><a href="mailto:w3wl@nfarl.org">w3wl@nfarl.org</a></td>
</tr>
<tr>
<td>Secretary &amp; Community Service Projects</td>
<td>Bill Reed K4YJI</td>
<td>770-993-5758</td>
<td><a href="mailto:k4yji@nfarl.org">k4yji@nfarl.org</a></td>
</tr>
<tr>
<td>Treasurer &amp; Repeater Trustee</td>
<td>Fred Moore N4CLA</td>
<td>404-434-4499</td>
<td><a href="mailto:n4cla@nfarl.org">n4cla@nfarl.org</a></td>
</tr>
<tr>
<td>Past President &amp; Special Events</td>
<td>Chuck Catledge AE4CW</td>
<td>770-641-7729</td>
<td><a href="mailto:ae4cw@nfarl.org">ae4cw@nfarl.org</a></td>
</tr>
<tr>
<td>Program &amp; Mid-Month-Madness Chairman</td>
<td>John Kludt K7SYS</td>
<td></td>
<td><a href="mailto:k7sys@nfarl.org">k7sys@nfarl.org</a></td>
</tr>
<tr>
<td>Field Day Chairman</td>
<td>Ian Kahn AK4IK</td>
<td></td>
<td><a href="mailto:ak4ik@nfarl.org">ak4ik@nfarl.org</a></td>
</tr>
<tr>
<td>ARES Liaison &amp; Community Relations</td>
<td>Jim Paine N4SEC</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></td>
<td><a href="mailto:w5jr@nfarl.org">w5jr@nfarl.org</a></td>
</tr>
<tr>
<td>Web Master</td>
<td>Bill Cobb K4YJJ</td>
<td></td>
<td><a href="mailto:k4yjj@nfarl.org">k4yjj@nfarl.org</a></td>
</tr>
</tbody>
</table>

### Club Repeaters

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>145.470</td>
<td>(-)</td>
<td>100 Hz Sweat Mountain</td>
</tr>
<tr>
<td>147.060</td>
<td>(+)</td>
<td>100 Hz Primary ARES repeater</td>
</tr>
<tr>
<td>224.620</td>
<td>(-)</td>
<td>100 Hz Sweat Mountain</td>
</tr>
<tr>
<td>443.150</td>
<td>(+)</td>
<td>No Tone Roswell WaterTower</td>
</tr>
<tr>
<td>444.475</td>
<td>(+)</td>
<td>100 Hz Sweat Mountain</td>
</tr>
<tr>
<td>927.0125</td>
<td>(-)</td>
<td>146.2 Hz Sweat Mountain</td>
</tr>
</tbody>
</table>