



N4LNR

NOVEMBER 2017

News & Views

P. O. Box 3276
Lenoir, NC 28645



Serving Amateur Radio
In Caldwell County

Next LARC Meeting
Thursday, November 9
7:00 PM
Gamewell Fire Dept.
2806 Morganton Blvd SW
Lenoir

LARC Weekly Net
146.625 Minus 94.8
Alt 147.330 Plus 141.3
Friday, 9:00 PM

Caldwell ARES Net
Sunday, 9:00 PM
147.330 Plus 141.3

DMR Digital Net
Tuesday 8:00 PM
Lenoir Local DMR

Election of 2018 Officers & ARES

LARC November Meeting

Election of 2018 Officers is on the agenda for the November meeting of the Lenoir Amateur Radio Club. Nominees are: John Crowe AG4ZL for President, Frank Gordon KN4ACU for Secretary, and Dick Blumenstein K0CAT for Treasurer. We are still seeking a candidate for Vice President – nominations will be requested from the floor.



Tom Land KA4HKK, Caldwell ARES EC will discuss lessons learned from recent ARES activations and restructure of local ARES support. A brief business meeting will also be held.

This meeting is our last regular meeting of 2017. The December meeting will be a holiday gathering at The Mayflower Seafood Restaurant, Lenoir.



President's Comments

John Crowe AG4ZL



Good day to all! What a month October was! Two recent tornado events created a lot of scary moments and severe weather affected our entire area. Caldwell ARES led by Tom Land KA4HKK stepped up when needed and helped Caldwell emergency management officials during this time. There will be addition information and pictures on the CARES activation later in this newsletter. I want to give a little run down on this month's crazy weather -- October went down as one of the wildest weather months in Western North Carolina in a long, long time.

A late season tropical system, classic fall season severe weather, flash flooding, a record number of confirmed tornadoes...and even a frost and freeze stuck in there at the end!

The National Weather Service said that on October 8 the first tornado touched down in Caldwell County around 5:30 pm damaging several homes and trees around Connelly Springs-Hudson and just to the South of Lenoir near Whitnel. This tornado was rated an EF-2. On October 23, a second tornado was confirmed at the Hickory Airport that moved across parts of Burke, Catawba, Caldwell and Alexander counties with winds of up to 125 mph and rated as an EF-2 (200 kph). I really have to say hats off to all of the Skywarn Spotters that checked into the Caldwell Cty Severe Weather Net during these events. Things were quite hairy at Net Control during those tornadoes as one of our Skywarn Spotters Bobby Roark W4BLR drove right into the rear flank down draft of the tornado as it crossed Highway 321 in Granite Falls. Bobby had stated to me that the wind was so strong it moved his 6,000-pound Hummer. Also Brian Hudson KM4KIS dedicated his time to do damage assessments throughout the County after the tornado had touched down. Brian and Bobby both has received a certificate for their above and beyond commitment to the Caldwell County Severe Weather Net.

On a lighter note, the 2018 nominations for club officers have been officially announced. I am also nominated for club president for the upcoming year. And if elected, I vow to bring more recruitment and whatever it takes to make our amateur radio club great. This past year I have learned a lot being president and I have enjoyed meeting all the members and participating in club functions. I am looking forward to next year!

7 3 John AG4ZL



2 BURKE COUNTY TORNADO JESSICA



Caldwell CARES Activates

By Tom Land KA4HKK Caldwell
ARES Emergency Coordinator

The evening of October 23, John Crowe AG4ZL had the Caldwell Cty Severe Weather Net going, taking reports to pass along to the National Weather Service. He asked me to call Caldwell Emergency Management to confirm that people were trapped in homes in the Granite Falls area during the storms/tornado. When I called Kenneth Teague, Assistant Emergency Management Director, Kenneth asked if I could come to the EOC and get some people together to help with communications. He couldn't confirm that people were trapped.

I got to the EOC around 1825 and started operations at 1833. I walked into a hornet's nest of phones ringing and continuous radio chatter. The room was full of other Emergency Management personnel and representatives of other agencies. When Kenneth turned and saw me coming into the room he exclaimed, "here's our radio man!" I felt overwhelmed and appreciated at the same time. It was like nothing I had ever seen before. Most of the times I have been in there were during events that LARC and Caldwell ARES had participated in. Although we have had to monitor and operate several radios at the same time, we usually had at least two people starting off the operation at the same time and each knew what to do. This time was different.

I was told that we would be using the VIPER radios and was told what channels to be on. I was told that I needed to get someone to a shelter that was to be opened at South Caldwell High School at 1900. I would have to monitor three radios, one for the shelter, one for the Incident Command/Field Operations and one for Chainsaw Crews. I knew right away that I couldn't cover all the radios without help.

I started making phone calls. The first I thought of for the EOC was Ro, Maddox K4HRM because she had operated the radios at the EOC before. Well, Ro was in the path of the tornado and had received damage to her home. And she would have to cut her way out to the main roads! Which, from what I was hearing from



reports coming in would have been almost impossible. So I wished her the best and tried to think of someone else to help me. I then called Phil Crump KG4BCC because Phil works with one of the local fire departments and knew the VIPER radios and he was familiar with a lot of the people and the area. It turns out that Phil also works for Blue Ridge Electric, which had power lines in the same affected area! So he was helping out at dispatch at Blue Ridge! However, he was able to leave and come help at the EOC.

Next I had to find someone to go to the shelter and set up communications there. John Crowe, AG4ZL was able to provide that request. Luckily by then the storm was over and John was able to come by the EOC and pick up a VIPER radio and extra battery to use from the shelter. The shelter only had one or two people needing a place to stay. There weren't many needs at this time coming from the shelter, except the request for a "medical cot". John was able to stay until around 2330. He gave his VIPER radio to the Red Cross staff. Earlier, a Caldwell County Deputy Sheriff was there and asked John for his extra battery. After he gave it to him, we started using our DMR radios and operated on Lenoir Local.

The EOC closed around 2330 except for Kenneth and I staying. The phones kept ringing after the EOC was closed. But we weren't getting any direct radio traffic by then. So I secured my station at 2359 10/23/2017. However, I took a VIPER HT home with me to monitor the Red Cross Shelter. I was told by Kenneth Teague to call him if they needed anything. Nothing was reported.

I went back to the EOC the next day and manned the radio room again all day and Tim Sloat WV7TIM was able to provide communications from the Red Cross shelter. He came by and got an extra battery for the VIPER radio that was already there. Tim got to the shelter at 1137. By the time he got there, there were three people using the shelter. There were several requests from the shelter during the day. Most of them were asking about ETA on power being restored at the residences of the people there. By the end of the day, all of the people that were there had either found a place to stay with friends or relatives or had been put up in a hotel.

The phones were still ringing off the hook during the day but the radio traffic had died down to a trickle. So the EOC closed at 1835. Emergency Management and the Red Cross had decided to shut down the shelter around 2000 but Catawba County requested the use of the shelter for people from their county. Tim and I secured our stations at 1853 since the shelter would coordinate with Catawba County.

Caldwell Cty. Severe Weather Net, Caldwell REACT, and Caldwell CERT – all include several members of the Caldwell CARES and the Lenoir Amateur Radio Club -- were activated for this event.



LARC Eatin' Meetin' Set For December 14



Members, area Clubs, friends and others interested in amateur radio are invited to gather at The Mayflower Seafood Restaurant (303 Blowing Rock Blvd, Lenoir) on Thursday, December 14, at 6:00 PM, for the LARC Annual Eatin' Meetin'.

The dinner followed by a Dirty Santa gift exchange. Bring a wrapped \$10 gift if you wish to participate in the Dirty Santa.

Come say "Thank You" to the outgoing 2017 Officers -- Vice President, Secretary, and Treasurer – and wish the incoming 2018 Officers "good luck." A good time to talk radio and have a bit of food and fun. *See you there!*



LARC/Watauga Picnic/Fox Hunt Held October 28

A fun fox hunt and picnic was held on October 28 for the members of both the Watauga and Lenoir Amateur Radio Clubs at the Yadkin Valley Community Park, Lenoir. Even though, attendance was low, the event was a grand success – the food was good and the fox was found!

Attending were Josh N4JDE, John AG4ZL, Tim WV7TIM and wife Kat, Frank KN4ACU, Tanner KK4SZI, Tom KA4HKK and son and grandson, several members of the Watauga Club (didn't get list) and special guests Tom Brown N4TAB NC SEC, and Karl Bowman W4CHX NC SM.

While dodging some rain, there was plenty of time to hide and hunt the “fox.” The Watauga fox transceiver was hidden and everyone was able to locate the fox (except Tom KA4HKK who found the fox when it was brought back).

There was plenty of food and no one went home hungry! The facilities were excellent with a large covered area, plenty of tables, and bathrooms. It also had a kitchen but it was locked. The Yadkin Valley Community Park is a place the Club may want to use for an event in the future.





ARRL ARES Western Branch Holds Fall Meeting in Lenoir

The ARRL ARES Western Branch Fall meeting was held October 28 at the Library in Lenoir. The meeting was well attended. Caldwell ARES was represented by Tom Land KA4HKK, John Crowe AG4ZL, Josh Edwards N4JDE, Irv Kanode W4IWK, Tim Sloat WV7TIM and Frank Gordon KN4ACU.

ARRL NC Section Manager Karl Bowman W4CHX, NC ARES Section Emergency Coordinator/ NC AUXCOMM Coordinator Tom Brown N4TAB, and NC ARES Assistant Emergency Coordinator led the meeting discussions. Topics included: the working relationship between ARRL and FEMA/Homeland Security during emergencies, reporting ARES public service statistics and personnel to ARRL, the Parity Act, maintaining professional relationships between ARES, AUXCOMM and EM, the new NC Emergency Operation Plan and the need to have local plans consistent with the State plan, using WINLINK for other modes in addition to voice, distributing a list of WINLINK email contacts for the EOCs.

Tom Brown commented that NC is rated best in AUXCOMM operations and noted that the local ARES units needed to review the database and update member active status and deactivate inactive members. Also, members can make updates in the AUXCOMM database themselves by logging in their account.



A suggestion was made to find a more central location for future Western Branch meetings due to travel time.

The Lenoir Amateur Radio Club and The Watauga Amateur Radio Club held a picnic. Karl Bowman and Tom Brown joined the clubs for some BBQ and informal talks.

Note: The November LARC meeting program will be on ARES and Caldwell ARES Emergency Coordinator Tom Land KA4HKK will discuss the above issues in more detail.

Tower Building 101: Form Removal, First Winch Assembly, Digging First Ditch ~~ Mixed In With High Winds & A Tornado

By Dick Blumenstein K0CAT

Last month we removed 2 of the 4 concrete forms around the concrete tower foundation after much strenuous work, and then put the mast and mast bearing into the tower along with nesting the sections of the tower together and moving it closer to the foundation.

This month, we didn't get a lot accomplished (for the tower project) since there was a loooong "honey-do" list (the tower was lower priority), plus some very high winds and tornado activity.

The last two footer forms (below) surrounding the foundation presented itself as a reminder of the work required to remove the other 2 forms last month. These proved no different and were more difficult since they were buried deeper in the ground!



Here's where the concrete flowed up and around into the back of the form



... and what it looked like after it was chiseled and finally removed.



The final of the 4 form walls was the same. After chiseling the concrete, I was finally able to remove it,

After cleaning all the soil off the concrete top I started thinking about mounting the 2 steel arms that hold the winch assembly I had rebuilt that raises the tower from the horizontal to the vertical position.

I realized that due to the extra threaded lengths of the anchor bolt sticking up from the foundation that they would interfere with mounting a bunch of the hardware, so I first had to cut off all 6 bolt threads that were sticking up from the nuts.



Here's the first bolt that was cut off with the Sawzall. Below the cut off rod, you can see the bolt that I wanted to put into the hole to the right of it.

This allowed me to mount the metal arms at the bottom to the tower base frame.



A couple of construction guys from Tim McCaslin Construction just happened to be stopping by to address some previous work item and I pressed their formidable muscles into use to help mount the winch assembly. (Thanks so much guys!). That assembly probably weighed about 150 lbs. Here I am inserting the lower mounting bolt into the rebuilt assembly while they hold it in position.



As they continued to steady it, I could then swing up the 2 side arms to bolt to the winch frame.



Here's the finished winch assembly mounted onto the tower base, and looking back towards the house from where the motor power (and eventually the antenna coax) will need to be fed.



The power for the presently mounted winch and also for the winch assembly that will be mounted once the tower is raised into a vertical position is being fed from an existing power box mounted on the outside house wall between the 2 air conditioner compressor units.

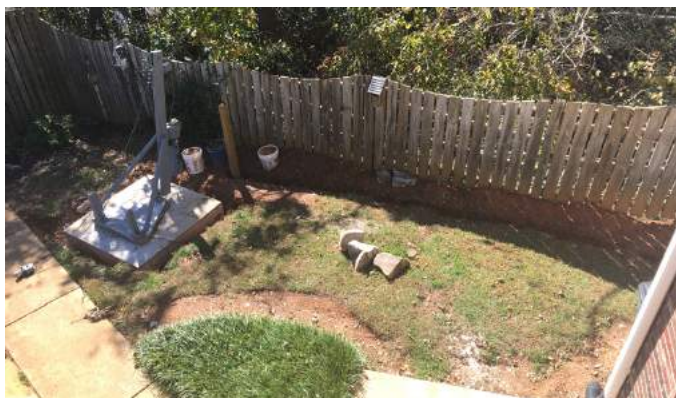
First I had to lay out a pathway where the power line ditch will be dug, using only 45 degree angles so that plastic conduit can be used.

Once the path was marked, I dug a very deep hole and concreted into position a 4x4 pressure treated post that will hold 2 boxes. One will be the power box and shut off switch, and the other will be a much larger plastic box into which the antenna coax will be fed.



NEC (National Electrical Code) requires that plastic conduit be buried a minimum of 18" below ground, so I marked a post hole digger at the 19" mark, and after pick axing the path of the conduit, starting digging the trench.

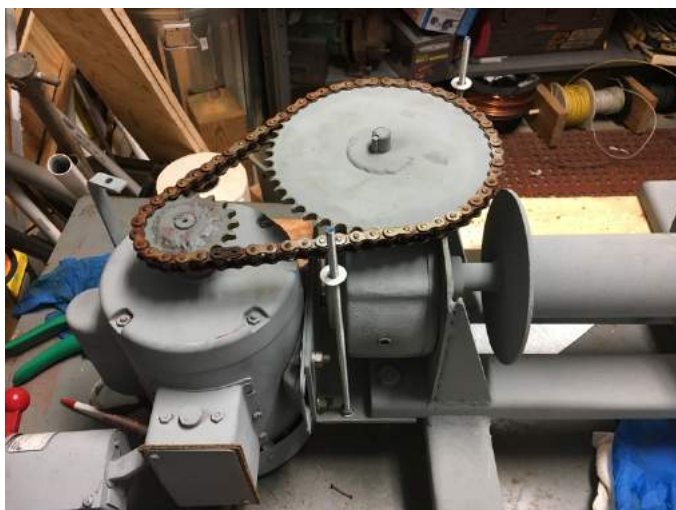




Here's what the trench looked like when it was dug about $\frac{1}{2}$ of the required depth.

Some rain intervened so it delayed the digging. Hence, I had an opportunity to build a shield to prevent one's clothing or fingers from getting caught in the vertical winch assembly's gears. Here's what it looked like before I fabricated the gear shield.

This is the point where I wished I had access to, or the skills to build a really nice gear shield, but that was not available. I started to form a shield out of sheet metal and pounded the heck out of it. Here it is not quite done:



The ugly (but functional) finished shield, fitted onto the vertical winch assembly. This assembly is now done (except for the power feed into the switch box) and is awaiting mounting to the tower when the tower goes vertical.

At about this time, on Monday October 23 in the late afternoon, a huge weather front carrying winds of up to 125 mph hit our area doing a tremendous amount of damage. An EF-2 tornado touched down near the Hickory Airport, destroying a hangar and a lot of airplanes, and then enlarged to $\frac{3}{4}$ mile wide and traveled up Grace Chapel Road to the NorthEast area



On our property, we sustained shingle damage to our house and another structure, along with fencing blown down and 4 trees toppled or split in half. Here's what our roof looks like, which is a lot better than some of our neighbors! We were relatively lucky compared to some others.



So the last week has been spent dealing with clean up, the insurance company and getting quotes from roofers and other vendors.

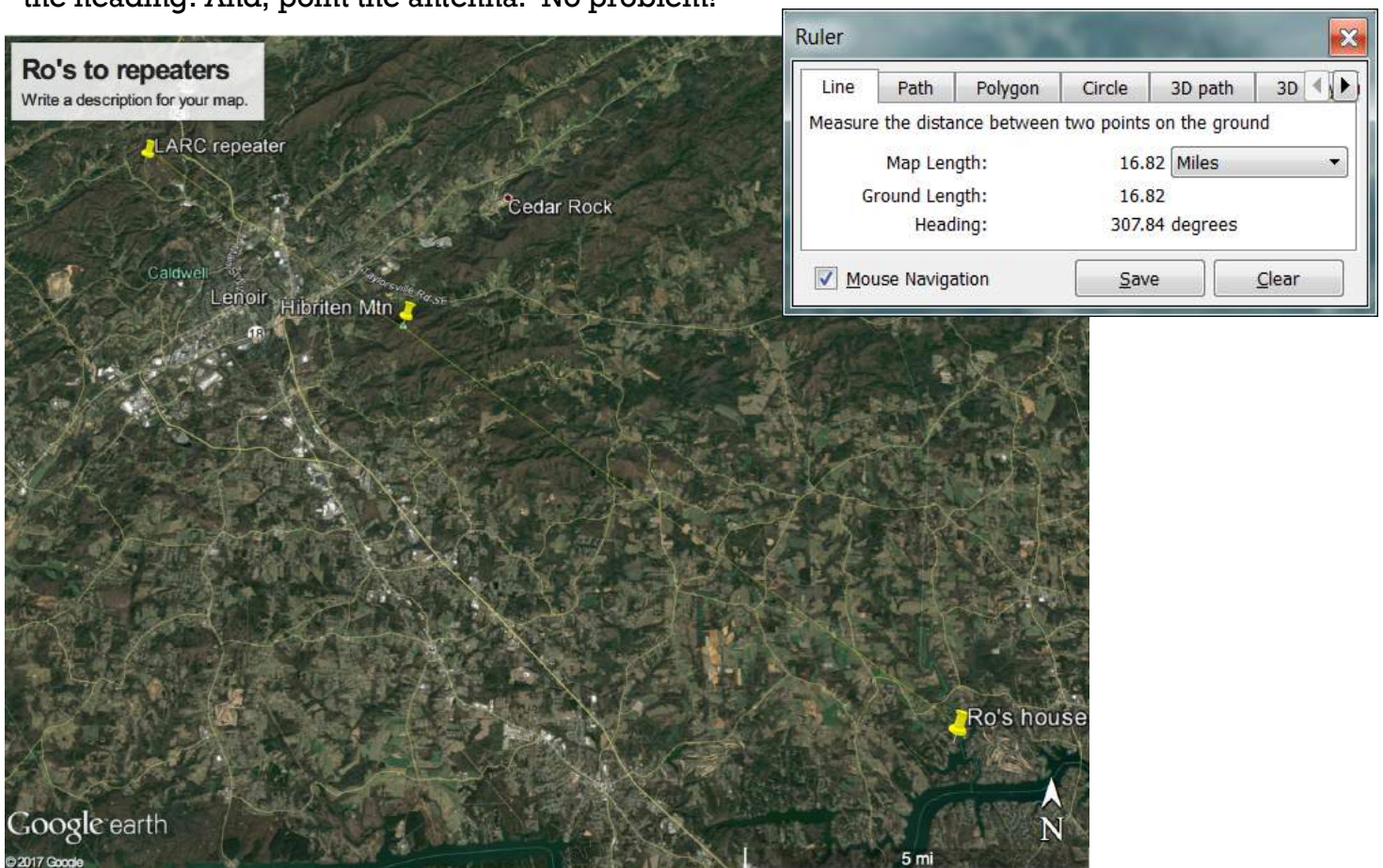
NEXT MONTH – Finishing the wiring power to the vicinity of the tower and attempting (hopefully) to move the tower to its foundation and raise it for the first time to a vertical position.

To be continued...

Using Google Earth Pro To Point My Beam

After getting more than frustrated with receiving the Club repeater, I began experimenting with different antennas – one being a beam. Figuring out how to point the beam was a good learning experience (thanks to Dick K0CAT) that I am sharing. Use Google Earth Pro free software.

Identify the points needed – see the yellow pins on the picture below – LARC repeater, Hibriten repeater, Ro's house. Use the Ruler to line these up (yep, right behind Hibriten) and calculate the heading. And, point the antenna. No problem!



A Personal Point of Privilege: I am taking a “point of privilege” to tell you how proud I am of the senior women with whom I play basketball. A couple weeks ago, our program (the Red Foxes) took 7 teams to the NC Senior Games State Finals Basketball Tournament at East Carolina University in Greenville NC. We returned with **4 gold and 3 silver medals** (the team I captain won silver).



We were referred to as dominating “senior women’s basketball” in NC. So proud of these women – ages 50 to 80 – for their hard work! Get up and move – fitness, friends and fun!

Upcoming Hamfests: Mark Your Calendar

November 19, 2017 **JARSFest 2017**, Johnson Amateur Radio Society, Benson, NC,
<http://www.jars.net>

March 31, 2018 **RARSfest/ARRL North Carolina State Convention**, Raleigh
Amateur Radio Society, Raleigh, NC, <http://www.rars.org/hamfest/>

July 21, 2018 **Mid-Summer Swapfest**, Cary Amateur Radio Club, Cary, NC,
<http://www.qsl.net/n4nc/>

LARC 2017 Officers



John Crowe
President
NC4JA



Josh Edwards
Vice President
N4JDE



Tom Land
Secretary
KA4HKK



Ro Maddox
Treasurer
K4HRM

**Send comments concerning the Newsletter
to Ro Maddox K4HRM hrmaddox@nettally.com
Suggestions and articles are appreciated.**