



MAY 2018

N4LNR

# News & Views

P. O. Box 3276  
Lenoir, NC 28645

Serving Amateur Radio  
In Caldwell County  
Since 1986

## Coming Events

### Volunteers Needed

May 12 Rotary  
Cycle to  
Serve Bike  
Race

Jun 23-24 Field  
Day

## REACT ~ LARC May Meeting

Rosemary Hall will present the May meeting program on REACT—what is it and how it relates to CERT, LARC and ARES. REACT volunteers have a desire to assist their communities in times of emergency or disaster. Members provide their expertise when disasters strike and assist with augmenting local resources with the goal of accelerating relief efforts. REACT members interface with Caldwell ARES and LARC on a number of events as well as with CERT.

A brief business meeting will follow the program, including final planning for the Cycle to Serve event. Hope to see you there!



**Next LARC Meeting:**  
Thursday, May 10, 7:00 PM,  
Gamewell Fire Dept.  
2806 Morganton Blvd SW,  
Lenoir

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

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

**DMR Digital Net:**  
Tuesday, 8:00 PM, Lenoir  
Local DMR

## Galvanic Corrosion (from the ARRL Contest Update, May 2, 2018)

When two dissimilar metals are in contact, corrosion may occur due to differing electrode potentials of the metals. Metals are [ranked according to their electrode potentials](#), the more "negative" of two metals will usually be the one to be corroded, if smaller in area than the more "positive." Radio towers and antennas are usually constructed of metal, and care must be taken when using fasteners, clamps, and hardware to ensure compatibility between metals that are in direct contact. The environment also has a large influence on corrosion -- for example moist versus wet, and fresh versus salt water. ARRL's website has an [article on galvanic corrosion](#) that may inform your choices.



**Ever hear of GNU Radio?** I had not, but when I was talking to another ham, the question came up—"have you done anything with GNU?" Nope, but I was curious enough to look it up on the Internet – [www.gnuradio.org](http://www.gnuradio.org) -- and quickly realized I was way out of my league. So, if you're into "signal processing blocks to implement software designed radio," here's your site!

## LARC Email Communications Revisited!

Did the change in the LARC email system confuse you? Well, some folks started getting a lot of extra email chatter and wanted to know what gives! First, let me say we expected a few bumps in the e-road as we shifted from maintaining five email lists to using only two—one for LARC newsletter only, and one for all other email communications.

For several years, LARC members have communicated with each other about amateur radio in an interactive Googlegroup; however, a large segment of our ham community was not involved in these great discussions since they were not members of the Lenoir Amateur Radio Club. In refocusing our communications, we are hoping to engage the broader amateur community in activities, such as field day, fox hunts, trailer and repeater work days, Elmering, special programs, training, problem solving whether they are LARC members or not. We want to inform and communicate radio-related activities that LARC and others are involved in and hope that you will get involved and help keep amateur radio fun!

Our hope is that if you see a LARCmembers email that says, "how about let's do some 10-meter rag chew on 28.450 at 7:30 tonight" that you will join in. Or, "we need someone who knows about balloon chasing to talk to some local scouts" that you will come forward. It helps exercise our radios and expands our knowledge base.

**But, if you only want to get the LARC newsletter or don't want to receive anything from LARC, send an email to [garysch69\(at\)gmail\(dot\)com](mailto:garysch69@gmail.com) saying "newsletter only" or "remove me completely" and it will happen.**



# Catawba Valley Hamfest

## April 21 ~ Morganton

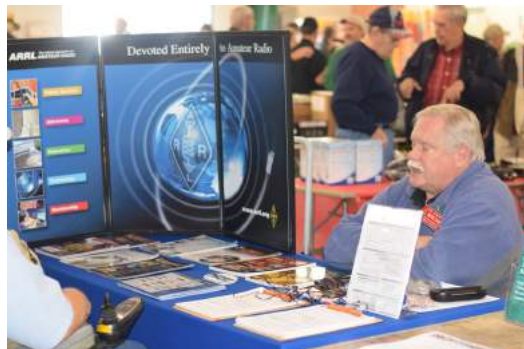
The Catawba Valley Hamfest moved back to its April roots and was a grand success! The biggest crowd in several years wandered the exhibit floor and the boneyard was busy. The Lenoir Amateur Radio Club, along with McDowell ARC, Western Piedmont ARC and Western Piedmont Community College, sponsored the annual event at the Burke County Fairgrounds, Morganton.

Several prizes were awarded each hour and the Grand Prize was a Yaesu 857D transceiver, with lesser prizes being a TYT TH-7800 mobile transceiver, and two BaoFeng UV-82 hand-held transceivers (one being donated by LARC).

LARC had a table where member items were for sale. Tom KA4HKK, John AG4ZL, Ro K4HRM, Brian KM4KIS, Angel N8VRS, and Frank KN4ACU took turns at the table. Tom reported that over \$300 was generated from the items on sale.

Brian KM4KIS introduced his new daughter, Emma, to hamfests as she took in all the flashing lights and noisemakers. Michelle KD4YTU was at the Foothills Community Workshop booth and gave away laser etched callsign plates.

This year's hamfest was much better supported than in the past few years thanks to the efforts of the organizers to bring in more vendors. ARRL NC Section Manager Karl Bowman was also present at the ARRL Booth. Shelby Hamfest sponsors manned a table and sold advance tickets to their Labor Day weekend event.





## LARC & Amateur Radio Science Street ~ April 28

The Lenoir Amateur Radio Club held its first exhibit at the NC Gravity Games on Science Street, April 28. The NC Gravity Games is a signature event of the North Carolina Science Festival. The main events were a gravity-powered race and STEM extravaganza designed to get students revved up about science, technology, engineering and math. Event sponsors were Google, Appalachian State University, the University of North Carolina, and the City of Lenoir.

The LARC exhibit featured a video of the modes of amateur radio – VHF, UHF, HF, CW, Digital, and SSTV as well as satellite tracking, talking to the International Space Station, balloon chasing, and disaster response. LARC teamed with Catawba Valley Community College Hot Air Balloon Team to track a near-space balloon launched during the Gravity Games--the balloon reached 109,000 feet and came down North of Winston-Salem. Dick K0CAT set up his solar station that powered the LARC exhibit and was a focal point for visitors.

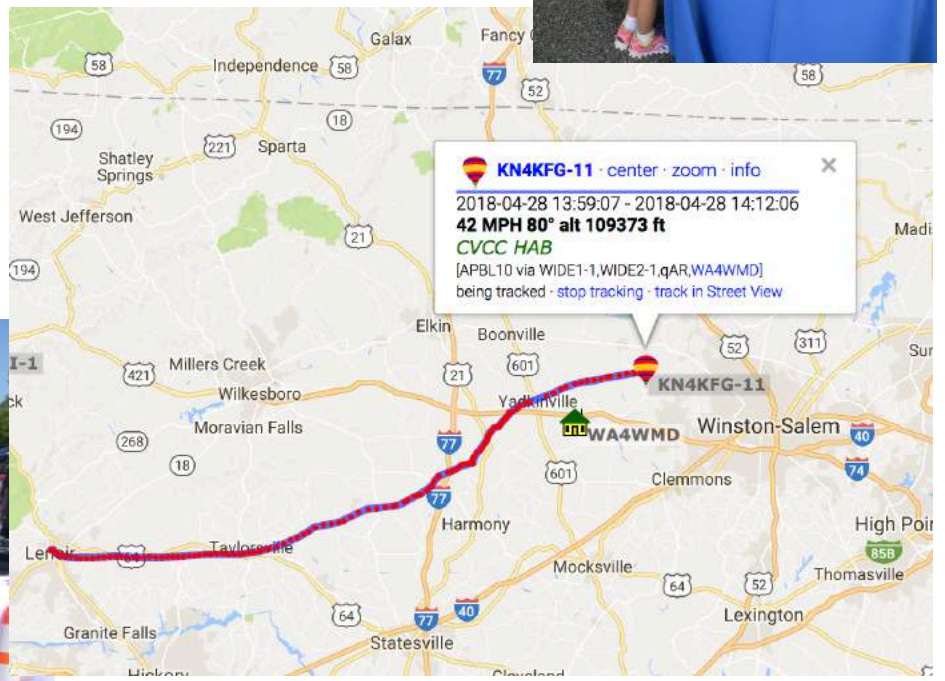
The LARC exhibit was located on Science Street (a giant tent) where hundreds of visitors passed through to visits exhibits that ranged from robots to snakes. The theme of the LARC exhibit was “hands-on experience with amateur radio can develop skills and interests that lead to professional careers and a lifelong hobby.” Volunteers were Tom KA4HKK, John AG4ZL, Dick K0CAT and wife Jill, Brian KM4KIS, and Ro K4HRM. Thanks to Tanner KK4SZI for making the amateur radio video that played throughout the event. Also, thanks Gary K3OS for providing for remote operation of his HF station.

The exhibit team had to deal with crowd noise, bad RF reception, spotty Internet, and HF radio equipment not arriving as planned. As a first-time exhibitor at this event, the team learned a lot about the “instant gratification” need that should be built into the exhibit to attract more kids -- and the event sponsors have already invited the Club to participate again next year.

Josh N4JDE worked with the Collettsville Red Devils gravity racing team and their cars finished in the Top 8 and Top 16. There were over 50 racing teams participating in the gravity event.











## Caldwell ARES/AUXCOMM

### Focus on Forecasts



The 2018 Hurricane Season begins June 1. What does this season have in store? The TSR released the first forecast for the year in December 2017, predicting a slightly above-average season with a total of 15 named storms, 7 hurricanes, and 3 major hurricanes. Then Colorado State University released their prediction April 5, 2018, saying a slightly above-average season with 14 named storms, 7 hurricanes, and 3 major hurricanes on April 5, 2018. That same day, TSR released a second forecast calling for a slightly-below average hurricane season, predicting 12 named storms, 6 hurricanes, and 2 major hurricanes, due anomalous cooling in the far northern and tropical Atlantic. And, on April 16, North Carolina State University released their predictions for a well above-average season, with 14–18 named storms, 7–11 hurricanes, and 3–5 major hurricanes. On April 19, The Weather Company released their first forecasts, calling for the season to be a near-average season, with a total of 13 named storms, 7 hurricanes, and 2 major hurricanes. So, we have it from the experts – lots of activity this hurricane season!

The National Hurricane Center announced that starting with the 2018 season, they plan on shrinking the size of the “cone of uncertainty for hurricanes,” thanks to improvements on their forecast record. Reducing the cone size stems from the data that forecasters receive from Hurricane Hunters inside the storm.

Lieutenant Garrett Black, Aerial Reconnaissance Weather Officer (ARWO) of the 53rd Weather Reconnaissance Squadron (Hurricane Hunters), said, "Our data is averaged to typically reduce about 30 percent of the cone size, so if the forecaster did not have our data, the cone size would be about 30 percent larger, from different studies that have been done. That data is shrinking the cone roughly 30 percent and it gives the forecasts more confidence in their forecast and hopefully we can continue to build that lead time up to help people be prepared."

In addition, NHC forecasters will extend watches and warnings out to 72 hours to allow an extra 24 hours for storm preparation. Also, experimental models used in the 2017 Atlantic Hurricane Season, such as a dangerous wind arrival map, will be permanent features.

Along the way, we got a new word to consider – “areal” as in “areal flood watch”. What? The word “areal” is the adjective version of the noun “area.” There's no word on why the National Weather Service changed the name of the watch. The word “areal” refers to an area, which is an expanse of space or a region of land. Not to be confused with “aerial” which means of or relating to the air.



## KG4BCC Upgrades Hibriten Repeater

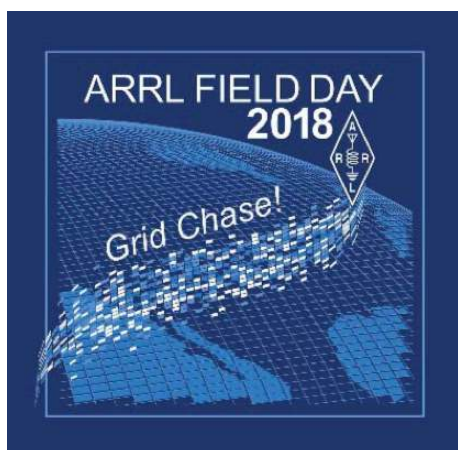
You probably have noticed a stronger signal from the Hibriten Repeater. Phil KG4BCC reports that he has added a new antenna and increased the output power of the repeater.

Additionally, Phil and James N4NIN have worked together to set up a link option for the KG4BCC and N4LNR repeaters. This will allow the two repeaters to be linked for emergencies and public service events. Club members will be able to initiate the link when necessary.

Please give both Phil and James a big “thank you” for their work in making amateur radio communications convenient and with a big footprint!



Want to listen to live audio streams – fire, police, EMS, aircraft, railroad, and **KG4BCC HIBRITEN REPEATER**? Thanks to Brian KM4KIS, you can go to [Broadcastify.com](https://www.broadcastify.com) and listen to live feeds or download the apps from Apple or Google to your phone or tablet and listen on the go. During the recent severe weather event, I carried my phone in my pocket and kept up with the Caldwell County Severe Weather Net for 3-4 hours without being tied to my shack desk. Thanks, Brian!



Field Day 2018 is less than a month away. How will you get involved? Volunteer to tow trailers, setup/breakdown, handle food, and operate radio! **You do not need to be a LARC member to participate.**

Help make this Field Day one for the record books.



## June/October 2018 Basic CERT Class



The CERT (Community Emergency Response Team) course is a great way to learn how to prepare for any type of disaster and to assist you, your family members, and neighbors during emergencies. The class is free and will be held in Lenoir during June and October 2018. Our members assist the community in many ways including during the 2 tornadoes last fall. Space is limited, so register today!

**Location:** Caldwell County Health and Human Services Building, 2345 Morganton Blvd SW, Lenoir, NC

**Registration:** Send an email to [caldwellcountycert@gmail.com](mailto:caldwellcountycert@gmail.com) with **your name, address, phone number.**

**Please note which class you wish to attend, June or October.** Participants are expected to attend all 6 classes. There is no fee for taking the CERT Basic Training Class. Groups are welcome.

June Class	October Class	Topic
6:00 – 9:00 pm Mon. June 18	6:00 – 9:00 pm Mon. Oct 15	Disaster Preparedness CERT Organization
6:00 – 9:00 pm Tues. June 19	6:00 – 9:00 pm Tues. Oct 16	Disaster Medical Operations-Part I Disaster Medical Operations - Part II
6:00 – 9:00 pm Thurs. June 21	6:00 – 9:00 pm Thur. Oct 18	Light Search and Rescue Operations Cribbing Exercise
6:00 – 9:00 pm Mon. June 25	6:00 – 9:00 pm Mon. Oct 22	Fire Safety and Utility Controls Fire Extinguishers Exercise (Class at N. Catawba Fire Station)
6:00 – 9:00 pm Tues. June 26	6:00 – 9:00 pm Tues. Oct 23	Disaster Psychology Terrorism and CERT Emergency Communications/Radios
6:30 – 8:30 pm Thur. June 28	6:30 – 8:30 pm Thur. Oct 25	Group exercise Graduation/Refreshments Caldwell County REACT* Meeting

\*Caldwell County REACT is a nonprofit organization of CERT-trained volunteers.



# Upcoming Hamfests: Mark Your Calendar

May 12: **13th Annual Rockingham County Swapfest**, Rockingham County Amateur Radio Club, Reidsville, <http://n4iv.org>

July 7: **33<sup>rd</sup> Annual 2018 Firecracker Hamfest**, Rowan Amateur Radio Society, Salisbury, <http://www.rowanars.org/firecracker-hamfest/>

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

July 28: **WCARS Hamfest**, Western Carolina Amateur Radio Club, Waynesville, <http://wcars.org>

August 11: **20<sup>th</sup> Annual Cape Fear ARS Swapfest**, Cape Fear Amateur Radio Society, Fayetteville, <http://www.cfarsnc.org>

August 31-Sept 2: **Shelby Hamfest/ARRL Roanoke Division Convention**, Shelby Amateur Radio Club, Shelby <http://shelbyhamfest.org>

## LARC 2018 Officers



John Crowe  
**President**  
AG4ZL



Tom Land  
**Vice President**  
KA4HKK



Frank Gordon  
**Secretary**  
KN4ACU



Dick Blumenstein  
**Treasurer**  
KOCAT

Send comments concerning the LARC NEWSLETTER to Ro K4HRM [hrmaddox@nettally.com](mailto:hrmaddox@nettally.com)

Suggestions and articles are appreciated.

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