

NALINR News & Views

P. O. Box 3276 Lenoir, NC 28645





Serving Amateur Radio
In Caldwell County

Save the Date!

Next LARC Meeting September 10, 2015 Thursday, 7:00 PM Gamewell Fire Dept 2806 Morganton Blvd SW, Lenoir

LARC Weekly Net Thursdays 9:00 PM 146.625 MHz Minus PL 94.8 Alt 147.330 MHz Plus PL 141.3 TSQL

Caldwell ARES Net Sundays 9:00 PM 147.330 MHz Plus PL 141.3 TSQL





Whether you are brand new to ham radio (or just thinking about it) or you have been in the hobby since Marconi was a boy, the Shelby Hamfest is where you need to go this Labor Day weekend. Known as the "Grand-Daddy of them All", Shelby offers something for everyone. Start the day with an update of the goings-on in the Roanoke Division and NC Section, then move on to the Fairgrounds and begin a systematic perusal of "anything and everything amateur radio". Talk to manufacturers, vendors and club members about what's new and how it will make your radio station the envy of the neighborhood. Stop by the ARRL booth where, if you join ARRL or renew your membership, you can pick up a free gift. Oh, did I mention, meet up with old friends and make a few new ones!

See you at the Shelby Hamfest this weekend!



President's Message Antenna Making

When I first passed the test and received my general license, the first thing on my list to get after a radio was an antenna. I spent days looking for just the right one for my lot. Not having much experience at the time, I purchased a pre-made dipole kit by Alpha Delta, the DX-CC. It has been a really good antenna and I have made many contacts since I have owned it. I do not know if it was a field day experience or someone telling me a homebrew antenna building tale but I decided one day that buying an antenna was not enough, I wanted to build one myself.

The Internet is such a valuable resource for ham related information so off to the cloud I went. I looked up all kinds of designs but knowing my first field day was coming up, I decided on a simple dipole. At first I thought that putting up my own antenna was going to be a hard thing to do. But after finding the right information, I found that it was very easy and a 40m-dipole antenna was born. We placed it at the top of a 35-foot pole in an inverted V configuration at field day. We used Phil's radio on that antenna to make over 200 contacts in 24 hours. It was definitely a success.

From that day until before field day this year, I focused on other aspects of the hobby but field day 2015 brought back that renewed vigor. This year I decided to make a multiband dipole. It took a good bit more wire and time but finally I got it assembled. Tuning it was a little more painful because you have to work from the lowest band to the highest band but with the help of an antenna analyzer and a few helpers we made it work. It worked pretty well on 80m, 40m, 20m, and 15m. I was hoping I was going to be able to get 10m out of it as well but did not have any luck. With just that antenna our station made 300 contacts to other hams all over the US and around the world!

I was amazed -- so many contacts from just a wire on a pole? It is amazing to me how many different antenna designs are out there and I decided that this year I would build some antennas for my home station and not just limit my antenna making to field day. Right now I am in the process of building a delta loop antenna for 20m. I have it up in the air but still need to tune and try it out. Antennas come in so many shapes and sizes and even can be made from aluminum cans. If you did not get to hear John Crowe's presentation about Emergency Antennas a few meetings ago, you really did miss out. He details many different antenna designs during his talk.

I found that it is much easier to build antennas than it seems. Most of you probably have several antennas already, but try your hand at making one anyway. If you look on the web you will surely find a different design or maybe just an antenna for a band you do not work regularly. It is a load of fun to build and very rewarding to be using something you crafted with your hands to talk to others from around the globe. Even though I mention mostly HF antennas in this column there are many different VHF and UHF designs to choose from as well. Maybe you would like to try your hand at talking to satellites or the International Space Station. Run by your hardware store, get a tape measure and some PVC and drag out the solder station. It can be as easy as that.

Change Radio Settings for Hibriten Repeater!

A new repeater has been installed on Hibriten Mountain. (See article in the LARC August Newsletter.) Having trouble receiving/transmitting? Check your Radio Settings!

- 1. Frequencies are the same --147.330 receive and 147.930 transmit.
- 2. Tone is the same -- Tone 141.3, but you need to add **Tone Squelch**. This will enable your radio to not only transmit a tone when keying up, but to also open the squelch when receiving the same tone from the repeater. This will ensure you do not hear digital transmissions (being transmitted unsquelched).
- 3. Bandwidth changes from 25 kHz to 12.5 kHz (wideband to narrowband). This is a simple programming change in your radio menu. Radios manufactured in the last 15 or so years will support this, if your radio does not, it's not a big deal.



Caldwell CERT Schedules Fall Events

Caldwell CERT has announced the following events. Registration instructions and additional information on each event can be accessed at www.caldwellcountycert.com.

Sept 12 – NC CERT State Quarterly Meeting. 1:00-4:00 PM, Tammy Austin Conference Center, HHS Bldg., 2345 Morganton Blvd, SW, Lenoir

Sept 15 – Triage Class. 7:00 PM, Grace Chapel Volunteer Fire Dept., 4470 Grace Chapel Rd, Granite Falls

Oct 3 - Foothills Fire & Life Safety Festival. CERT Display Booth, CVCC, Hudson

Oct 10 - Caldwell County Disaster Exercise. 9:00 AM. Location TBA. Volunteers needed to be "victims of the disaster"

Nov 7 – Search and Rescue Skills Training. 10:00 AM – 3:00 PM, Location TBA, cookout to follow training.

How Safe Is Your Ham Shack?

By Phil Ashler N4IPH

I read an interesting article a few days ago by Patrick Tice, WAOTDA, the *HandiHam* Manager, about safety in the various areas of our hobby. He was thinking back on a recent ARRL Field Day making point of some of the "good housekeeping" he observed at several of the operating positions; coax-feeding neatly coiled up on a hook and secured with plastic wire ties was one of the first things he mentioned in the article. Pat asks the question: what topic is so important that it is found in EVERY Amateur Radio Question Pool?



After working on a small project, do you return the tools you used to the toolbox or do you simply leave them on the desk under a pile of papers because you know you might need them later? Then in a week or so you look for the wire-cutters or the special tool and it is nowhere to be found! He remembers visiting several "ham shacks," one in particular where a ham was running a tube-type rig located under a pile of papers, another had a week-filled yard with hidden wire and antenna parts – a natural obstacle course. Pat admits that he hasn't always been the best example of tidiness over the years. Like most of us, he had several projects going on at the same time, not finishing one before he started another. You may have guessed the correct answer to Pat's question above: It was Element "0" SAFETY, the final element in the question pools for all classes of Amateur License. RF Safety, wiring, tower safety, grounding, dangerous chemicals & toxic gases, shock hazards and power line dangers are also covered in all the question pools. Pat continues with several pieces of advice on how "he" has managed to keep his operating position, feed lines and antennas as safe as possible, not only for himself but for others; including visitors, children and pets.

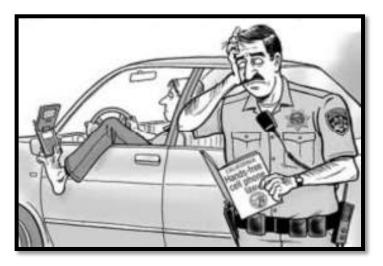


Back to this article's initial question: How Safe Is Your Ham Shack? How safe is your operating position... your feed lines and antennas? After reading Patrick's article, I started to look around my place to see how many "safety violations" I could find. It didn't take long to start a list; electrically, my place is pretty safe. I have a "master cutoff" switch in both operating areas as well as in my main house.

I have "most" of my equipment connected to a "common ground" and a ground rod buried outside the shack. My tower is also grounded and physically secured with the recommended wire guying support. The coax is high enough to prevent any problems. I make a habit of disconnecting my antenna outside the shack and also tossing the coax away from the building. The electricity is disconnected unless I'm physically in the shack or at the operating position. So far, I've been pretty lucky from Mother Nature's wrath except for the time a close lightning strike came in through the 'common ground' taking out two rigs. A neighbor's tree decided to split the roof of my workshop/shack during a tropical storm a number of years ago. While we're looking at 'operating positions', how safe is your 'mobile' shack?

How many wires, microphones, rig controlheads and other assorted items does a ham's vehicle have to have before it becomes a potential safety hazard? I've seen some of the mobile 'stations' of hams in the area and they look like the 'NASA Control Point' during a Shuttle launch! They're a big jump from the simple HT we all had 20+ years ago. I have seen some setups that were very neatly organized and others that had a 'little cleaning up to do'. While writing this, I heard a news report on a local radio station that the Florida Legislature with pressure from the AARP was pushing for an 'antitexting' bill. What do you think would happen if they looked inside one of our 'all band, all mode, digital rolling communications vehicles'?





How safe is your mobile installation? Do you have wires, microphones, antenna leads, coax switches and multiple transceiver heads scattered all over your front console (like the picture)? How are you able to comfortably reach, let along adjust anything on your variety of equipment? Do you know what microphone goes with which radio? Are you able to keep your eyes on the road and still carry on a conversation with all that stuff to worry about? There are several very articles on how to safely install your Amateur Radio equipment; one I found most interesting was on the

web eHam.net by Alan Applegate K0BG: http://www.eham.net/articles/20723

He warns about putting equipment where it may interfere with air-bag deployment in case of an accident, and states that "Air Bags are not filled with air... their contents include cornstarch, glass particles, nitrogen, potassium nitrate, silicon dioxide, sodium azide (a Class A explosive, and a dangerous carcinogenic inhalant), sodium bicarbonate, sodium hydroxide, talcum powder, and several different oxides. Ranging from benign to hazardous, these chemicals are involved in exploding the air bag (typically made of nylon) in less than 200 milliseconds." Alan covers other topics such as mobile antennas; both mag-mounts and permanently installed antennas. Also, where to mount the main unit; not under the seat as it's one of the hottest areas of the vehicle.

I've only touched on a few of the topics that concern safety in the Ham Radio hobby. If you wish to get more information, simply do a Google Search on "Safe Amateur Radio Installation" and see what you can find. There's a lot of information and tips from our fellow Amateurs.

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Boone UHF Digital Net Returns September 5

Marv Hoffman WA4NC has announced the restart of the Boone UHF Digital Net to be held each Saturday night at 8:00 p.m. on the Boone and Sugartop DMR digital repeaters on the Local Talkgroup. The purpose of the net includes:

- a. Passing along information to the group concerning ARES/AUXCOMM
- b. Gathering information about the coverage of the linked Boone and Sugartop repeaters.
- c. Providing an opportunity for digital users to become acquainted with each other over the air.
- d. Exchanging information about amateur radio in the High Country.

Net control will call the net to order and invite stations to check in according to call sign suffix groupings. Net control will pass along information of general interest to the group and then invite comments from net participants. At the conclusion of the net, participants are encouraged to communicate directly with each other.

WA4NC will initially be the net control but John WA4J and Scott K2SD have agreed to fill in when needed.

The footprint of the two linked repeaters covers much of Watauga, Avery, Ashe, Wilkes, and Caldwell Counties. Participation is encouraged. Please invite anyone with DMR capabilities to join in the net.

The first session of the net will be Saturday evening, September 5. No doubt many will have comments about what they saw, bought or wish they had purchased at Shelby earlier in the day.

From The August Meeting

Attendees. Tanner KK4SZI, Tom KA4HKK, Josh N4JDE, Susan N4OJN, James N4NIN, Ro K4HRM, Scott KC4SWL, John N4LBX, Michelle KD4YTU, Jeet KK4CCA, Gary K3OS, and guests Tim Slay N4IB (program speaker), Curt Hiller, Marv Hoffman WA4NC (WARC), Danny Horney KE4APP (WARC), James Harrison WS4JH (WARC), Pierre Coovert, Ken Fair N9PWB, Donna Fair.

Membership. Ken Fair N9PWB was approved as a new member.

Repeater. John N4LBX took lead on Club repeater project. He is trying to locate a tower climber. Tanner KK4SZI to develop a list of needed work.

Trailers – Communication & Antenna. Possibility of storing trailers at Lovelady FD fell thru so its back to seeking a storage location. Tanner KK4SZI will appoint committee to develop an equipment list for the trailers for review by members. Additional workdays will be scheduled.

Public Service. Volunteers needed for the following events: 1) LARC Day (September 19, 2-10 PM) at the Road Show Amateur Radio Club Special Event Station N4F and Booth at the NC Mountain State Fair, Asheville NC. 2) Foothills Fire & Life Safety Festival on October 3 at CVCC. Michelle KD4YTU suggested the Club should enter the Communications Trailer in the Charlotte Maker Fair on October 10. She also reported that Foothills Community Workshop is planning upgrade sessions for General and Extra License in October. Tom reported that the NC Western Regional CERT meeting is in Lenoir on September 12, 12-5 at the HHSs Bldg. on Morganton Blvd. Attendance is encouraged.

Program. Tim Slay N4IB was program speaker on the topic of Remote Station Operation over the Internet using RemoteRig. He had a remote station setup and demonstrated its operation.



LARC Sponsors Day at NC Mountain State Fair Ashville - September 19

LARC will join with the Road Show Amateur Radio Club to sponsor a day at the NC Mountain State Fair on September 19, 2015, 3:00 – 9:00 p.m., at the Western North Carolina Agricultural Center, 1301 Fanning Bridge Rd., Fletcher, NC (across from the Asheville

Airport, I-26 Exit 40). Last year, the Fair attracted 191,000 visitors. The Fair celebrates the people, agriculture, art and tradition that make the region great.

The Road Show Amateur Radio Club joined by area Clubs hosts a visitor's booth and special event station N4F. This is possibly the largest public ham radio demonstration in the Southeast. Volunteers are needed to work the event. If interested, contact Tanner KK4SZI at tannergreer@bellsouth.net.



Come and bring the family, enjoy the Fair and operate some radio! See you there.

LARC 2015 Officers



Tanner Greer
President
KK4SZI



Tom Land
Vice President
KA4HKK



Josh Edwards
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Phil Crump Treasurer KG4BCC

Send comments concerning the LARC NEWSLETTER

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