



JUNE 2016

# News & Views

N4LNR



Serving Amateur Radio  
In Caldwell County

P. O. Box 3276  
Lenoir, NC 28645

## Next LARC Meeting

Thursday, June 9  
7:00 PM

Garnewell Fire Dept.  
2806 Morganton Blvd SW  
Lenoir

## LARC Weekly Net

Friday, 9:00 PM  
146.625 Minus 94.8  
Alt 147.330

## Caldwell ARES Net

Sunday, 9:00 PM  
147.330 Plus 141.3

## DMR Digital Net

Tuesday 8:00 PM  
Lenoir Local DMR

## Next WPARC Meeting

Monday, June 13 7:00 PM  
Foothills Community Wkshp  
10 Falls Ave  
Granite Falls

## Getting Ready for a "Boots on the Ground" Weekend ~ Field Day 2016

The next meeting of the Lenoir Amateur Radio Club will be Thursday, June 9. The meeting will begin with a brief business meeting and the remainder of the meeting will focus on making final plans for Field Day 2016 to be held at Redwood Park June 25 and 26. Each year our Field Day event just gets better and its all thanks to the tireless efforts of our Club members and area amateur radio operators. All licensed amateurs are invited to operate radio at Field Day so come to the June 9 planning meeting and be a part of our "ham team."



# President's Comments: Dayton Round 2



It is that time of year again. The cooler weather of spring is starting to fade and summer is almost here. Warmer weather is already here and even warmer weather is coming. To some of us, the summer spells their least favorite time but for me it is a time in which I greatly enjoy. As some of you may remember in my previous writings, I have not been a Ham very long. In fact, August will be the four-year anniversary of my time as a radio operator. Last year was the first year I had ever gotten the chance to go to Dayton. If you remember in my article, I was amazed at the vastness and amazed at the scope of the event.

This year I did not think I was going to be able to make it. The timing and my schedule didn't seem like they would work out and it was only three weeks ago that I even figured out that I would be able to make it. Last year I went into the Hamvention a rookie. This year I hoped my experience would allow me to enjoy it even more.

This year I arrived in a small car instead of a charter bus and parking consisted of a



grass field instead of the lot beside of the arena. The weather was bit chilly and moist and rained threatened throughout the morning. As I walked beside the fence to the bone yard on my way to the ticketing office, I saw some familiar tents and booths that I could remember from last year. After purchasing my ticket, I headed into the inside arenas and starting looking at the new equipment that each vendor had to offer.



My first stop was the ICOM booth in the main arena. After talking about possible HF radios for the communications trailer for the last couple meetings, I wanted to get my hands on the IC-7300 myself. For those that do not know, this ICOM radio is the first from a major manufacture to be software defined instead of more traditional means. After a quick demo, I was impressed with the unit and wrote down some notes to bring back to the club.

I moved through the first arena and stopped by the booths of Ham Radio Outlet, DX Engineering and the like.



As I moved into the next few buildings, I noticed that many companies have digital radios of one form or another. It seems that DMR, Fusion, and DStar are here to stay. I saw handheld DMR radios for just a little over one hundred dollars. One interesting product to note is the DV4MOBILE from the company Wireless Holdings. It is a triband (2m, 220,440) radio that will from the factory do DMR, DStar and C4FM (Yaesu Fusion). Later they plan to release support for P25 and several other digital modes. It should be priced a little less than \$1000. One



cool feature it has a built in LTE card that will download the frequencies for the repeaters in your area based on GPS. They are supposed to release it later this year.

After moving through the last arena, I made my way to the bone yard. It was neat to browse through all of the old equipment. I noticed that there is a lot of public safety equipment up for sale due to the upgrades they have done to emergency communication systems over the years. I visited many of the booths and picked up a few small items. After working my way through each section of the bone yard, I checked out the Dayton Radio Club's Communication trailer. It is something to behold with its 100-foot crank up tower and huge 60 inch TV's behind Plexiglas that show what the operators are doing inside.

My second trip to Dayton was just as awesome as the first. If you have never gotten the chance to go, make plans next year to drive up to Ohio and enjoy the festivities. For those that care more about education, they have many classes through the weekend where they give instruction on different aspects of radio and for those looking for a particular item, there is a saying that goes, "If you can't find what you need at Dayton, then it does not exist!"



### 7 3 Tanner KK4SZI

# Looking Back: Thirty Years Ago ~ June 1986...

By June, the LARC Newsletter had added an “associate editor” and introduced it’s first “editorial” by Charlie Eaker KB4SGO. It is a real nail-biter as he describes the experience of being a “brand new novice”, buying his first used radio and getting his first antenna in the air. He made his first radio contact using CW with James N4NIN after discussing it by phone and being “nervous as a long-tailed cat in a roomful of rocking chairs.” He was astounded to realize he could send CW but he could not copy it well enough to make sense of the message. His “elmer James” pointed out his mistakes and praised him for what he had accomplished. Charlie admits that reading the book doesn’t answer all the questions for a practical radio contact— you just have to “do it!”

Cash and equipment donations were needed as discussions of installing a Club repeater began. Attention was brought to two issues before the FCC involving increased access to the 10-meter band and repeater coordination to address interference problems caused by uncoordinated repeaters. Several new hams got licensed or upgraded since the prior month and the first VEC exam was held in Valdese not requiring travel or dealing with hamfest crowds. The fee for a VEC exam in 1986 was \$4.24. The June meeting of the newly formed Club will be the first reading and discussion of the proposed Constitution and Bylaws.

Note: You can read the complete June 1986 Newsletter at <http://n4lnr.org> under the heading Newsletters.

## May Meeting Notes...

**Attendees:** Tanner KK4SZI, Josh N4JDE, Tom KA4HKK, Ro K4HRM, James N4NIN, Susan N4OJN, Phil KG4BCC, Dick K0CAT, Mark K9FWA, Irv W4IWK, Robert KM4UAC, Jeff KM4DOR, Shawn KI4ZKP, Dave KK4MWF. Guest: Brian Hudson KM4KIS.

**Program:** Tanner presented an introduction to all things “antenna”.

**Trailer/Equipment Committee:** Ro K4HRM inquired about digital use of trailer HF radios, agreed to include capability with built-in interface. Tom KA4HKK commented that Ken Teague, AEM, has asked for specs for an HF radio for the EOC for ARES use. Suggested unit be compatible with those in communications trailer. Trailer workday set for May 28 at 8:00 am.

**Trailer Storage:** Tom KA4HKK and Ro K4HRM reported on discussion with Ken Teague, AEM, concerning possible undercover storage at EOC with other EM units. Tanner KK4SZI to send letter of support. Tom KA4HKK to follow up with Ken.

**Public Service Events:** Volunteers will be needed to work the Fire and Life Safety Festival – June 4.

**Field Day 2016.** The June meeting will focus on final plans for this event. Tom KA4HKK will be seeking volunteers.



# Fire & Life Safety Festival



It was a hot, humid Saturday but LARC members, Tanner KK4SZI, Tom KA4HKK, Irv W4IWK, Mark K9FWA and James N4NIN demonstrated amateur radio at the annual Foothills Fire & Life Safety Festival on June 4. The Club communications trailer was used to show the visitors how amateur radio can respond anywhere in Caldwell County as needed.



## A Better Mousetrap! By Stephen Williams KI4ZUI

In an email to the LARC Newsletter, Stephen Williams of the Maryland Amateur Radio Club, comments "Tanner's article in your May '16 radio club bulletin on the criticality of power under all circumstances is a good one. Up here in Mitchell County, several of us have taken steps to insure we can continue to operate via generator, battery, or solar if/when the power grid goes down."

"I have attached is a photo of a setup I have been using for about a year now in my vehicle (pickup truck) to run my VHF/UHF analog & DRM mobile radios. Previously, I had been powering directly off the vehicle's battery/alternator. Works, but I experienced a couple of embarrassing episodes where I parked the truck, kept on operating, and then unwittingly ran the truck battery down to the point that I was not able to restart the vehicle. Something had to be done. So I acquired a West Mountain Iso-Power unit that serves to switch me automatically back & forth between the trucks' starting battery/alternator (while driving) & a separate 33 Ah AGM battery inside the cab prepared to run my rigs when parked, truck motor shutdown. Everything fits into a plastic storage crate that sits inside my truck cab behind the driver's seat. A sealed AGM battery is safe to use inside the truck cab (no hydrogen gas emissions) -- enough power in this size battery to run my rig all day. AGM battery recharges whenever I restart the truck. I can power either or both rigs off this setup. Normally, I run only one rig at a time. Since I installed this setup, I have experienced NO drained-battery episodes. The West Mountain Iso-Power unit also functions as a UPS, so there is no delay or downtime when the setup kicks into operation. All connections are red/black PowerPoles, easy to connect/reconnect. I carry a few extra items in the storage crate so that I could connect to any available power source wherever I find myself. Just give me access to an AC source or generator, and I can operate or recharge batteries off them. We have found the "battery booster" a valuable item when operating off purely battery power-- keeps the voltage at a 12+ volts DC level for a prolonged period, even as your battery slowly drains."







**Yaesu FT-880R analog FM radio:** operates off 11.73v-13.8v-15.87v; draws: Rx: .5A (measured .3 A), Tx: 8.5A at 2M (measured 6A at 50w. Has a separate antenna.

**Motorola XPR4550 model FM-DMR radio:** also connected via Y-configured PowerPole cable to the ISOpwr unit so it can be run either alone or at the same time as the FT-8800R analog radio. Draws about the same power as the Yaesu unit when running. Has a separate antenna.

**West Mountain ISOpwr unit:** operates on max 20v. Draws 5 mA current. Keeps aux. battery charged (See [www.westmountainradio.com/](http://www.westmountainradio.com/) and its review at [www.eham.net](http://www.eham.net)

**33 Ah AGM cell:** can provide = 16 Ah max usable power before needing a recharge. One source is [www.batterystuff.com](http://www.batterystuff.com).

**Engine running:** alternator delivers 14.4v to ISOpwr unit; AGM cell is being charged plus about 14.07v DC is passed to radio.

**Engine off:** AGM cell starts delivering = 13.0v to radio, eventually dropping down to 12.6-12.5v as time goes on. Truck system battery voltage fed to the radios (once engine is cut off) drops to about 12.0V; returns to 14.4v if engine is restarted and alternator begins recharging system.

**Also kept in the crate:** MFJ 13.8v DC switching power supply; MFJ battery booster; Watt's Up power meter; Soneil 3Ah AC-to-DC charger unit; bag of spare PowerPole cords & adapters.



## July 2016 Basic CERT Class



**Description:** Community Emergency Response Team (CERT) is a free, voluntary program created by FEMA that encourages members of our community to be prepared in any emergency. Using the training learned in the classroom and during exercises, CERT members can assist themselves, their families, and others in their neighborhood or workplace following an event when professional responders are not immediately available to help. Individuals, groups of friends and family, and organizations are all encouraged to join us!

**Location:** Training Room, 3rd floor, Caldwell County Health and Human Services Building  
2345 Morganton Blvd SW, Lenoir, NC (Park and enter at the rear of the building.)

**Registration:** Send an email to [caldwellcountycert@gmail.com](mailto:caldwellcountycert@gmail.com) with **your name, address, phone number, and email address**. Note if you are attending as a member of a group such as an employer group, civic group, church, etc.

Dress comfortably. Bring your own water or soft drinks and snacks. Training manuals will be provided. There is no charge for this class. To learn more about us, go to our web page, <http://caldwellcountycert.com/>.

Time - Date	Topic	Instructor
6:00-9:00 PM Tues 7/19/2016	Unit 1: Disaster Preparedness Unit 6: CERT Organization	Rosemary Hall Shirley Kanode
6:00-9:00 PM Thurs 7/21/2016	Unit 3: Disaster Medical Operations - Part I Unit 4: Disaster Medical Operations - Part II	Kenny and Rosemary Hall
10:00-1:00 PM Sat 7/23/2016	Emergency Communication/Radio Use	Thomas Land and Kenneth Teague
6:00-9:00 PM Tues 7/26/2016	Unit 2: Fire Safety and Utility Controls Group Exercise	Shirley Kanode
6:00-9:00 PM Thurs 7/28/2016	Unit 7: Disaster Psychology Unit 8: Terrorism and CERT	Shirley Kanode
10:00 AM-1:00 PM Sat 7/30/2016	Unit 5: Light Search and Rescue Operations (Outdoor exercise. Wear sturdy, close-toed shoes. Bring work gloves and a hard hat, if you have them.)	Kenny and Rosemary Hall



# LARC's Phil Crump KG4BCC Featured Blue Ridge Electric 2015 Annual Report



Serving our members is also about protecting their information and safeguarding our servers and system against security breaches. Hackers work overtime to disrupt the electrical grid and steal personal identities and financial information. We all work diligently to protect the thousands of members of our community. Really, we view every single one of those members as part of one big Blue Ridge Electric family. And when you look at it that way, we don't need any extra motivation to safeguard our electrical grid, along with our members' information.

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– Phil Crump  
Network Security Administrator  
9 Years of Service

***Ethics and Operating Procedures for the Radio Amateur* has become a respected work describing the best standards of operating on the amateur bands. This booklet can be found at <http://hamradio-operating-ethics.org>, click on Versions and select Language English.**

# Ham Happenings...

**June 11** Winston-Salem Classic Hamfest, Forsyth ARC, see [www.w4nc/ws\\_classic\\_hamfest\\_2016.htm](http://www.w4nc/ws_classic_hamfest_2016.htm)

**June 25-26** Field Day 2016. **LARC Volunteers needed.**

**July 9, 2016** 31th Annual Firecracker Hamfest at 315 Martin Luther Jr. Ave S, Salisbury NC, sponsored by the Rowan Amateur Radio Society, Salisbury, see <http://www.rowanars.org>

**July 16, 2016** Mid-Summer SWAPFEST, Cary Amateur Radio Club, Cary <http://www.qsl.net/n4nc>

**July 30** WCARS Hamfest, Western Carolina Amateur Radio Society, Waynesville, see [www.wcars.org](http://www.wcars.org)

**September 3-4, 2016** 60th Annual Shelby Hamfest/ARRL Convention, Shelby Amateur Radio Club, Shelby, see [www.shelbyhamfest.org](http://www.shelbyhamfest.org)

**September 23-24** W4DXCC DX and Contest Convention with Ham Radio Bootcamp, Pigeon Forge, TN. See [www.w4dxcc.com](http://www.w4dxcc.com) for information

## LARC 2016 Officers



Tanner Greer  
**President**  
KK4SZI



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](mailto:hrmaddox@nettally.com)  
Suggestions and articles are appreciated.**