

M A Y 2 0 1 4

N4LNR

# News & Views

P. O. Box 3276  
Lenoir, NC 28645  
<http://lenoir-arc.org>



*Serving Amateur Radio  
In Caldwell County*

## ***Save the Date!***

### **Next LARC Meeting**

**May 8, 2014**

**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**

### **Caldwell ARES Net**

**Sundays 9:00 PM**

**147.330 MHz Plus PL 141.3**

## **Sossamon to Speak at May LARC Meeting**

Lee Sossamon KK4GEV, AEC Charlotte Regional Skywarn, will present the program at the May LARC meeting. Lee was instrumental in organizing the Piedmont Spotter Group and will discuss how it supports Skywarn.

The Piedmont Spotter Group was formed in 2012 with the idea to integrate Ham Radio and Social Media in severe weather reporting.

The group operates the Piedmont Spotter Group Net, a ham radio net that is held each night at 8PM local time on the W4BFB amateur radio repeater, 145.230, minus, PL 118.8. The Piedmont Spotter Group supports Charlotte Regional Skywarn when they activate a weather net, normally for a severe thunderstorm warning, tornado warning or watch.





## President's Message

The few times I've traveled outside of the continental US I've met people whose native language was something other than English. Fortunately most of them also knew English sufficiently to make up for my inability to communicate with them in their local language. While technology has enabled us to download apps on our phone that can repeat back our spoken English into other languages, it's still limited in ability, accuracy, and often the web-required network isn't available (or too expensive) to utilize on foreign soil. Neither have we quite got to the point of the "universal translator" that we see on the sci-fi programs, but I expect one day it will become a reality. Meanwhile, our best communication occurs when both parties have a common ground of understanding and syntax (aka protocol).

Amateur radio is successful because of these common and accepted protocols. To help build these skills the club often participates (and non-members are always invited as well) in public events as well as weekly nets that give us opportunity to practice these protocols and become better communicators. Sometimes we even purposely create "traffic" for practice so that if and when the legitimate need occurs, we feel more confident and capable of following these protocols. That's not saying we need to abandon some occasional "fun stuff" during regular rag-chewing or DX'ing (such as customizing our phonetic names), but even then we never forget that we operate not just in the realm of a higher standard of FCC regulation, but that we also hold a responsibility of being available as an entity/tool/extension of other government regulated services. The power of amateur radio's effective communication is evident when you have two strangers able to initiate a conversation, transfer information, and terminate their QSO with an exchange of accepted protocol procedures that promotes a smooth flow of communication without confusion.

I encourage everyone to participate in the frequent weekly nets as well as with community events that request communication assistance. It's also great to monitor local repeaters and don't be shy to join in an existing conversation or initiate your own by simply introducing your call and asking if anyone is on frequency. Not only does this help keep you get comfortable with protocol, it is also a great way to make new friends and stimulate your radio activity level.

73, Ted KF4FLY

**Know someone who is interested in amateur radio?** Invite them to come with you to the next LARC meeting. Send their email address to the Newsletter Editor so they can receive the monthly Newsletter. Membership in LARC is not a requirement to receive the Newsletter.

## Catawba Valley Hamfest A Success!



"A good time was had by all" at the 17th Annual Catawba Valley Hamfest on Saturday, April 19, 2014, at the Burke County Fairgrounds in Morganton. The Lenoir Amateur Radio Club was one of the co-sponsors. LARC members attending were Tom KA4HKK, Scott KC4SWL, Tanner KK4SZI, Josh KK4ZPV, Michelle KD4YTU, Jerry AD4JG, and Warren WU3Y. The Hamfest is a flea market style event where amateur radio operators, electronic enthusiasts, computer enthusiasts, etc. come o buy, sell and trade.

The grand prize was a Yaesu FT-897D and a 2-meter mobile and an HT were also given away. The Club had 2 tables where members displayed radio gear for sale and distributed Club information. LARC also raffled a Baofeng HT radio that was won by Greg Branch KI4GZD Western Piedmont ARC. Tom KA4HKK won \$100 Hamfest Bucks for early registration.

Club members enjoyed a BBQ dinner with members from the other sponsoring clubs and Hamfest vendors on Friday evening.



## Ham Bits and Pieces

**How waterproof is your radio?** A new generation of fully waterproof hand-held amateur radios has been available for a few years now. Many of these radios are not only submersible, but also designed to float if dropped in water. To be considered "waterproof," your radio should meet the JIS7 standard, meaning they are supposed to be waterproof for a period of 30 minutes at a depth of one meter.

## From The Last Meeting...

**Attendees.** Ted KF4FLY, Tom KA4HKK, Irv W4IWK, Phil KG4BCC, James N4NIN, Susan N4OJN, Tanner KK4SZI, Michelle KD4YTU, Ro K4HRM, Will WB4Y, Scott KC4SWL, Bob Rogers KC4TVO (Guest), Josh Edwards KK4ZPV (New Member), Shawn Griffin KI4ZKP (New Member), Randy Combs KC4ZSM (Guest), Marvin Hoffman WA4NC (Guest).

**Club Trailer.** Workday set for May 3. Looking for a place to store the trailer undercover. Phil KG4BCC is to get prices for construction of an enclosed storage shed. Accepted offer of a 42" pneumatic antenna mast subject to inspection – See separate article.

**Club Equipment Inventory.** Members were reminded to get their lists of Club equipment to Irv W4IWK <[kanode@mindspring.com](mailto:kanode@mindspring.com)>

**Repeater Upgrade/Professional tower climber.** Phil KG4BCC is continuing to pursue a possible tower climber. Agreed for Phil KG4BCC to purchase new coax (125' jumper @ \$300) and antenna (Maxrad MSB1602 @ \$157).

**Website.** Tanner KK4SZI plans to have new website "live" by May meeting.

**Public Service.** Tom KA4HKK reported on the Hibriten Hill Run. 36 runners completed. 8 amateurs participated (KF4FLY, KA4HKK, W4IWK, KG4BCC, KK4SZI, K4HRM, KC4SWL, WB4Y). Organization pleased with support. Agreed to forego participating in The Butterfly Festival in Hudson. Tom KA4BCC to follow-up on amateur radio presentation to the Oath Keepers organization.

**Catawba Valley Hamfest.** Michelle KD4YTU showed a callsign etched on marble that the Foothills Community Workshop would sell at the Hamfest for \$10. Tom KA4HKK asked for a count of those planning to help (KC4SWL, KK4SZI, WB4Y, K4BCC, KK4ZPV).

**Training.** Tom KA4HKK said copies of AUXFOG could still be ordered. CERT Disaster First Aid class scheduled for May 12.

**ARES Program.** Bob Rogers, Area 12 DEC, and Marvin Hoffman, Area 12 ADEC, were the program speakers – See separate article. Lee Sossamon, Asst Dist Coor Charlotte Regional SkyWarn, will present the May LARC program. Tom KA4HKK reported that 2 ARES events were being held April 12 and April 22 and requested volunteers – See separate articles.

### Become a LARC Member Renew your LARC Membership

Pay your 2014 dues in person to the Treasurer or by mail  
At the LARC address shown on Page 1

Full Member \$15/year      Family Member \$25/year  
Associate Member \$10/year      Family Associate \$15/year  
Life 10 times/year



## LARC Trailer Work Day on May 3



The “hammers” will be installing the plywood panels on the trailer’s back door and carpet on the walls at the May 3 workday. The workday is from 8:00 am until Noon at James N4NIN garage, for directions, contact Ted KF4FLY

[ted.manual@alexlee.com](mailto:ted.manual@alexlee.com). Come on out! Best job you will ever have and it’s fun too!

## Club Looking for Location To House Communications Trailer



The search for a place to house the Club’s Communications Trailer continues. Several LARC members visited the HHS Building site on Morganton Blvd. where several trailers and vehicles used for emergency management purposes are located. While none of these trailers were under cover or secured behind fencing, the Club feels that cover is essential to protect the trailer’s contents and prevent water intrusion.



## LARC Secures Pneumatic Antenna Mast for Communications Trailer



Scott KC4SWL noticed an advertisement on Craig's List where a man had purchased a used NASCAR communications trailer and wanted to sell the 42' pneumatic antenna mast. He made contact Scott KC4SWL and learned it was a 42' Will-Burt mast with a compressor. The mast has an estimated resale potential of \$6,000 to \$12,000 on the used market. Scott also explored the possibility of the man donating the mast to LARC. LARC members agreed to authorize Scott to offer \$6,000, consisting of \$1,500 cash and a receipt for donation of \$5,500, subject to inspection of the unit in full operation. The seller, Patrick Parsons, Parsons Construction, accepted the Club's offer and Scott arranged for several Club members to inspect and operate the mast.

The mast operated as advertised and the Club dismantled the mast and related equipment from the trailer. Club president, Ted KF4FLY commented that the acquisition of the pneumatic mast would greatly enhance the operability of the LARC communications trailer.

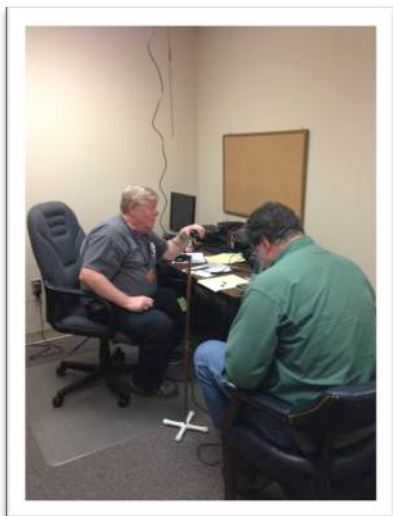


## ARES Exercise: Lessons Learned

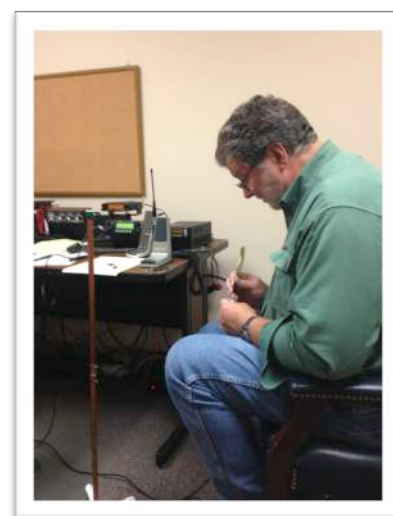


Hurricane Tiawana took aim at the Florida-Georgia line with winds expected to reach Category 4 and pushing tropical force winds and heavy rain into the Carolinas. Localized and flash flooding was predicted for Western Carolina with Caldwell County forecast high wind and heavy rain. This scenario played out as the North Carolina Emergency Management held its Statewide Hurricane Exercise on April 22. Caldwell County ARES participated in the Exercise providing communications support from Caldwell County Emergency Operations Center located in the HHS Building on Morganton Blvd. in Lenoir. The goal was to test communications from Caldwell County as well

as from the rest of the state, back to the State EOC and the Western Branch office. The modes of communication were HF, VHF and Winlink/Winmor. Tom KA4HKK, ARRL ARES Emergency Coordinator for Caldwell County, along with Ro K4HRM and Scott KC4SWL were located at the EOC with Irv W4IWK operating HF and Winlink from his home station. Josh KK4ZPV, Will WB4Y and David N4DBR provided radio checks from mobile locations in the county.



The Exercise provided the local ARES team with several valuable learning opportunities. Antenna problems at the new EOC location, a disconnected wire in a jumble of wires, a bad wire in an antenna, missing radio user manuals, untimely and time consuming software updates in Winlink, and forms missing from templates were just a few of the unexpected pleasures of working an emergency. Tom KA4HKK commented afterwards "at least we know what we don't know and now we work on fixing our weak areas."



**Did You Know?** Ro's K4HRM adventure in radio began on her first assignment in law enforcement as a dispatcher. Her most memorable event as a dispatcher happened on her third workday when a jailbreak occurred and she had to establish perimeter containment on the fly with her supervisors both "out to lunch." AND THIS WAS BEFORE COMPUTERS, GPS, 911 STREET MAPS! She received a commendation for her quick actions.







## LARC Supports Hibriten Hill Run

The Lenoir Amateur Radio Club provide communications support for the 3<sup>rd</sup> Annual Hibriten Hill Run for the Children on Saturday, April 5, 2014. The Run was a charity event and all proceeds benefited the Communities In Schools in Caldwell County by helping students learn, stay in school. The Run began at 9:00 AM and all 36 participants crossed the finish line of the 3.6 miles, 1,000 feet elevation gain run up Hibriten Mountain within an hour.

Tom KA4HKK and Ro K4HRM provided Net Control, with Irv W4IWK, Ted KF4FLY, Tanner KK4SZI, Phil KG4BCC, and Will WB4Y covering the Run route. In addition to a LARC club

activity, this event served as a practice for the Caldwell ARES members and ICS protocols were used. The event organizers expressed their thanks for LARC's support and plan to continue this arrangement for next year's run.





## Get To Know Your Ham Bands - An Article From The Freezer by Mike Maynard, K4ICY

[Originally published in The Printed Circuit – Newsletter of the Tallahassee Amateur Radio Society – Visit K4TLH.net]

Let me take a moment to bring to light one of Amateur Radio's dirty little secrets – actually a sad condition of our hobby that just gets looked over or brushed under the carpet. Are YOU, a “ham” that is just like the poor sap that buys a ticket to enter a major theme park only to spend the entire day sitting in the food court next to the lockers, haplessly missing all the fantastic rides and captivating shows? Are you the kind of awkward person to dress up for that long-awaited single's dance only to stand next to the punch bowl the entire evening? I am speaking metaphorically for your on-air activity... *No, you say?* For goodness sakes – are you sure?

My counsel here is not directed to the avid contester or the obviously active mobile ham driving around in the equivalent to a metal porcupine, but to the “wall flowers” of our proud hobby! I think, upon closer examination, YOU hams know who you are. You were so excited ‘back when’ you passed your Technician's license and got your very own call sign, but what? You find yourself owning just an HT and maybe you check in on that Sunday night net once and a while. Well, if you, as a tepidly semi-active, so-called “ham” have been attending the monthly meetings, perhaps there may still be hope! Maybe all you need is a good and willing “Elmer.”

Why, the world of Amateur Radio is an exciting one just waiting to be explored and enjoyed! Its electromagnetic vistas are ever so vast and fruitful, with new people to befriend from all walks of life. There are modes and ways to communicate that you may have never imagined. YOU may already have the right license class privileges to go on boldly exploring stranger lands by even stranger means – or most likely, as a “Tech”, you're only one passing examination away from sampling the buffet of the ionosphere. Is there really more to this hobby than a “ker-chunk” and a weekly check-in on a local repeater? You bet your \$40 Chinese HT there is!

Let me take you on a journey: one of shortwaves, dits and dahs and “E-skip.” Listed here-on is a brief description of most of our federally-granted frequency bands - bands that each have their own character, needs for different technology and rules - bands that have been ‘borrowed’ to us by the FCC for our own enjoyment, education pursuit and final commitment to use in service for our society's safety. People though time have fought hard, even at great cost to ensure that YOU, the Amateur Radio operator, have the right to “play radio,” because if you don't use it, perhaps there is some money-hungry corporation that can and will.

I don't expect anyone reading this to garner a full knowledge of our band plans and operating modes by my writ alone. If you find anything of interest here, ask for an “Elmer.” Events like Field Day and our occasional Get On The Air days are designed for the express purpose to put YOU behind the wheel – maybe to experience your first HF contact to a foreign ham in another land altogether. They are *your* ham bands and modes to enjoy.

These keys are provided for visual example only - please consult the ARRL chart provided at link.

420	Amateur Fast Scan TV No Tx Along Canadian Corridor	432.125 C W	450
440 BAND		Allocated FM Simplex / Repeater, SSB, Digital, Satellite, TV - See Charts	

### 70 Centimeters: 420.000 - 450.000 MHz

70 centimeters, commonly referred to as “440,” is a UHF (Ultra High Frequency) band that has great value for emergency communications work. Many repeater systems are located here and often all you'll need to get on is a basic HT (hand talkie.) The use of 440 does not come without strings attached since hams are designated as “secondary” users on this band with power and/or use restrictions in some parts of the US, particularly near military bases. The small cost is worth it as 440 has added advantages that make it attractive for ARES emergency communications use: for one, UHF signals better penetrate thick walls like the concrete and metal ones found in office buildings and hospital facilities. The 440 band is also less susceptible to atmospheric anomalies like solar flares and Sporadic-E, however, and with the help of interoperability networks such as Florida's SARNet - using microwave linked repeaters or internet-connected modes such as D-STAR and WinLink, a ham's HT has world-wide voice and data connectivity at just the push of a button. All hams should strongly consider access to 70 centimeters when shopping around for HT's and mobile transceivers.



## 2 Meters: 144.000 - 148.000 MHz

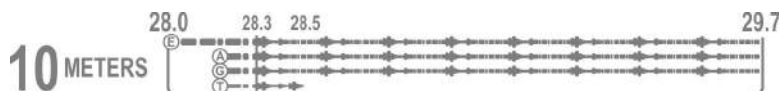
2 meters is really the 'go to' band for most hams and the vast majority of new hams start here first because all you need is an HT that will get you into many local repeaters. On this VHF (Very High Frequency) band, repeater activity (in FM mode) makes up the majority of activity though you can use other modes in their respective designated areas of this band including CW, digital and voice SSB. This band is known as the 'work horse' because most radio clubs host and monitor a flagship 2 meter repeater system that will get you connected to other hams in your area and even into adjacent counties. Unfortunately, either from a lack of interest or from inadequate mentoring many unfortunate hams may never feel the need to venture outside of this band – fecklessly ne'er to leave the cradle. The "main" 2-meter repeater and their HT is likely all they'll ever use. For those personally risking this sad fate, might I suggest reading on!

As far as signal propagation, 2 meters operation often shares the same Sporadic-E "magic" as 6 meters where stretches of 50 to 200 miles are possible. 2 meters penetrates walls well enough for most indoor work and is often the band of choice for emergency communications workers as on-the-job volunteer will only supply 2-meter HT capability if a great need arises in the aftermath of a communications disaster.



## 6 Meters: 50.000 - 54.000 MHz

6 meters is like a perceivably dormant volcano: dead-quiet most of the time, but a sleeping monster that sometimes wakes without much warning to feed - a great VHF band, where if conditions are right, you can do about anything that can be done on HF and sometimes better. Six meters is called the "Magic" band because of its mysterious and spurious nature - its ability on short notice to send signals halfway around the Earth. Solar activity has some to do with 6-meter openings, but this effect can mainly be attributed to the phenomena called "Sporadic-E." Sporadic-E is a special ionization of the Earth's atmosphere's E-layer allowing signals to propagate. Look for these openings around the solstices (June through July and around December.) Other forces of nature can have an effect on VHF opening such as auroral events, meteor-scatter, moon-bounce, thermal ducting, trans-equatorial and grey-zone propagation. Hams working on VHF frequency will be found using directional beam antennas such as Yagi's and log-periodics often radiating up to legal-limit power levels to bridge the distant gaps through the ether.



## 10 Meters: 28.000 - 29.700 MHz

At 1.7 MHz wide, 10 meters is the largest of the HF (High Frequency) bands - and also a vast and barren wasteland when the sunspot cycle is in its low. Propagation is extremely erratic and ground wave range is only around 25 miles. A ham may wait years to use 10, but when the sun is active, this band is the place to be - especially if you're a member of "10-10!"

When propagation is good, expect worldwide DX communications of thousands of mile with only just a few watts! Openings to any part of the world are unpredictable so hunting DX entities and QSL cards only add to the excitement. By the way, 10 meters is the only HF band with a segment that allows hams with Tech licenses voice SSB operating privileges!



## 12 Meters: 24.890 - 24.990 MHz

A very small band, but when sunspots are active this band is capable of very great DX distance with little power and meager equipment, making this a great band for mobile operation. When the sunspot cycle is at its low expect only local communications.

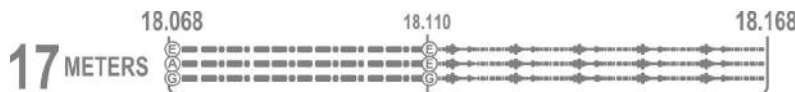
### 15 Meters: 21.000 - 21.450 MHz

Like 17, 15 meters is similar to 20 meters but is more influenced by sunspot activity. There's little to no nighttime activity and at the low-end of the sunspot cycle, the band is almost dead, but at the peak of the cycle, 15 meters can get you some great DX distances.



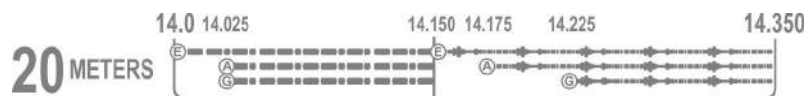
### 17 Meters: 18.068 - 18.168 MHz

Band conditions are about the same as 20 meters. 17 meters has an appeal to mobile hams as it offers most of the same benefits as 20 but requires a smaller antenna and is a little quieter. This band is small like 30 but is segmented between CW and SSB operators and allows up to 1500 watts!



### 20 Meters: 14.000 - 14.350 MHz

20 is where the serious DX'ers hang out! Daytime conditions here are as good as 40 meters at night. Worldwide communications are common all hours of the day when sunspots are up, but when they're not, the band can close up shop in a hurry. Locally, line-of-sight to 50 miles is often possible but regional communications are generally unlikely and selective one-way propagation is often the case nationally, especially as nighttime approaches. This band has all the advantages of 40 with the more quiet nature of higher frequency bands making 20 meters a prime spot for digital modes such as PSK-31, SSTV and RTTY.



### 30 Meters: 10.100 - 10.150 MHz

A small band similar to 40 meters but only CW and digital are allowed. You'll find No broadcast interference here and only a casual number of operators make 30 their abode; that is... until a contest starts up, then parking is at a premium! The band, like 20 has somewhat longer range than 40 meters and daytime distances of 1000 miles are common. Hams are, however, limited to only 200 watts PEP (peak envelope power) here and when conditions are bad, you just might not hear anything.



### 40 Meters: 7.000 - 7.300 MHz

Every ham either loves or hates 40 meters - Like a popular restaurant, it's always open somewhere but it's often crowded! A 65' dipole antenna will get you regional coverage in the summer daytime with likely distances of 300+ miles, with 500 or more in the winter. 1000+ miles are very common during summer nights with DX (intercontinental) communications more common in the winter!



This band, especially 7.2 MHz and above, is also the roost for many gigantic million-watt shortwave broadcasters from countries outside of North America. Between these strongly interfering signals, a ham with a modest station can still often work some great DX, provided you find a spot. 40 meters is not very affect by sunspot activity and it's another great place to hold regional nets. Here, you'll also find a lot of CW and digital activity at the bottom of the band and literally ever spot filled with voice SSB at the top.



**60 Meters: 5.3305 - 5.4035 MHz**

This allocation is not actually a traditional Ham band but 5 frequency channels shared with other government services. Many restrictions apply to the technical requirements including transmission power, mode and antennas, and hams are secondary users of this band, so we must yield to QRM (interference) from government stations - nor be the cause of it. 60 meters is an obvious cross between 80 and 40, and it's not uncommon to reach a thousand miles using QRP SSB (5 watt voice) on channel #2.

**80 Meters: 3.500 - 4.000 MHz**

Conditions on 80 meters are close to what they are on 40 and tend to be pretty reliable day and night. It also isn't very susceptible to the effect of sunspots, and for those reasons is regarded as a "go to" place for HF-based nets and regular group activities.

Emergency Communicators can place their 119' dipoles closer to the ground to get NVIS (Near Vertical Incidence Sky wave) communications on a more local and statewide level, but at night, the band can "go long" as propagation reaches out. Summer can bring a lot of atmospheric noise, but the quieter winter propagation can send your signals around the globe!

Known as "The Watering Hole," expect to find a lot of established "locals" groups 'rag chewing' in 'round tables' using linear amplifiers - you'll find them warming up the ionosphere 'til the wee hours of the morning on frequencies that have been established for decades. Some, you'll find to be quite friendly - but some, not so much. Just use common courtesy and look around for a free spot to operate.

As with several bands, the CW/digital portion of the band is separate from the wideband modes of SSB (and even AM,) and access privileges are important to note, so if you wish to do some DX on 80, you might want to try for your Extra ticket.

**160 Meters: 1.800 - 2.000 MHz**

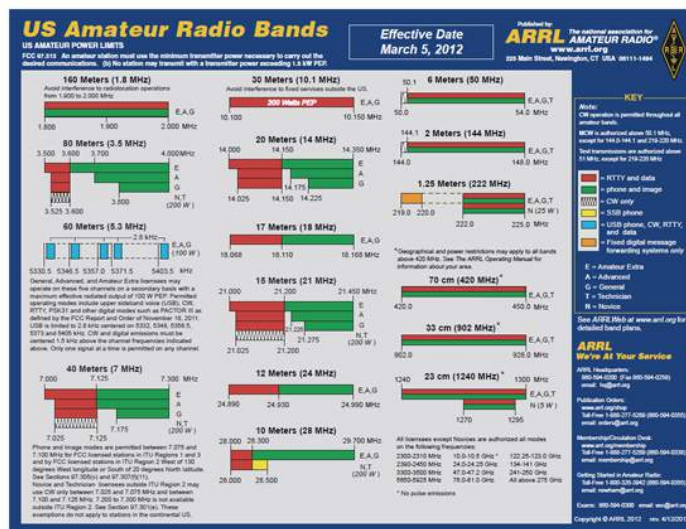
Known as the "Top Band," more or less because its wavelength is the largest, sits just above the AM broadcast band and is really a MF (Medium Frequency) designation rather than HF. In fact, if your older analog AM radio has band edges that extend outside enough, you can often hear CW hams doing their thing. If you're thinking of 160, a dipole antenna for this band would be 250' long, so you'll often find hams using loop antennas, or modified vertical antennas with an added loading element at the top called a "top hat."

Band conditions and propagation on 160 are pretty similar to what you will find on the AM broadcast band, and not quite as much range as the 80-meter band. During the day, propagation is pretty much local, but at night you can expect greater distance. Summer nights bring good regional distances of a few hundred miles with a high amount of QRN (atmospheric interference) from nearby evening thunderstorms, but in the winter expect a hop or two off the ionosphere at a few thousand miles with a quieter noise floor.

You'll find a mix of modes on 160 with CW, digital and SSB cohabitating in the same space, just like the old days, and you must have a general license or higher.

## Are there more? Yes Yes there are, in fact!

Aside from a few bands not listed above, hams have access to microwave bands *and even higher*. Hams in other countries are often working with the (ITU) International Telecommunications Union to procure new band allocations and on the same token, working to also protect our current bands from unwanted interference. There are also hams with experimental grants that are even working with very-low frequencies, below the AM broadcast band. By the way: every ham should have a chart!



73! Mike Maynard, K4ICY [k4icy@arrl.net](mailto:k4icy@arrl.net)

## ARES Area 12 DEC: Emphasis on Building Communication among Counties

Bob Rogers, ARRL ARES Area 12 DEC, and Marvin Hoffman, ADEC, attended the April LARC/ARES meeting to discuss priorities for the counties of Area 12 – Caldwell, Mitchell, Yancey, Avery, McDowell, Catawba and Ashe. Rogers has set as a goal the ability of all these counties to communicate with each other. He emphasized that this need is becoming more critical as mutual aid expands. He advised radio operators to enroll in the AUXCOMM database since those not in the database will not be called for assisting outside their home county. In addition to the ICS requirements, he expects minimum ARES activity standards may be put in place. He noted that as ARES has morphed into AUXCOMM the ARRL has not necessarily supported these changes.

With the recent addition of several repeaters and links to the PCRN network, coverage now exists for most of Area 12. Backup power for repeaters continues to be an issue. In Mitchell County, the hospitals have come on board with Winlink/Winmor operated independent of the hospital's Internet. Rogers also discussed obtaining callsigns through MARS to be assigned to served agencies, such as hospitals, EOCs.

Hoffman discussed the need for each County to be able to sustain an emergency response and the use of mutual aid. He discussed the addition of repeaters on Beech Mountain and Rich Mountain and their link to the PCRN network. He encouraged members to explore the new technology of MotoTRBO and the advantage of local, regional, statewide, nationwide and worldwide communications.

For more information on new repeaters and MotoTRBO, refer to the "Area Repeater Update" in the April Newsletter.



## Caldwell ARES Participates in Disaster Mobilization Exercise

HELP, a non-profit disaster management organization based in Houston TX, deployed to Lenoir NC to a simulated disaster to test its capability to mobilize resources, transport those resources to a disaster, and be operational within a benchmark time. Tony Lamberth, President of HELP, reported that on April 11-12, HELP exceeded their benchmark by arriving in Lenoir and being operational within 31-1/2 hours. As a part of the Exercise, HELP managed the tracking of volunteers working on projects located throughout the City of Lenoir from the Command Post set up at the Carolina Prime Pet manufacturing plant. One part of the Exercise involved emergency radio communications that were assigned to the Caldwell ARES unit. Participating were Tanner KK4SZI, James N4NIN, Ted KL4FLY, Josh KK4ZPV and Tom KA4HKK.

HELP is frequently hired by businesses and governmental entities to provide a professional staff to coordinate disaster activities including Incident Management, Technology, and Response and Recovery Services when that entities resources and capabilities are limited.



## Caldwell CERT Classes

Register now for:

**May 12, 6pm, First Aid Training**, Smith Memorial Church, Lenoir

Future CERT classes are:

**June 21, 1:00-4:00 pm, Disaster Triage**, Bethel Colony, Lenoir

**To register**, call or email Kenneth Teague at Caldwell County Emergency Services.

Office: (828) 757-1419 Email: [kteague@caldwellcountync.org](mailto:kteague@caldwellcountync.org)





## FCW To Hold Open House

The Foothills Community Workshop will be having an Open House on Friday, May 30, from 5:00 to 9:00 PM and Saturday, May 31 from 10:00 AM to 6:00 PM. There will be food, tours, demonstrations and activities for all. Demonstrations will include the model railroad, CNC wood routers, laser cutter, 3D printer and the amateur radio station.

FCW is a hacker space located in the Old Shuford Mill Building in Granite Falls. Members have access to a CNC Machine shop, wood shop, electronics shop, amateur radio station K4FCW, technical library, model railroad, and light fabrication equipment including a 3D printer, laser cutter and welder. Regular meetings for members are Saturdays at 3:00 PM and Tuesdays at 7:00 PM. Visitors are always welcome. For information about the Foothills Community Workshop go to <http://foothillscommunityworkshop.org> or call 828-351-HACK. A flyer about the Open House is at the end of the Newsletter. Print it out and tack it up at your place of work or give to a friend.



## LARC 2014 Officers



**Ted Manuel**  
**President**  
KF4FLY



**Tom Land**  
**Vice President**  
KA4HKK



**Irv Kanode**  
**Secretary**  
W4IWK



**Phil Crump**  
**Treasurer**  
KG4BCC



## Editor for a Final

After the last meeting, I decided to venture into the world of MotoTRBO and acquired a gently used Motorola 6550 HT from a ham in North Wilkesboro who Will WB4Y introduced me too. Seems he wanted to get into DStar and I wanted to get into DMR so we traded equipment. Amazingly, I was able to sit at my desk in the extreme East corner of Caldwell County and receive the Boone repeater loud and clear. Transmitting was another story, tho. So the search for an outside antenna to hook up to the HT began. Marv WA4NC in Boone told of a man in Jonesboro TN connecting to Boone using a Yagi, so I began to look for the “latest, greatest” in Yagi’s. My past experience with a Yagi is limited to a homemade one given to me by a fellow ham and rarely used – and it did not make the move with me from Florida. It’s been a week now and I am still reading each maker’s claim to have the best Yagi out there. So I decided to broaden the search to include dual band VHF/UHF antennas and a monoband UHF antenna. There are thousands of these suckers out there to purchase and even more in the resale market. The reviews run from “greatest ever” to “not worth the effort to throw it in the dump.” What is a ham to do? I’m open to suggestions!

And a new ham story for you. I sold my Florida farm last April to an engineer who wanted to get into organic farming. Recently, he asked a neighbor why were there so many antennas in the storeroom attic and coax everywhere. She told him I was into amateur radio. He decided that could be an interesting hobby, so he studied, took the exam and now Mike KK4ZTT is “on the air” as a General. He also joined my old radio club and, as you would expect, I immediately got emails/texts from my ham buddies letting me know that my old antennas had been fired up. Kind of made me proud.

April has been a very busy amateur radio month. As you browse thru this Newsletter you will see that a lot has been going on and a lot of exciting events are coming up. Field Day 2014 is less than 60 days away!

Send comments concerning the LARC NEWSLETTER  
to Ro K4HRM [hrmaddox@nettally.com](mailto:hrmaddox@nettally.com)  
Suggestions and your articles are appreciated.



# Foothills Community Workshop

Learn - Teach - Make

*A Hackerspace for the NC Foothills*

**FCW has:** resources to help **you** with projects in

Computers Ham Radio Electronics Programming  
Woodworking Metal working Model railroads Robotics

10 Falls Ave. Granite Falls NC 28630

[www.foothillscommunityworkshop.org](http://www.foothillscommunityworkshop.org)

**828-351-HACK (4225)**

# OPEN HOUSE

**Friday, May 30 5-9PM**

**Sat., May 31 10AM - 6PM**

Food

Activities

Tours

Fun

Demos

Foothills Community Workshop is a 501(c)(3) non-profit organization