

June, 2020

LARC NEWS & VIEWS

N4LNR



Lenoir Amateur Radio Club Newsletter

Events

LARC Morse Code Class

Mondays, 7:30 pm
Webex Online Meeting

LARC General Exam Prep

Thursdays, 7:30 pm
Webex Online Meeting

Next LARC Meeting

Thu. July 9, 7:00 pm
Webex Online Meeting

License Exam

Sat. Aug 15, 9:30 am
Foothills Community Workshop
141 N. Main Street
Granite Falls, NC 28630
By Appointment Only
Please register ahead
(K3OS@ARRL.NET or 828-270-8173)

Shelby Hamfest Cancelled

Fri. Sep. 4-6
www.shelbyhamfest.com

13 Colonies Contest

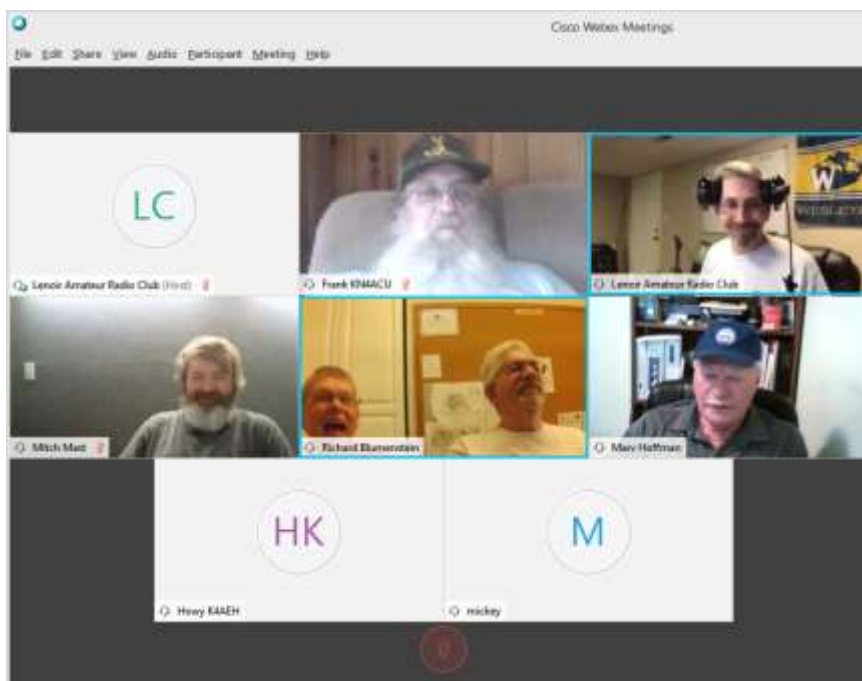
Wed. Jul. 1, 9am—Jul. 7, 12am
www.13colonies.us

Field Day 2020

Field Day, the most popular Amateur Radio contest in the United States and Canada happens every year on the fourth full weekend of June. This year Amateur Radio operators concerned about the Covid-19 pandemic and social distancing measures were included and not disappointed. ARRL made it possible for everyone to participate with a slight change in contesting rules. In past years, the Lenoir Amateur Radio Club have setup in a public place to demonstrate its skills and equipment for responding to emergencies and also participate in the 24-hour nonstop radio contest. This year Lenoir Amateur Radio Club members participated Field Day in the comfort of their own home or location of their choosing. Each individual received a score and all members of the club earned an aggregated score for the club.

LARC had also set up the club's communication trailer with three radios in a way that abide by the social distancing rules for those members who wish to participate Field Day at the location where the trailer is stored.

A Webex meeting was set up for LARC members to see and talk to each other as they get on the air live. Marv Hoffman, the North Carolina ARRL section manager joined us on Webex and chatted with LARC members. Thanks for visiting Marv!



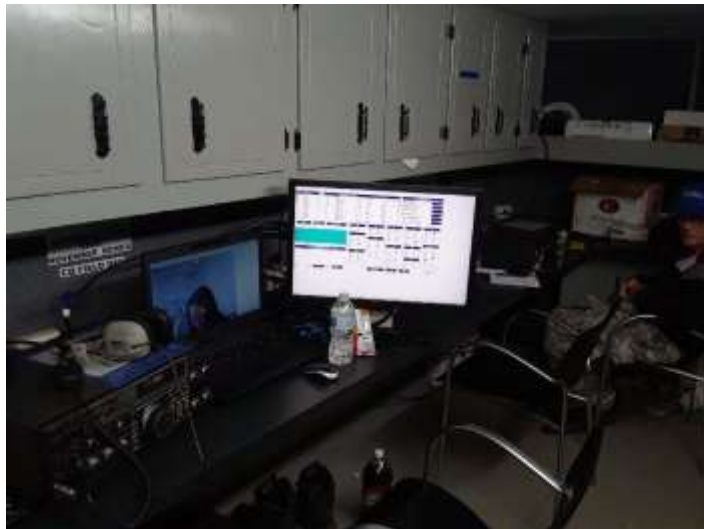
A chat with Marv



On The Air Buzzing



Setup in the Communication Trailer



Inside the Communication Trailer

Josh N4JDE working 2m from the parkway. The picture shows the Sahara Dust weather phenomenon. He worked Winston, Lincolnton, Gastonia, Salisbury and Newton. We're sure Josh's little boy enjoyed the outing too. He was heard helping dad in the background calling "CQ" ,"CQ" !



K0CAT at his station with his buddy. Now we know why you chose that cool call sign!



K4HRM operating from home with K0CAT under solar power. COVID-19 made Field Day different this year but we hams are flexible and can show the community how we can still all work together.



KB2KHR brought his radio to the Communication Trailer to use for Field Day.



Antenna Trailer and Communication Trailer



President's Comments

Mitch Mast (KN4AYD)



To Our Valued LARC Community, Members, and Friends:

I want to let everyone know how the club is progressing and cover a few of these things.

Where we were:

- This is our 34th year with an established Constitution and By-Laws
- Nonprofit 2008 and IRS Tax Exempt 2009
- We built a Communications Trailer and an Antenna Trailer
- Established a club repeater
- Established affiliation with ARRL
- One of our members established a 5 minute talk show on a local commercial radio station to educate the public about Amateur Radio
- Received a donation of a house which when sold created a sound financial base

What we have accomplished:

- This year we have 48 members - topped only 2 times in the club's history - 1990 and 1997 having 50 members those years
- We created a management plan that will maximize the club's assets to get the best return
- The club created much needed committees and re-structured them to meet the needs of a growing and developing club
- We empowered the committees with guidelines to make necessary well thought out plans and recommendations, so that the club can make well informed decisions
- Freeing up valuable members' time to enjoy the membership and benefits of club meetings

- We are in the process of establishing a budget providing members and donors a bird's eye view of how the club uses funds and resources it receives
- LARC is in the process of renovating the social media platform by improving the club's Website and Facebook page
- The club is establishing an organizational structure and automating many processes to facilitate workflow so that no one is overworked
- We are one of the first HAM clubs to establish online collaboration for the club meetings, officers' discussions, and committees' discussions

So where are we headed?

Recent events have forced the cancellation of many club activities and the Club had to adjust accordingly. We are thinking outside of the box with how we conduct business and how we participate in future events such as classes, testing, contesting, and other activities.

LARC is working toward more community involvement by creating partnerships with the 4H, Boy Scouts, Girl Scouts, homeschooling, and public schools. This will educate the public and involve the youth to encourage the growth of a new generation of Amateur Radio operators to continue the hobby for years to come.

We are developing a robust educational program to enrich the knowledge base of LARC's members and give new hobbyists a rewarding experience that will last a lifetime.

The club is capturing the historical significance of the club's accomplishments for its members and the general public.

LARC continues to look for volunteers that have a desire to see the Club succeed.

The most valuable resource, is in our members' backgrounds. This is what LARC brings to the table.

Not in any particular order and not recognizing any one individual but here are some skills that members are bringing. This includes both retirees and current occupations:

- Law Enforcement
- Multiple Military members including
 - ◊ International communications at all levels
 - ◊ Medical Sciences
 - ◊ Helicopter Pilot
 - ◊ Naval Engineer
 - ◊ Flight Surgeon
 - ◊ And Active Military

We also have:

- Firefighter Volunteers
- Pastors
- Truck Drivers
- Farmers
- Beekeepers
- Nuclear Power Plant Expert
- Pilots
- Local Government Officials
- Public School System
- Teachers / Professors
- College Administration / Networking
- Computer Programmers from all Disciplines
- Doctors
- Lawyer
- Electrical Engineers
- Presidents of local radio clubs
- Financial Manager of multi-million/ billion dollar ac-

counts

- Master Gardeners
- Mechanics
- 4H Members
- Boy Scouts
- Girl Scouts
- Business Owners
- International Travelers
- Marketing Experts
- Elmers with over 50 years of Amateur Radio Experience
- Elmers with communications experience not directly related to Amateur Radio
- Emergency communications and Emergency preparedness organizations to include:
 - ◊ AUXCOMM
 - ◊ CARES NET
 - ◊ TARHEELS NET
 - ◊ ARES
 - ◊ REACT International
 - ◊ Skywarn
 - ◊ Emergency Operation Center Volunteers

Forgive me if I have missed some. Outside of the military or church, I have never been in an organization with such a diverse group of skill sets in the membership.

Gary said it best in the Tech Class he taught earlier this year – “Amateur Radio has led hobbyists to all kinds of career fields”.

This excites me to no end. The Lenoir Amateur Radio Club's potential is only limited by its imagination. I think we get an A++ rating!

The value of an organization is the value that it places on its members and the community that it serves. That being said, we are all from almost every conceivable background, with our desire to learn as much as we can in Amateur Radio—this is the bond that ties us together.

We must do our due diligence to respect one another and be courteous in how we help and address one another.

I am honored to be able to serve as your president with outstanding officers and committee members. I am looking forward to witnessing first-hand what LARC is about to accomplish.

Thank you for your continuing interest in the Lenoir Amateur Radio Club and we hope to see you at our next meeting or event.

Mitch
KN4AYD

Mitch Mast, President
president@n4lnr.com

Scott Hunt, Vice President
vp@n4lnr.com

Jeff Tickle, Secretary
secretary@n4lnr.com

Ro Maddox, Treasurer
treasurer@n4lnr.com

Raspberry Pi Controlled Ham Radio

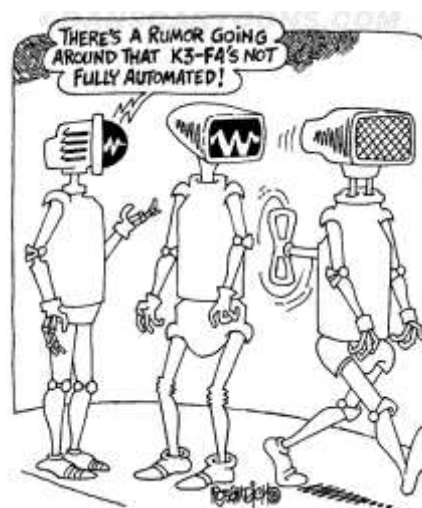
Remote operation is getting more common in today's Ham radio world. Ham radio gear often have a facility for remote control, but they most often talk to a computer, not the operator. Hambone: Ham + Bot + Tone is a Ham Radio Bot built for the Raspberry Pi. It acts as computer interface for your radio by listening for DTMF (dual tone multi frequency) commands and can activate the radio's PTT via the Raspberry Pi's GPIO pins to play audio.

This project was the result of a failed experiment to see if a handheld could work as a POCSAG transmitter to send paging tones. It didn't work because the Yaesu VX-7R

doesn't support transmitting data at 9600 baud. More or less it took the 2FSK coming from the audio source and modulated it as NFM. This program was written for the RPi and Yaesu VX-7R in mind however the core functionality should work for most radios.

Not to throw away a mostly working product, it was repurposed for keying the radio and reading off the weather.

More information on Hambone and the programming codes can be found on this website: <https://github.com/notpike/Hambone>



Soldering A PL-259 Connector

At one point or another in your Amateur Radio hobby, you'll want to do some repair work or make some cables of your own. A skill in soldering is good to have. So, the Lenoir Amateur Radio Club had a class on "Tricks of the Trade" - the finer points of soldering. Here, Gary (K3OS) demonstrates online through Webex, soldering a PL-259 connector to a coax cable.

Cable Types



The PL-259 Connector to be used



Cut to expose the inner cable



Clean the end



Clamp it. A clothes pin is useful!



Crimp



Smoking solder!



Solder a little



Final Crimp



Crimp



Cut



More Soldering



Get the right length



Scrape the end



Thread the connector pieces



Clamp and Solder



Test the connector



Done! There you have it.



Field Day Contesting Voice Saver

Here is another helpful "Tips and Tricks" brought to you by Gary K3OS.

Just a few hints if you have never used the macro functions before.

Most of the logging programs including N3FJP support voice macros. If you record a file with "CQ Field Day. This is Kilo 3 Oscar Sierra, Kilo 3 Oscar Sierra", that wave file can be associated with a computer function key. Let's say you labeled the file "CQ.wav". You assign the file to the F1 Key. That way every time you punch the F1 key on the computer, it sends your CQ file. Similarly, you can record other files for the Field Day exchange, like: "Roger, copy 1Delta North Carolina over" and assign that to F2 key. This means that you would only have to speak the station's call sign, then hit the F2 Key.

For Icom owners, the N3FJP software supports sending these same types of messages from the rig's internal voice memory instead of the computer memory. That eliminates the issue of dual audio inputs, i.e., mic and USB for the first scenario.

Regardless of which method you use, your audio files need to have little to no space at the beginning or end.



13 Colonies Contest



The 4th of July is Independence Day! Lets celebrate the birth of our nation by getting on the air!

Independence Week Special Event

Original 13 Colonies

July 1 1300UTC - July 8 0400UTC, 2020

July 1 0900 EDT - July 7 Midnight EDT, 2020

Sponsored by The U.S. Original 13 Colonies Group

After all we live in North Carolina, one of the original 13 colonies which became a state! What more reason do we have to celebrate and be proud?

For more information go to <http://www.13colonies.us>



No Privacy In Ham Radio

Some Amateur Radio operators talk often and talk a lot on the air. Some rarely talk and mostly listen. Some seem to forget that everyone and anyone can hear them, or they just don't care. We all have heard everything from mundane everyday conversations to very inappropriate subjects that shouldn't be on the air. Just like social media posts, one can learn a lot about an individual if they listen to them talk long enough. We all like to talk about ourselves and about others. Be aware of your conversations. Don't give out any sensitive information you don't want others to hear about you or about someone you know. Above all, remember that anyone could be listening. So don't forget your on-air etiquettes!

Here is some excerpts from an article on the internet that talks about ham radio privacy, which we all know there is no such thing. This article is mostly in the prepping and prepper's perspective but we all could learn from it. All this can be found at <https://preppingtosurvive.com/2012/03/14/theres-no-privacy-in-ham-radio/>

"I only have 1500 rounds of .223 ammo. I need to pick up a lot more of that. I have over 10,000 rounds of .22 ammo so I should be okay there."

That's part of a conversation I heard as I was scanning the 2 meter band on my ham radio recently. The conversation, or QSO in ham radio vernacular, was obviously between two gun enthusiasts. Or perhaps even two preppers. In either case, they were talking openly about just how much ammunition they had stockpiled and just how prepared they were.

As I listened for a while, I learned of modifications they had made to some of their weapons; I heard stories of recent trips to the range. I just listened and learned.

Was my listening unethical? No. They were talking on a publicly accessible frequency and using an open repeater to extend their transmission range. In the ham radio world, there is no expectation of privacy. In fact under most circumstances, encryption and other methods of obfuscation are explicitly prohibited under the FCC guidelines.

Anything you say when you transmit on an amateur radio frequency is available for everyone to hear. Everyone. The airwaves are an open medium.

Fellow preppers, like me, can listen and learn. Your neighbors can listen, and learn. Others can listen and learn, too. For example do you think that the Department of Homeland Security is monitoring the radio waves? What about the Federal Bureau of Investigations? Or maybe the Bureau of Alcohol, Tobacco, Firearms, and Explosives? Think any of those agencies would find eavesdropping on such a conversation interesting? I'd say so.

But what about anonymity?

There's no such thing in the ham radio world.

Title 47 of the Code of Federal Regulations, part 97.119 requires that amateur radio operators identify themselves at least every ten minutes while on the air and at the conclusion of any conversation with another station. Ham radio operators must provide their FCC-issued call sign, even if it's just a short transmission to test your radio.

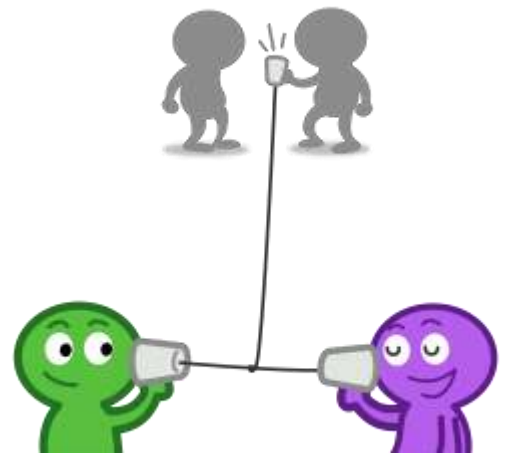
Most ham radio operators say something like "This is KJ6DEL" (That is not my call sign by the way; I just made it up.)

Additionally, the FCC requires that each amateur radio operator maintain his current physical mailing address with the commission. Failure to do so can result in a suspension of your license.

So, by eavesdropping for only a few minutes on a conversation that includes guns, prepping supplies, God, and the downward spiral of our economy, anyone, any agency, can quickly identify the person. By using the person's call sign, a quick search of the FCC database can produce the operator's full name and physical address.

Not long ago, I suggested that ham radio could also be an integral part of your prepping plans. In times of emergencies, ham radio operators have provided much needed information to others. Sometimes to governmental agencies, but often to other hams.

Imagine being able to bypass the mass media reports. Imagine being able to listen directly to those near the scene of an accident. Imagine not having a filtered presentation by the nightly news that leaves you wondering about their bias or propaganda. Imagine being able to listen to ham radio operators from other states or even other countries so you can know what is really going on. But, just as you must be careful with Twitter and Facebook, you must also take care when talking on the radio. What you say may not be recorded forever the way it is with social media. But then again, depending on who is listening at the time, maybe it will be.



A Ham's Life

Tell us about yourself. How did you learn about Amateur Radio? Who lead you to the hobby? When did you become a Ham? Show us your rig, ham shack, home station, mobile station, your antenna setup and equipment. Share your knowledge, problems, and solutions. What have you learned or want to learn? Tell us about an interesting contact or event. What is your favorite mode? What part of radio communication do you like and enjoy?

Hi All, I'm **Ed (KB2KHR)**. Here are a couple of stories about my radios and the places I've contact. I first started



using 10 meters in 1990 on my President HR-2600 which I used as a base radio. I made contact

all over the world including Hawaii, Germany, Croatia, Alaska, Canada, many states in the U.S.A., and other countries. I talked on 10 meters until 2001. Then I packed everything away and move to the Cape Vincent Senior Housing Complex in 2002.

In the summer of 2002 I got my Technician Class license and used many mobile radios loaned to me from the Jefferson County Radio Amateur Club. Then I bought my Yaesu FT-2900 R/E and put it in my car. I talked to Canada, Massena, Watertown, and Syracuse to mention a few places.



In Watertown we have two repeaters, 147.255 which covered the North Country and Canada, Dexter, NY 147.030 and the Jefferson County Radio Club 147.375. I enjoyed talking to my friends in Canada every day. I lived 1 mile from the border. I use to talk on the Jefferson County Radio Club Repeater quite often.

The Canadian repeaters I use to talk on were: VE3KBR 146.940 Kingston, Ont. and VA3LGA 146.625 Lansdowne, Ont.

Here are antennas I have had and radios that I currently own. As most of you know, I got my first start in CB radio.

The CB's I still have are as follows: SBE Trinidad 23 Channel Base Transceiver,



Uniden Madison 40 Channel USB, LSB, AM Base Transceiver,

Midland 23 Channel Base AM Transceiver,



and Model POS123Z Power Supply Regulated 13.8v – 3A.



Antennas that I use to have are as follow: Antenna Specialists PDL-II Beam Base, HygainCLR Penetrator Base and an Avanti A-99 Fiberglass Base. The PDL-II I modified on the back with 4 wires to make the signal rejection tighter. I could barely hear anyone if I was turned away from them. When I turned the beam towards them, receive and transmit was increased after the wire modification.

I was in the Fire Dept. where I lived in Cape Vincent, NY and I have a Sonar Business Band FM40 Mobile Radio.

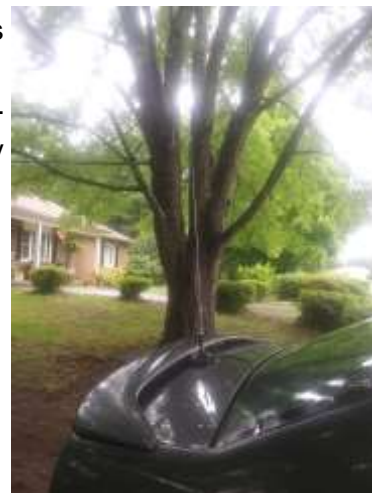


In Amateur Radio Equipment, I have an Ameco Code Practice Oscillator,



My mobile antennas are as follows:

Hustler 2m 5/8 wave magnetic mount which is on my car now, 2m 1/4 wave whip,



Yaesu FT-2900R/E 2m mobile Radio, President HR2600 10m mobile Radio,



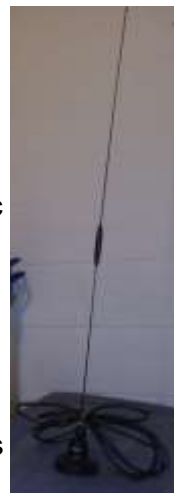
Icom IC-730 HF Base Transceiver,

LDG Automatic Antenna Tuner,



Hustler 2m magnetic mount,

Tram 2m/70cm magnetic mount,



Astron RS-35A Power Supply,



Daiwa 140mhz-525mhz CN-103L Cross Meter,



numerous jumper cables and a 2m/70cm Base Antenna.

Yaesu FT250R 2m Hand held



and a Baofeng UV5R Handheld.



The antennas I use to have are as follows: Avanti A-99 Fiberglass Base Antenna and a Cushcraft AR10 FM Ringo. When I was using both the antennas separately I was using my President HR-2600 Mobile Radio as a base radio.



Frequencies

146.625- 94.8

Club Repeater (N4LNR)

147.330+ 141.3

Hibriten Mountain Repeater
(KG4BCC)

145.535

Simplex

29.6

Simplex FM

28.374

Simplex USB

Nets

LARC Weekly Net

Tuesday, 7:00 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

Lenoir Amateur Radio Club, Inc

P O Box 3276

Lenoir, NC 28645

N4LNR.org

Serving Amateur Radio In Caldwell County Since 1986

Become a member or renew your membership

Pay your dues in person to the Treasurer or by mail

Full Member \$15/year

Family Member \$25/year

Ask about our Life Time memberships

Send comments concerning the LARC NEWSLETTER to

newsletter@n4lnr.com

Suggestions and your articles are appreciated. Tell us about yourself so we can feature you in our newsletter.

To unsubscribe from the Newsletter,

send an email to above address.

