JANUARY 2015

NALINR News & Views

P. O. Box 3276 Lenoir, NC 28645 http://N4LNR.ORG



Next LARC Meeting January 8, 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

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







Serving Amateur Radio
In Caldwell County

LARC's First Meeting of 2015!

SDR—Software Defined Radio! What is it? Will it benefit me? What does it cost? How do I get started? Join Phil KG4BCC as he takes a swan dive into "software defined radio" at the

January LARC meeting. Want to read up on SDR, see the LARC June 2014 Newsletter on N4LNR.org.

Catch up on current
Club projects and
chat with fellow hams about
what new "things" Santa
brought this Christmas for their
"radio shacks."



Bring a friend! Talk up amateur radio with your family and friends, particularly the young ones. You may be surprised by their interest.

See you January 8 at Gamewell Fire Dept.





This time of year we often think about two things, the past and the future. We look back at the last year and see how we did on the list of things we wanted to get accomplished. We also take a look at the future year to come. What things do we want to get done? What goals do we have?

I sit here at my keyboard thinking the same things about the Club. We have accomplished so many things in the last year from the various service events to the work on the communication trailers to Field Day. I really feel as though we accomplished more than expected.

At my workplace, we have goals that we set at the beginning of each year. If we hit those goals, we then look to see how we can change them to push ourselves a little harder. I feel that the Club is at the same point in the road. We have hit our goals and need to push ourselves even farther.

I have some anxiety in the role of President. There is internal pressure to be sure that I do what is in the best interest of the Club and the members. I want to steer us in a way that will let us look back next year and think, "Look at what we have accomplished." I know that I will lean on my fellow officers and all the members for help. We have such a diverse and intelligent group and there is much information to be learned.

As I think about the next year for LARC, there are a few things that I feel as though we can accomplish which will enrich our meetings and grow our Club. I have a goal to have some sort of hands-on learning or demonstration at each meeting. We may not hit this goal every meeting but I believe that learning and expanding our horizons is a crucial part of the Club.

We should be able to finish both trailers this year. What an awesome accomplishment that will be! The trailers will be essential in helping during community events as well as disasters. They will help us meet our goal of service to the people of Caldwell County.

Another goal is get the Club repeater repaired and working correctly. If we can complete this, then I will urge us to get more heavily involved in DMR. My hope is for us to help with the install of a DMR repeater in our County filling the gap in coverage for the statewide NCPRN Network.

Those are some lofty goals, but I know with all of us giving as much of our time and ideas as possible, that we can accomplish them all. The next year for the Club is a painting yet to be completed. What will our painting look like?

I want to finish this first column with a story of something that happened to me this week and a challenge to you. I was at work talking with my fellow coworkers about Software Defined Radios. We were discussing all the things that you can do with them from FM Radio, Paging, Police Scanning, and Aircraft tracking. Only a couple of us are hams, but as we spoke I noticed that everyone was interested and listening intently. What I discovered is that there are people all around us that might be interested in amateur radio. In the next month, whom in your life could you share radio with? Family member? Co-worker? You may find that they are more interested than you think! How else can amateur radio grow, as a hobby if we never tell anyone it exists?

LARC Eatin' Meetin' A Grand Affair



LARC members, family and friends gathered on December 9 at Captain's Galley in Granite Falls for the annual Eatin' Meetin' and to enjoy the fellowship and fun of the "Dirty" Santa gift exchange. The room was packed and the food was plentiful and the conversation overflowed!

Vice President Tom KA4HKK welcomed incoming President Tanner KK4SZI and presented a license plaque to outgoing two-term President Ted KF4FLY. He expressed the appreciation of the entire membership for the leadership and hard work Ted had provided the Club.

A good time was had by all...



Radio Herstory: It started with a skin flick...

In 1933, a beautiful, young Austrian woman took off her clothes for a movie director. She ran through the woods, naked. She swam in a lake, naked. Pushing well beyond the social norms of the period. The most popular movie in 1933 was King Kong. But everyone in Hollywood was talking about that scandalous movie with the gorgeous, young Austrian woman.

Louis B. Mayer, of the giant studio MGM, said she was the most beautiful woman in the world. The film was banned practically everywhere, which of course made it even more popular and valuable. Mussolini reportedly refused to sell his copy at any price.

The star of the film, called Ecstasy, was Hedwig Kiesler. She said the secret of her beauty was "to stand there and look stupid." In reality, Kiesler was anything but stupid. She was a genius.



She'd grown up as the only child of a prominent Jewish banker. She was a math prodigy. She excelled at science. As she grew older, she became ruthless, using all the power her body and mind gave her. Between the sexual roles she played, her tremendous beauty, and the power of her intellect, Kiesler would confound the men in her life, including her six husbands, two of the most ruthless dictators of the 20th century, and one of the greatest movie producers in history.

Her beauty made her rich for a time. She is said to have made - and spent - \$30 million in her life. But her greatest accomplishment resulted from her intellect, and her invention continues to shape the world we live in today.

You see, this young Austrian starlet would take one of the most valuable technologies ever developed right from under Hitler's nose. After fleeing to America, she not only became a major Hollywood star, her name sits on one of the most important patents ever granted by the U.S. Patent Office.

Today, when you use your cell phone or, over the next few years, as you experience superfast wireless Internet access (via something called "long-term evolution" or "LTE" technology), you'll be using an extension of the technology a 20- year-old actress first conceived while sitting at dinner with Hitler.

At the time she made Ecstasy, Kiesler was married to one of the richest men in Austria. Friedrich Mandl was Austria 's leading arms maker. His firm would become a key supplier to the Nazis. Mandl used his beautiful young wife as a showpiece at important business dinners with representatives of the Austrian, Italian, and German fascist forces. One of Mandl's favorite topics at these gatherings - which included meals with Hitler and Mussolini - was the technology surrounding radio-controlled missiles and torpedoes. Wireless weapons offered far greater ranges than the wire-controlled alternatives that prevailed at the time. Kiesler sat through these dinners "looking stupid," while absorbing everything she heard.

As a Jew, Kiesler hated the Nazis. She abhorred her husband's business ambitions. Mandl responded to his willful wife by imprisoning her in his castle, Schloss Schwarzenau. In 1937, she managed to escape. She drugged her maid, Snuck out of the castle wearing the maid's clothes, and sold her jewelry to finance a trip to London. (She got out just in time. In 1938, Germany annexed Austria. The Nazis seized Mandl's factory. He was half Jewish. Mandl fled to Brazil. Later, he became an adviser to Argentina's iconic populist president, Juan Peron.)



In London, Kiesler arranged a meeting with Louis B. Mayer. She signed a long-term contract with him, becoming one of MGM's biggest stars. She appeared in more than 20 films. She was a co-star to Clark Gable, Judy Garland, and even Bob Hope. Each of her first seven MGM movies was a blockbuster.

But Kiesler cared far more about fighting the Nazis than about making movies. At the height of her fame, in 1942, she developed a new kind of communications system, optimized for sending coded messages that couldn't be "jammed." She was building a system that would allow torpedoes and guided bombs to always reach their targets. She was building a system to kill Nazis.

By the 1940s, both the Nazis and the Allied forces were using the kind of single- frequency radio-controlled technology Kiesler's ex-husband had been peddling. The drawback of this technology was that the enemy could find the appropriate frequency and "jam" or intercept the signal, thereby interfering with the missile's intended path.

Kiesler's key innovation was to "change the channel." It was a way of encoding a message across a broad area of the wireless spectrum. If one part of the spectrum were jammed, the message would still get through on one of the other frequencies being used. The problem was, she could not figure out how to synchronize the frequency changes on both the receiver and the transmitter. To solve the problem, she turned to perhaps the world's first technomusician, George Anthiel.

Anthiel was an acquaintance of Kiesler who achieved some notoriety for creating intricate musical compositions. He synchronized his melodies across twelve player pianos, producing stereophonic sounds no one had ever heard before. Kiesler incorporated Anthiel's technology for synchronizing his player pianos. Then, she was able to synchronize the frequency changes between a weapon's receiver and its transmitter.

On August 11, 1942, U.S. Patent No. 2,292,387 was granted to Antheil and "Hedy Kiesler Markey," which was Kiesler's married name at the time.

Most of you won't recognize the name Kiesler. And no one would remember the name Hedy Markey. But it's a fair bet than anyone reading this newsletter of a certain age will remember one of the great beauties of Hollywood's golden age ~ Hedy Lamarr. That's the name Louis B. Mayer gave to his prize actress. That's the name his movie company made famous. Meanwhile, almost no one knows Hedwig Kiesler - aka Hedy Lamarr - was one of the great pioneers of wireless communications. Her technology was developed by the U.S. Navy, which has used it ever since.

You're probably using Lamarr's technology, too. Her patent sits at the foundation of "spread spectrum technology," which you use every day when you log on to a wi-fi network or make calls with your Bluetooth-enabled phone. It lies at the heart of the massive investments being made right now in so-called fourth-generation "LTE" wireless technology. This next generation of cell phones and cell towers will provide tremendous increases to wireless network speed and quality, by spreading wireless signals across the entire available spectrum. This kind of encoding is only possible using the kind of frequency switching that Hedwig Kiesler invented.



Did You Know? The ARRL has published a revision to the <u>HF Contesting Guidelines</u>. The goal of the guidelines is to provide guidance and advice, especially for new contesters, and to encourage contest operation that advances the spirit and integrity of radiosport.

From The December Meeting

Attendees. Ted KF4FLY (wife, daughter), Tom KA4HKK, Irv W4IWK, Tanner KK4SZI, Josh N4JDE (wife, daughter), Susan N4OJN, James N4NIN, Jeet KK4CCA, Phil KG4BCC, Warren WU3Y, Shawn KI4ZKP (wife, daughter), Ruby Rogers, Ro K4HRM (guest), Marv WA4NC, Randy KC4ZSM.

Repeater Upgrade. Approved hiring services of Don Daso K4ZA to complete tower work.

Transition of Officers. Tom KA4HKK presented a license plaque to outgoing President Ted KF4FLY for his 2 years of outstanding service to the Club. Incoming new officers, President Tanner KK4SZI and Secretary Josh N4JDE were recognized.



Foothills Community Workshop Learn - Teach - Make



FCW Christmas Open House

Visitors were welcomed to the Foothills Community Workshop Open House on December 5-6 in Granite Falls.

















The LARC President is asking you for ideas and interests that YOU want to talk about and/or see hands-on demonstrations at future Club Meetings. Nothing is off the table, so send your thoughts directly to the top - tannergreer@bellsouth.net

LARC Gets Local Media Hit

The Lenoir Amateur Radio Club and amateur radio received great publicity recently, thanks to Tom KA4HKK who was interviewed by the *Hickory Daily Record.* Not only did the article make the local press, it was featured on the media hits websites of QRZ and ARRL, and shared statewide by the NC Section Manager. To read the article, go to

http://www.hickoryrecord.com/life_entertainment/can-you-hear-me-now/article_8ecbe664-8648-11e4-9d36-8706a199ba5f.html



Get Ready for the NC QSO Party

The North Carolina QSO Party will hold its 45th annual event on Sunday, March 1, 2015. The QSO party starts at 1500 UTC (10:00 AM Eastern local time) and runs for 10 hours through 0059 UTC (8:00 PM Eastern local time). Complete details can be found at the NCQP website: http://rars.org/ncqsoparty/

Looking for an Area Hamfest?

January 10, 2015 FirstFest, Forsyth Amateur Radio Club, Winston-Salem, NC, see http://www.w4nc.com/

March 13-14, 2015 Charlotte Hamfest/North Carolina Section Convention, Mecklenburg Amateur Radio Society, Concord, NC, see http://www.charlottehamfest.org

April 4, 2015 43rd Annual RARSfest/North Carolina State Convention, Raleigh Amateur Radio Society, Raleigh, NC, see http://www.rars.org/rarsfest

July 11, 2015 30th Annual Firecracker Hamfest, Rowan Amateur Radio Society, Salisbury, NC, see http://www.rowanars.org

LARC 2015 Officers



Tanner Greer
President
KK4SZI

Tom Land
Vice President
KA4HKK

Josh Edwards Secretary NAJDE

Phil Crump **Treasurer** KG4BCC

Editor For A Final

Over the holidays, I was having a conversation with friends about amateur radio. Two comments struck me as something that needs more attention when the Club does amateur radio exhibits at local community events. These comments were: "it's an old man's hobby" and "it's too technical and anyway we have cell phones and internet now." Yes, it's an old man's hobby! But it's also a lifelong hobby that most of those old men got into during their youth or their military days. And, yes, it's technical, but far more than cell phones and Internet in an emergency. There are more women and young people involved as well.

So my challenge to you is to help the Club shed new light on how we interest new people in amateur radio—as a lifelong hobby or in case of emergency only. What about a couple poster boards that show the progression of a lifelong hobby or how amateur radio is used in an emergency? I am a visual person and don't tend to read a lot of detail in handouts—show me what it does, don't make me read all about it.



Send comments concerning the LARC NEWSLETTER to hrmaddox@nettally.com
Suggestions and your articles are appreciated.