

## 2024-10-01 Hamlet Net - LARC Foxhunt and Emergency Support for Hurricane

### Announcements:

- Test Session Info
  - Had a good test session last weekend. 8 candidates tested, and earned 3 new Technician licenses, 3 upgrades from Tech to General, and one person with an expired Extra passed the Technician exam and regained his Extra Class license.
  - Next VE session is Saturday, October 26th in the Clover Building at the Boulder County Fairgrounds, and starts at 10 am. It is an ARRL session, so there is a \$15 fee to test. For more info, and to pre-register, see the Licensing/Testing page on the club web site, <https://w0eno.org/>, under the Education menu.
- We are still looking for volunteers for Santa on the Air - we can use elves who act as net control, as well as Santas. We've got a script for the elf, and a list of questions for Santa to keep the net going when Santa doesn't have anyone to talk to. No experience is necessary. You can even participate over Echolink as well.
- This Sunday is BARCFest from 9am to 1pm. Entry fee is just \$5. LARC will have a table - contact Chuck, K0ITP, if you'd like to help out.
- Also in October, on October 12th during the farmer's market, Chuck will be present to talk about communications during emergencies.
- We have some volunteer opportunities available where you can help out LARC:
  - Photographer / videographer - record team activities and upload to web site / YouTube
  - Newsletter Editor - put together the monthly Splatter newsletter
  - Event Coordinator
- You can start earning your 2024 membership or future renewal by acting as NCS for at least 5 nets this year. You can run either this Tuesday night net or the Thursday night net (or both). We have scripts available for both, so all you need is a good connection into the repeater, and somewhere to keep track of names and call signs as people check in. If you're going to be on the net anyway, why not save some dough at the same time! There are four free memberships available for 2023, so don't wait to get started!
- Chuck has set a goal for the Club of running at least one activity a month. This can be a hands-on construction activity, an operating activity like Field Day, a fox hunt, or a special event station. The goal is to get people together to have fun with amateur radio!

We have multiple locations at our disposal, as well as lots of Club equipment, so if you have an idea for something you think others hams would like to do, please let us know, and if you're willing to run it, even better!

- The Club is also looking for presentation topics for 2024. If you have any ideas, or better yet, would like to present, please let Chuck know and we'll get you on the schedule!
- All club activities are open to anyone - members and non-members. If you have questions, ask them on a net or **send email to [elmer@w0eno.org](mailto:elmer@w0eno.org)**

**Presenter: Bryan, AF0W**

**Topic: LARC Foxhunt and Emergency Support for Hurricane Helene**

- This weekend, Chuck ran a LARC foxhunt with a twist - he did not announce the frequency of the fox in advance.
- The fox broadcast its frequency and position via APRS, so you had to either receive it via RF or check on a web site like [aprs.fi](http://aprs.fi) to retrieve the info
- Once you had this information, you could hunt the fox using the same techniques as a regular fox hunt
- There were some issues with the APRS transmission, but Chuck communicated the relevant information via the club's repeaters
- I'm not sure what the output power of the fox was - looks like it can be configured from milliwatts up to about 10 watts

**My Hunting Experience**

- The hunt started at 12am - my wife and I started hunting around 12:30.
- We heard the possible area of the fox on the repeater, and headed up to Sandstone Ranch, figuring we might get a good signal from the top of the hill. We were not able to receive anything there.
- We then heard Chuck announce a smaller area for the fox, and headed down to that area.
- Kat actually spotted Chuck and his wife on their bikes. I was able to get a signal from the fox at that location.
- We got a clue from Chuck and headed off a bit farther up the greenway.
- We found a location that had a very strong signal - even with the antenna off the radio, I received a strong signal when attempting to shield the radio with my body

- We searched back and forth over the area, and while we occasionally found something that we thought must be the fox, they all turned out to be something else
- Finally, it was coming up on 2pm, and Chuck and his wife came back by, and told us we were really hot, but still couldn't find anything.
- Chuck finally pointed out the fox, which he had hidden in a large weed at the side of a sidewalk.
- We must have walked right by that location a dozen times, but never saw the thin, black antenna sticking up.
- The only other hunter that we were aware of was our Club vice president, Mike Ritchie, W0KKI, but he had to leave for another event before he located it, so I suppose the fox "won" this round!

### **Some Lessons Learned**

- The first one is that you should get prepared for any event in plenty of time before the event
  - a. I was running around trying to find things like a radio charger, BNC-to-BNC coax, an antenna, etc.
  - b. There is no reason that I couldn't have done this a day or two in advance and had it be a lot less stressful
- Another lesson is to know your equipment
  - a. I used a total of four radios during the hunt
    - A Kenwood TH-D72 HT for APRS reception and transmission, connected to a mag mount antenna on my vehicle, since I don't have a mobile installed
    - A Yaesu VX-3R HT for listening for the fox
    - A Yaesu VX-8GR for repeater and APRS
    - A Baofeng UV-5R to listen for the fox and communication on the repeater
  - b. I hadn't used the Kenwood and Yaesus for a long time, and had a lot of trouble remembering how to do things like enable GPS, quickly tune to frequencies, and adjust the squelch
  - c. At one point, I configured my Baofeng to listen to the fox on one VFO and the repeater on the other. I did not have the "dual watch" feature available, so I had

to manually change between the fox and repeater, so when I was listening to the repeater, I probably missed the fox a number of times.

- d. Even with dual watch enabled, if a signal was coming in on the repeater, I'd still miss it, unless I was using a radio like the Kenwood TH-D72 that will let you listen to both VFOs simultaneously.
  - e. Another radio issue was that since we didn't know the fox frequency going into the hunt, I was not able to pre-program in frequencies around the fox frequency, nor the third harmonic. Trying to make changes in VFO mode took too long given the short transmissions from the fox.
  - f. It's about impossible to try to mess with your radio at the same time as driving
- It would have helped a lot to have had a good plan for hunting
    - a. For example, in my case, which radio to use for listening for the fox, how to communicate with the repeater, etc.
    - b. Also how to use the directional antenna - what radio to use it with, how to hold it and the hunting radio, etc.
  - The biggest issue I had was the super strong signal from the fox once I got close
    - a. As I mentioned, even with the antenna removed, both the Baofeng and Yaesu VX-3R had a full-quieting signal no matter how I held the radio - I even tried walking around the car hoping that it would attenuate the signal, but even this didn't help
    - b. One thing I didn't try (again, because I didn't remember to get it when we left for the hunt) was to put a radio in a metal-lined Pringles can to attempt to make it directional. I'll have to borrow the fox from Chuck and see if that would help.
    - c. I also have an offset attenuator that I built, but I do not yet have it mounted in a box and have antenna connectors on it, so it was not ready to use either.
  - The radio and antenna issues were exacerbated by the timing of the Fox - it just made a fairly short transmission every 30 or 60 seconds or so. This doesn't give you a whole lot of time to play around with your equipment once the transmission starts
  - Overall, the hunt was a lot of fun, even though we didn't find the fox in the end. It certainly uncovered a lot of issues that I have to work on.
  - Much like these weekly nets, activities like a fox hunt give you a chance to exercise your equipment and procedures and find any weak spots.

## Emergency Support for Hurricane Helene

- Chuck mentioned that he has a Broadcastify instance up for the LARC repeater system - I found another use for Broadcastify
- There is a repeater in North Carolina that is being pretty heavily used for support in the aftermath of Hurricane Helene, and it also has a Broadcastify instance
  - a. The repeater's call sign is W4HTP and the link is:  
<https://www.broadcastify.com/listen/feed/43107>
  - b. Right now, there are just over 1450 listeners to that stream
- There are areas with no water, power, or phone/Internet access
- While writing this, Net Control is repeating information from official Facebook posts for various counties and info from meetings.
- Right now, there are travel bans in some areas
- Sounds like just about all supplies are being brought in via air as many roads are washed out or are blocked. This is going to pause tomorrow because President Biden is flying in the survey the damage
- Some counties are limiting the sale of gas to 10 gallons per person
- There are also numerous reports of looting
  - a. One that I heard was where a group of people in four vehicles who drove up to a church that was handing out emergency supplies, and a bunch of people jumped out of the cars and grabbed as much stuff as they could and took off - similar to those videos you've seen where a group comes in and robs a jewelry store
  - b. There are some curfews in a few counties
  - c. Since 911 is down in some areas, people will need to go to a police station for emergencies
- I didn't listen in the early days, but it sounds like this net was heavily used to communicate welfare messages or to attempt to get information on relatives in the affected areas
- There were a number of complaints about people not receiving any official information about what was going on, where to get help, etc. I did hear someone suggest an FM radio channel to listen to today, but I would assume people would have tried those stations before that, so not sure if they were down, or just didn't have any useful info on them.

- a. Longmont has an information radio station on AM (I couldn't find the frequency) - I don't know whether this would be a good source of information from the City during an emergency or not (but would probably still be a good idea to record it somewhere)
  - b. Some cities were setting up hotspots for Internet access - sounds like they were using Starlink. No idea if Longmont has a plan like this or not.
- I saw a request on Facebook from a support group who was looking for amateurs that could support Winlink for their organization
- One county recommended that people download offline maps to their devices before head out for travel
  - a. I just happened to be looking at some location settings on my Windows 10 laptop the other day, and noticed a warning that offline maps would not be supported after 2023 in the Microsoft maps app. I guess I need to find an app that supports them and get some downloaded.
- I also heard people asking about road closures. Net control seemed to be checking Google Maps for traffic info and road closures.
  - a. Net participants also chimed in with road and support information as well
- I did read that the Red Cross was not accepting welfare checks for anyone other than elderly and disabled individuals. Someone mentioned that the Cajun Navy was taking welfare check requests for the area.
- Sounds like the owners of the repeater were not able to get to it initially, and there was concern about its generator running out of gas, but it seems to still be up
- I've also seen mention of some HF frequencies as well, but have not tried listening to them.
  - a. This would be a good example of the need for NVIS communication - talking to someone in Spain isn't going to be as much help as getting in touch with someone in the next state.
- There was also a lot of traffic about donations - where to take them, and where you could get them
- One of the counties cautioned that if you are using a generator, make sure you have disconnected your house from the power grid so you don't inadvertently backfeed your generator power back to the grid and injure workers trying to work to repair lines

- Oxygen is another resource that is in short supply - people needing it are being told to attempt to travel to a location outside their local county to try to find hospitals or other locations with oxygen
  - a. Medications are another area that could be very problematic for some
- I haven't heard anything mentioned about ARES or RACES, so this may primarily be unaffiliated hams performing this service
  - a. I did see that some AUXCOMM volunteers were flown into a few cities to establish communications from the city
  - b. I have read that net control has communicated with some unlicensed individuals. While this is against the Part 97 rules for regular operation, it is likely excused in case of emergency like this.
- I remember hearing that a local ARES activation a while back (think it may have been one of the wildfires) that most of the shelters were not able to get their digital stations up and running - I think they were trying to run Winlink. Again, this is likely something that could be addressed with more training / experience.
- This whole thing really underscores what a major emergency will look like. Shortages, water, power, and phone outages, looting, and lack of information are very likely to occur.
- You will be on your own (or possibly with a few neighbors) - the government will not swoop in immediately and fix everything.
- Longmont used to have a CERT program (Community Emergency Response Team). I tried to find out information about it, but one link was dead, and the other only mentioned a class in 2023, so I don't know if that is still ongoing.
- I know that while I have a lot of amateur radio gear, I don't have anything packaged or arranged such that I could quickly grab it if I was being evacuated. As with the foxhunt, it's scattered in a few places around the house, and would take a while to collect.
  - a. Someone on the NC net mentioned that one factory only had about a 15 minute warning before the entire place was washed away. That's not a lot of time to gather up anything before jumping in the car.
- A number of years ago, we had someone from the Longmont city emergency management department come and give a presentation to the club at one of our meetings. He stated that the most likely emergency for our area is a train derailment and associated leak of hazardous chemicals.

- If there was a big cloud of poisonous gasses moving through the town, you're not going to have very much time to prepare to evacuate.

### Summary

- These two events, a foxhunt and the aftermath of a hurricane, are worlds apart yet they still teach some of the same lessons - the main one being to be prepared
- Preparedness isn't something that just happens - you have to work at it, and it's likely a continuous process, not just a one-time thing.
- LARC activities in addition to these nets can help with this
  - a. If you have any ideas for radio activities that could aid with being ready in case of an emergency, please let us know - perhaps we can set up an exercise that would benefit other club members

### Questions:

- **The question for the week is:** Do you have any plans for communications in an emergency, either one that requires you to evacuate from your home, or one where you are able to stay?
- **In my case,** I have some HF and VHF/UHF mobile radios that I purchased with the intent to make into some sort of portable GoBox. I've seen some huge boxes, but am thinking of something much simpler, but have not made any progress getting something put together (other than buying some sealed boxes at Harbor Freight).
- One other thing I need to do is get more experience with DMR. RMHAM has a huge state-wide network of DMR repeaters (and even one in Wyoming, and a few in New Mexico). This is an incredible resource, but again, probably not something you're going to be able to utilize effectively without some preparation and practice.
- We do have some family in Longmont - my parents are in an assisted living facility, and our daughter and grandson live in an apartment in the southeast part of town. It would be nice to have some means of communication with them. I don't think any of them have the least bit of interest in amateur radio, so I may explore something like GMRS for inter-family communication, but I have no idea if that will work between all three locations. I suppose if all else fails, I can get them some CB radios and 1000 watt amplifiers!

### More Info:

- <https://thecitizen.com/2024/09/29/how-to-stay-in-touch-when-the-grid-goes-down/>



- <https://thecitizen.com/2024/01/29/if-the-grid-goes-down-amateur-ham-radio-work-s-when-all-else-fails/>
- <https://www.cbs17.com/news/local-news/triangle-families-desperate-to-reach-loved-ones-missing-after-helene-ham-radio-operators-help-relay-messages/>
- Cajun Navy: <https://www.cajunnavyrelief.com/>
- W4HTP Repeater: <https://www.broadcastify.com/listen/feed/43107>
- Ham Radio Operators Trying to Help Connect Families After Helene: <https://www.youtube.com/watch?v=Yk2FLaetmY8>
- HamJazzSOS: <https://www.youtube.com/watch?v=RzqoDD10YF0>
- HamJazzSOS Info: <https://github.com/Animosity/HamSOS-README>

**Notes:**

- If you have ideas for net topics or general meeting topics / presenters, please let us know! Tell us on a net, or send email to [k0itp@w0eno.org](mailto:k0itp@w0eno.org)

**Email to [elmer@w0eno.org](mailto:elmer@w0eno.org)**

1. K0ITP - Chuck - Firestone
2. W7PGF - Philip - Frederick
3. W0DPC - Don - Longmont
4. AF0W - Bryan - Longmont -

End: 7:50pm