

Bill Albright - October 1, 2025 re Earle Rother's suggestion to establish a communications network of HAM operators in LWC and those with residences in Portland and the valley, Salem, Corvallis and Eugene.

Bill's report on Mike Tomlinson's and my efforts so far with respect to this objective:

## **HAM Radio**

We have not discovered a way to communicate between the Oregon Coast and the Central Valley using HAM radio. Here's why:

1. We assume that most of the LWC residents who do have a HAM license can operate only on the 2 meter VHF or the 70 centimeter UHF frequency bands (either because they only have a Technician level license or because they only have a VHF/UHF dual band radio). The exception might be Will Hobbs.

2. Propagation of VHF and UHF transmissions is almost exclusively line of sight (LOS) and is effectively blocked by physical obstructions like the Coast Range.

3. Ham repeaters located at high elevation can extend the range of propagation but the only repeaters we've been able access from LWC are along the Oregon coast at Cape Foulweather and Otter Crest. As far as we can tell, these repeaters do not provide communication across the Coast Range unless they can be linked to other repeaters via an internet connection such as EchoLink. This doesn't seem particularly helpful though, since if internet access is often not available during emergencies, and if the internet is available, Zoom would be a more efficient way to communicate over a long distance.

4. There is a HAM repeater on Mary's Peak that is closer to Philomath and might provide better communication with Corvallis or Albany, but we've not yet been successful communicating

with that repeater from LWC. I was able to catch a very short fragment of a transmission from Mary's Peak using my handheld radio in the Crow's Nest. Perhaps with our Diamond antenna mounted outside above the roof line we might do better.

5. We have been experimenting with a new texting application called Meshtastic that allows short range texting, using radio waves, without access to the internet or to cell towers and without any licensing requirement. Michael and I both purchased Meshtastic devices (about \$50 each) and are still learning how to use them. Basically, the device connects to a smart phone via Bluetooth and then, using the free Meshtastic app on the phone, it allows you to locate other Meshtastic users and send or receive text messages to or from them (without an internet connection and without cellular service). It does this by converting the text message into radio waves and transmitting those waves over a public or private channel. Meshtastic users can be connected to each

other on a public channel in a mesh-type network, so that text messages can “hop” from one user to another user, then on to another user, and another,..., etc., effectively extending the range of communication. Again, we’re still trying to learn how this all works, but it sounds intriguing, at least for the purpose emergency communications within LWC and surrounding areas.

6. I mentioned above that Will Hobbs may have more HAM capabilities than just VHF/UHF bands. I believe he has the licensing requirements to operate at longer wavelengths necessary for long distance propagation. I’m not sure if he has the necessary radio equipment for that. I’ve tried to contact Will to get his input on this objective but, so far, he has not responded to me.

In summary, I think this is an interesting project and we can certainly keep trying to learn more and talk with more HAM operators to get their

ideas. For now, I just wanted to let you know what we've learned so far.

Regards,  
Bill Albright