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## The Pickle Barrel Review



THE OFFICIAL NEWSLETTER OF THE WESTON  
MOUNTAIN DIGITAL RADIO ASSOCIATION

December 2024

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### **Introduction**

Greetings one and all, and once again welcome to the Pickle Barrel Review! The hope with this issue of the PBR, as with the new website, is that this will be a fresh new start. It will still have allot of the same great information as the previous publications, filled with the latest happenings not only of the W7NEO system, and the NE-OREGON room, but System Fusion, Allstar, and other Ham Radio related goings on as well. Along with that, since we have recently added GMRS to our group of repeaters, we'll be covering that as well. All that said, as before, we invite others to contribute with articles, or if your club or organization is having an event such as a tailgate, swap meet, VE testing, or whatever, you can list it here as well. As always, the only thing we ask is that your contribution be nonpolitical (unless it's a government action that directly affects Ham Radio), respectful of others (no personal attacks), and relatively family friendly. Just to be

clear, as was the case before, your brother-in-law's bachelor party still doesn't count as a coming event, sorry. So, all that said, feel free to reach in the barrel, grab yourself a pickle, pull up a chair and sit for a while as we discuss the latest happenings in Fusion, Allstar, GMRS, and Ham Radio in general.

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## **N7GSU – SK**



We begin this issue on a sad note of passing. At 11:45 PM, on October 24<sup>th</sup> we lost one of our own, Robin Lee Faulkner (N7GSU) of Condon Oregon. Robin departed this world leaving behind his wonderful wife of fifty-two years Kathy Faulkner (KD7OTY).

Robin was a strong voice among the local Amateur Radio community in support of Emergency Communications. An outspoken advocate of the role of Amateur Radio in emergency communications, Robin not only drew upon years of experience in EMCON, but years of experience as a first responder as well.

His entry into the Ham Radio hobby goes back to when he was first licensed in 1959 at the age of just 9 years old, in his native state of Indiana.

He went on to serve in Vietnam in the late 60's and early 70's with the US Army Signal Corps. His military career didn't end there, he eventually went on

to serve in the Coast Guard aboard the 210 ft cutter Valiant (WMEC-621) out of Galveston Texas, prior to attending Corpsman training in New London CT.

After having served in the military he continued to serve the public in various roles which included; law enforcement, paramedic, emergency services dispatcher, and county emergency programs coordinator.

Additionally, him and his wife Kathy ran a successful business in Fossil Oregon making portable field antennas.

Eventually, he succumbed to injuries from having survived a helicopter crash while serving in Vietnam, which led to his becoming a 100% disabled Veteran. During the final fifteen years of his life, he was wheelchair bound as a result of his injuries. But none of that slowed him down. To his credit, he also served as ARES EC, Lake County MT, former ARES AEC/Training, Yamhill County, Oregon, former Director of Communications, MT Wing, Civil Air Patrol, U.S.A.F. Aux., and Army MARS operator (AAROPH).

Robin was an avid CW operator, and boasted an impressive collection of vintage code keys. From their perch high above Condon Oregon Robin and his wife were able to make contacts on 2-meter simplex all over Oregon, along with parts of both Washington and Idaho.

We'll miss Robin's deep gravelly voice over the radio, along with his boisterous, infectious laugh. Rest easy OM, for your no longer in pain, and are now at peace.

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## **Repeater Updates**

Since our last issue, there have been allot of changes to our repeater system. Some good, some not so good. So, since there's more good news than "not" so good, I'll get the "not so good" out of the way first.

As most of you are aware, we lost both the Chandler Butte, and Roosevelt repeater sites. Chandler Butte was due in part to a fire that, although didn't

destroy the building, it did cause a group of lead acid batteries to explode, permeating the entire inside of the building with a mist of highly corrosive battery acid. The result was that the Yeasu DR2X repeater that was up there was damaged well beyond repair. There's more to the story, but after all was said and done, the owner decided it was time to get out of the commercial repeater business, and sold the site to another group that was more profit driven, and less accepting of Amateur Radio. Since he also owned the Roosevelt site where our 145.19 repeater had been for quite some time, we lost that one as well.

Fortunately, the owners of our two remaining sites recognize the importance of just what Ham Radio and our repeaters provide for the local community, particularly during times of emergency. So, we are on exceptionally good terms with not only the site owners, but many of the adjacent tenants of the sites as well. We are still working to acquire additional sites in order to add to our existing system, thereby increasing our overall coverage, along with our ability to better serve our local community in times of need. So, stay tuned.

Over the past year we've ventured into two additional areas which have been working out exceptionally well. One is the Allstar network, which our analog repeaters are now linked into. Thanks to others throughout the Pacific Northwest with similar systems, our analog machines now have reliable coverage over much of Northeast Oregon, Eastern Washington, both Northern and Central Idaho, along with Puget Sound. One added bonus for our local analog repeaters is the addition of a weather application called Skywarn Plus. Basically, this application queries the National Weather Service every few minutes looking for various alerts, warnings, and advisories. It then sorts them by FIP codes, which is how the NWS separates its forecasting down to specific counties within a given state. Once a notice is released by the NWS to a given FIP area, Skywarn Plus picks it up, and then a female voice (We call ours "Hilda") automatically announces it every 30 minutes over the repeater. This continues until the notice expires even if we lose internet connectivity.

The second area of repeaters we've ventured into is the world of GMRS, or "General Mobile Radio Service." Admittedly, at first there was some

apprehension, so it was decided to install one repeater on Cabbage Hill under a three-month probationary period to see just how it would work out. That was over a year ago, and we've since installed a second repeater on Weston Mt. Both repeaters are performing better than expected, and the users have been exceptionally good about following FCC rules, while additionally following WMDRA policies, including the "Three Don'ts." There's even a net on Thursday nights at 8:00 on 462.625MHz which highlights emergency preparedness that you might like to listen in on.

One last item worth bragging about. As most of you are painfully aware of, this past summer bore witness to some intense wildfires throughout the Pacific Northwest. During that period the WMDRA was contacted by Doug Jemenez (W7DMJ) of the Oregon Department of Emergency Management, requesting to utilize our WiresX room (NE-OREGON) in order to gather up to date information on local wildfires. Not only were we able to accommodate Doug's team with WiresX nodes that were already parked in the room, but once word got out other nodes began joining in to lend a hand. It was a great opportunity to show just what digital voice systems were capable of providing in times of need. It was a pleasure to work with Doug and his team, and hopefully we'll be able to be even more of a resource during future emergencies.

Well, that's all for now. We'll have more system updates as we continue to rebuild our website, and further expand our repeater system!

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- Lynn Wilson, K7LW

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## **Disaster Preparedness**



# **Power Blackouts**

Picture this for a moment if you will. You're sitting in your living room with your significant other, and perhaps even a few friends, and family members. Settled into your favorite easy chair with your shoes kicked off, you're enjoying the evening news on television, just like any other evening. It's winter, snow on the ground, cold wind blowing everything sideways outside, but inside it's nice and warm and dry. Dinner is still cooking in the oven, filling the house with a smell that makes your stomach growl in anticipation with every breath you pull through your nostrils. But suddenly, and without warning, everything goes dark, and all is quiet. The heater is no longer pushing warm air throughout the house, the oven is coasting to a halt with dinner only half done, and where once was the evening news on the television, is now only a blank screen staring back at you.

At first you tell everyone in the house not to worry, it should come back on in a moment. The moment passes, minutes turn to hours, and hours

eventually turn to days. Somewhere during all this as your sitting together bundled up in your long underwear, heavy coats, and blankets, grateful that you decided the diet wasn't really working anyway, the realization hits that this is clearly more serious than it first appeared.

In the past the most likely cause of most power outages were relatively short lived, as the result of trees falling on the power lines, and tripping the protection circuits. For the most part, we here in the Pacific Northwest have enjoyed a pretty stable and consistent power supply from our faithful grid thanks to those that manage it 24-7, 365 days a year. But experts are now warning that due in large part to a combination of the shutting down of coal plants in order to save our environment, and a sharp rise in data centers, the load on our grid is increasing exponentially. What this means is that we could be looking at not only an increase in power outages, but rolling blackouts covering a much larger area as well.

Additionally, whether you're a believer in climate change or not, regardless of the cause, it's real, and it's happening. As a result, like it or not, we're going to, and have been, seeing more and more severe weather events knocking out power, causing property damage, and even loss of life in many cases.

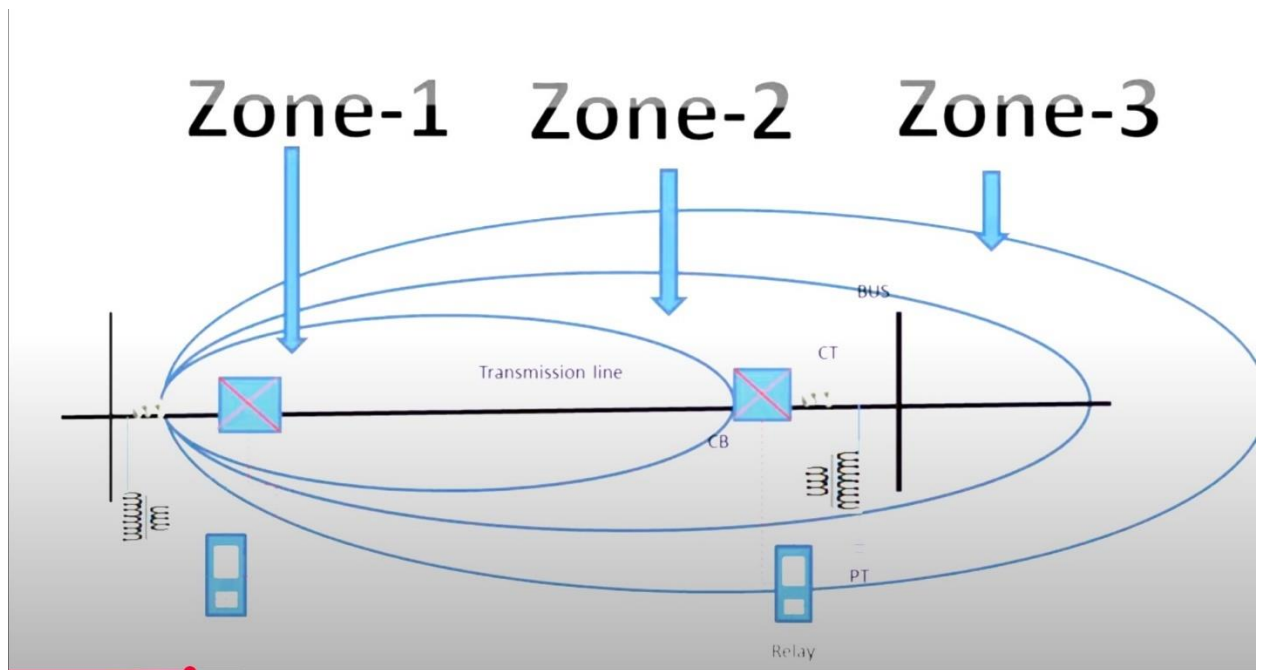
In February of 2021, the central Willamette Valley, parts of Clackamas County, and the Coastal Range, were covered in a half inch or more of ice. The ice storm caused wide spread damage as a result of trees tearing down power lines, and smashing transformers. Leaving thousands of people without power for days. It was the largest power outage in state history, and even lead to the closing of 45 miles of Interstate 84. I personally know of one hazelnut farmer in Hubbard that lost his entire orchard as a result. Fortunately, he has since been rebuilding, but like everything else, it takes time. Only just this year the west side experienced a rare [Bomb Cyclone](#) that inflicted damage up

and down the coast, leaving around 400,000 people just in the Puget Sound area without power for days.

I will touch on one additional cause of power outages, that being domestic terrorism. In 2022, there were at least 15 physical attacks on substations in Oregon and Washington, which included setting control houses on fire, forced entry, and sabotage. The attacks were concentrated around November and December, and were directly responsible for several power outages. The FBI warned of neo-Nazi plots, and some members of the extreme right have even praised the attacks. There's allot more on this subject, but I'll save that for a future edition of the Review.

Typically, the power utility companies employ a system that automatically balances the load on our grid called RAS, or "Remedial Action Scheme." RAS is designed to detect predetermined power system load conditions, and automatically take corrective actions in order to balance out loading and power distribution on the grid. Actions such as adjusting or tripping power generation, shedding load, or reconfiguring a power system(s) altogether. This is slightly different than the normal protection circuit referred to as "Transfer Trip," which uses specialized electronic relays that automatically isolate a section of power line by zones in the event it becomes compromised by a lightning strike, tree falling on the lines, or other severe weather events. It will also let the power utility know roughly where the breach occurred along the circuit by identifying which zone the breach occurred in.

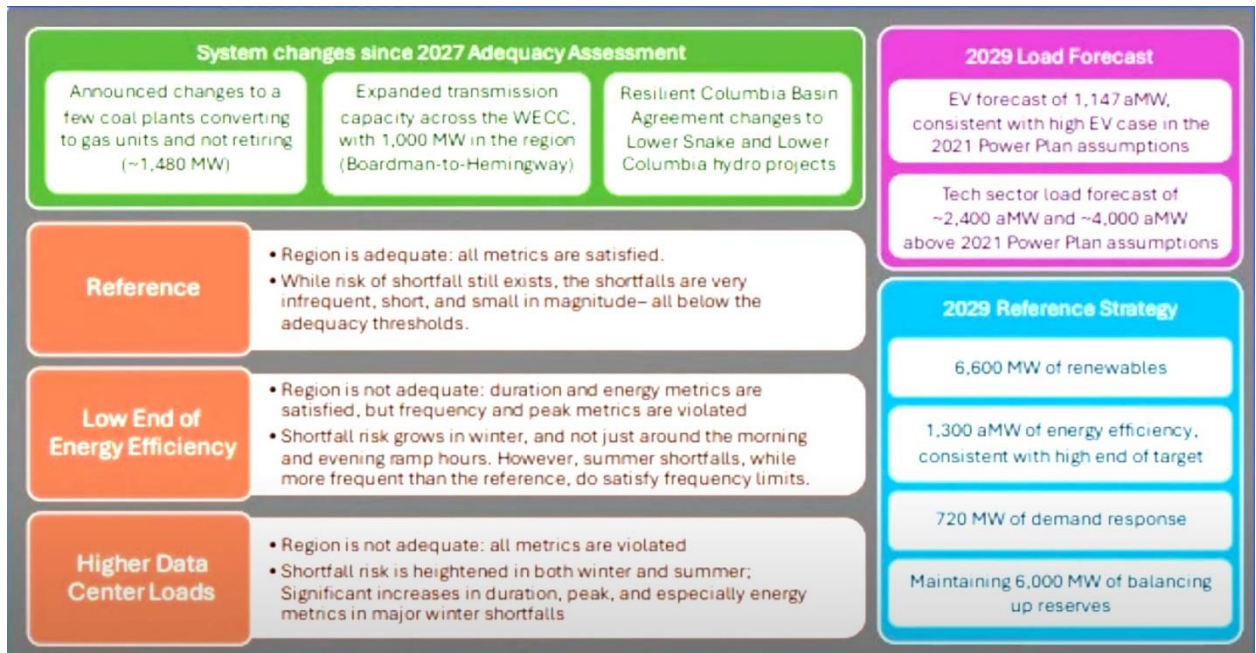




*Transfer Trip Zones*

A power consultant named Robert Cromwell with over 30 years' experience warned of the increase of possible rolling blackouts if the power industry doesn't act soon to build up our power resources.

He even produced a graphic showing the cause and effect of increased loads on our grid, specifically due to added data centers.



*Robert Cromwell's breakdown of the risk associated with data centers and our power grid,*

Here is a short explanation of Mr. Cromwell's diagram:

- The red box labeled "Reference," indicates that if things happen as planners expect, the region should have enough electricity to get by.
- But the box labeled "Low End of Energy Efficiency" warns that if the region only gets low-end results on energy efficiency strategies, there is a very real risk of rolling blackouts in the winter.
- The last box labeled "Higher Data Center Loads" targets the data centers mentioned earlier which shows that if there are higher data center loads — in other words, more data centers and more need for electricity than expected — then, the region is in dire waters, extending the risk of blackouts to both winter and summer.

It's pertinent to mention that with the increased rise in AI, the power required to run an AI data center is significantly higher than that required for a normal data center. AI-ready data centers have higher average power densities than traditional data centers, which are typically 5–10 kilowatts (kW) per equipment rack. AI data centers can have power densities of 60 kW or more per equipment rack, and some training models can consume over 80 kW per rack. Puts an entirely different spin on applications like ChatGPT, or Alexa, now doesn't it?

From the sounds of it, the Northwest Power Council is taking Mr. Cromwell's comments somewhat seriously, but still insisting basically that they've got it covered. Remember that the next time the lights go out...

One added note, our grid not only relies upon power generated here in the Pacific Northwest, but also from other sources all around the United States. Additionally, here in the United States we also depend on Canada for much of our power as well. According to the US Energy Information Administration, last year, the United States imported 38.9 million megawatt hours of electricity from Canada. In a recent news story, Premier Doug Ford of Ontario, stated in response to trump threatening a 25% tariff on Canadian products: *"We will go to the extent of cutting off their energy going down to Michigan, going down to New York State and over to Wisconsin."* Where do you think we get our power from when our grid here in the Pacific Northwest becomes overloaded? I'll just let you chew on that one for a moment...

But in the meantime, how prepared are you for an extended power outage? Here are a few suggestions you might want to consider BEFORE the lights go out:



## What to Do Before a Winter Power Outage



**Winterize your home**



**Know what to unplug if the power goes out**



**Stock up on food and water**



**Get a portable generator**



**Set aside warm clothing**



**Keep sufficient heating fuel on hand**



**Gather flashlights, radios, batteries and other necessities**



**Turn down the temp in your fridge**



Constellation.

Here are a few additional ideas:

- Fill up your bathtub with water, and allow for at least one gallon a day for everyone in your household.
- Make sure you have plenty of non-perishable food handy such as dry goods, powdered milk, instant coffee, etc.

- Open up the cabinets where water pipes are located. The warmer you can keep them, the less chance there is of pipes freezing and rupturing as a result.
- Isolate rooms with heat sources in order to conserve heat. Set aside plenty of warm cloths and blankets.
- If you have a portable generator, PLEASE ensure that you put it outside, in a clear location away from vents, windows, and awnings.

I'm sure there's much more, but that should get you started. Make sure you also check on your neighbors as well. Don't assume that the old couple on the corner are doing fine just because you are.

Lynn Wilson, K7LW

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### **From the FCC**

This past summer the FCC clarified the wording as part of FCC Section 47, Part 95 with regards to repeater linking on GMRS frequencies. In a nut shell, in accordance with FCC section 47, part 95.1749, operation of a GMRS station with a telephone connection is prohibited. In other words, any form of GMRS repeater linking is strictly forbidden. And just for the sake of clarification, "telephone connection" is referring primarily to an internet connection. The only thing a GMRS repeater owner can "legally" use a telephone connection for now is in order to remotely control their repeater, and not to carry any form of communications. Up until the clarification of the rules governing GMRS repeater linking, many GMRS repeaters were linked using a form of Allstar. But once this ruling came out, all of those systems have since dropped their linking infrastructure in order to comply with the FCC ruling, and are no longer connected.

In perusing through the various forums checking out the various comments on the subject of GMRS repeater linking, there are good arguments on both sides for and against the ruling.

In arguing for the ruling, comments were that given how the GMRS band is limited already, linked repeaters monopolized what little resource was available to begin with. Holding nets on the formerly linked repeaters reduced this resource even further.

Comments against the ruling argued that by taking away the ability to link repeaters, this severely hindered the ability of GMRS users to respond to an emergency. Emergencies such as a large-scale natural disaster in the form of wildfires, flooding, earthquakes, etc.

The FCC's argument is that linking repeaters is simply not in the public interest. Because the GMRS spectrum is limited, and used on a shared "commons" basis, the service only works well on a localized basis when users can hear each other and cooperate in the sharing of channels. Linking repeaters not only increases the potential for interference, but also uses up a limited spectrum resource over much larger areas than intended, limiting localized availability of the repeater channels.

There is currently a movement afoot to petition the FCC to have a discussion about the subject, and perhaps attempt to convince the FCC to walk back their decision a bit in order to once again allow the linking of GMRS repeaters.

I did see comments to the affect that if GMRS operators were really that passionate about repeater linking, they should put forth the effort to obtain an Amateur Radio license. Personally, I don't buy into that, but it was one of the arguments nonetheless.

Regardless of the outcome, we'll be watching this to see just where it goes, and try to keep you up to date should anything change either way.

Lynn Wilson, K7LW/WRYF803

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## **Emergency Communications**

There is nothing going on this month that we're aware of, but stay tuned. If we hear of anything in the way of simulated emergency drills, or other such exercises we'll be sure and let our readers know about it.

- Please be aware that the WMDRA (W7NEO) does not officially participate in any of the above listed training. Although we do make our repeaters available to outside organizations provided prior arrangements have been made with WMDRA, and it is agreed upon by those organizations to abide by our policies. Otherwise, this information is simply made available to our users for informational purposes only.
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## **Local Events**

Due to the holiday season, most all of the normal regular events such as Ham Fests, Swap Meets, etc. are pretty much all on hold until further notice. Hopefully after the holiday hoopla has calmed down, we can get back to normal and go back to holding our cherished nerd conventions once again. But should you have any knowledge of any upcoming events such as VE testing, or even something virtual locally going on, let us know and we'll try and get it in the next issue of the Review.

Thanks!

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## **VE Testing**

- There is no VE testing going on that we're aware of, but if you do have a regular test session taking place, feel free to let us know, and we'll post it here in the Review.
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## **Thank you!**

And finally, I want to extend a heartfelt Thank You to two individuals who without their unselfish, and generous contributions the W7NEO website would still be lost forever somewhere in cyberspace. So, to Jason Fouts (W7JSN) and Michael Abernathy (KK7MA) please accept my sincere gratitude for all your tremendous help. Without it, there would be no Pickle Barrel Review, nor a W7NEO website to post it too. You guys are truly representatives of the very best of our Ham Radio community!

Sincerely,

Lynn Wilson, K7LW

President Weston Mountain Digital Radio Association  
Trustee W7NEO

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## **The End**

Well, that's about it for this edition of the Pickle Barrel Review, I hope you enjoyed it. We'll keep trying to keep it interesting, and unlike that fruitcake you tossed down over the holiday season, hopefully a little more regular getting out. So, in the meantime, have a great Holiday Season, and grab another pickle, there's plenty to go around!

73,

Weston Mountain Digital Radio Association  
W7NEO

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*"Every day is a gift, that's why they call it:  
'The Present' "*

*- Author unknown, but appreciated...*