



CENTRALIA AMATEUR RADIO EMERGENCY SERVICE TEAM

June 2021

Amateur Radio is a hobby ... Amateur Radio Emergency Service is a commitment!

Field Day 2021 is just special. 2020 saw us 19 but Don, Chehalis.

around the corner and the Centralia ARES team is working to make it special. 2020 saw us 19 but Don, Chehalis. AI7CE, was kind enough to offer space at his beautiful home in Chehalis. With Fort Borst Park use up in the air again this year, we will once again hold FD at Don's home.

little
agency

This year's event will be a little different. As an Emergency Service Team, we decided to treat the weekend as an opportunity to test ourselves a little further. Pretending a response to a disaster that requires our team to set up an emergency Communications center in the field for our served agencies, we will activate our communications vans, set up a tower and beam antenna and test several other portable emergency antennas over the 24 hour activation period. Additionally, we will perform several propagation tests from around the area, test comms from the Chehalis airport as well as Riverside Fire's ECC in station #2 to be sure we can make emergency field comms work. Working the full 24 hours off the grid using our generators and van batteries will test the emergency power system as well. RFA Fire Chief Mike Kytta and his wife Diane, both amateur radio hams, will join us for our potluck dinner as Mike talks to us about summertime fire predictions in our area of responsibility. Propagation is on the rise this year with the introduction of Cycle 25 approaching, and we plan to activate five high frequency radio systems plus our own local VHF repeaters and simplex frequencies during Field Day.

It should be great fun and we know there will be some glitches along the way but those are the very things Field Day is designed to test. As long as it is 80 degrees and we have our lounge chairs and sunglasses, we are ready for anything..... almost.

Anemometers Are Now Installed

Recently, our team invested in two important pieces of new equipment. In early April, we purchased two HoldPeak Digital Anemometers. These battery operated devices allow the operator to determine wind direction, wind speed and local temperature. One anemometer is now located in each communications van on the wall near the fire radios. The anemometers are lightweight and very easy to operate but will still require some familiarization by team members.

As spring winds down and the weather heats up, our ARES team is scheduled for some Red Flag spotter training exercises in the field as well as windshield survey refresher practice in preparation for helping with local wildfire responses. Thanks Don, AI7CE, for the idea on adding the anemometers to the vans.

As a reminder, if you require refresher training on any of the communication van's equipment, notify any of the ARES team leadership.



Red Flag Spotter Program

Under the supervision of Riverside Fire Authority, Centralia ARES has begun work on what will become a new “Red Flag Spotter’s Program”. Red Flag warnings are issued by the Northwest Weather Service (NWS) when “conditions that are ideal for wildland fire combustion and rapid spread exist”. The ARES team is developing protocols that, once approved, by Riverside Fire, will allow trained ham radio operators to patrol Riverside Fire Authority jurisdiction during Red Flag episodes to provide an extra set of eyes watching for smoke or fire danger. Red Flag warnings are usually issued when several dangerous conditions come together at once. These include extreme temperatures, low humidity, excessive winds and dangerously dry terrain. Once these come together, the NWS, issues its Red Flag warnings. While these warnings are aimed at citizens who need to think twice before lighting a large campfire or brush pile, you can bet our local fire department first responders take notice as well.



It is our hope that our volunteer’s ability to quickly communicate information back to Riverside Fire Authority will help to keep our community and our region a safer place to be during the really hot days of summer. We plan is to have this program up and running no later than early July.

The WISA Woodsat Project

OK, now you can say that you have heard it all within the ham radio community. A plywood communications satellite? Really? Apparently, it is the real thing! The latest mission plan is a joint venture between UPM Plywood and the space tech firm Arctic Astronautics, which designed the satellite for launch into polar orbit. Finland celebrated its 100th anniversary as an independent nation with a student outreach project designed around a mobile science center “Space Truck”, that visited schools throughout the nation. The vehicle actually had a “clean room” built into it and school by school the satellite parts were added. The plan is to use a simple, low-powered receiver to pick up the satellites signal and then broadcast information from its sensor suite and two cameras using frequencies available for amateur radio.

“The wooden satellite with a selfie stick will surely bring laughter and goodwill,” added mission manager Jari Makinen of Arctic Astronautics. “Essentially, this is a serious science and technology endeavor. In addition to testing plywood, the satellite will demonstrate accessible radio amateur satellite communications; host several secondary technology experiments; validate the Kitsat platform in orbit, and popularize space technology.” The small satellite measures almost four inches square and weighs just over two pounds.

A short flight into the Stratosphere using a meteorological balloon proved the concept would work and the final version was completed in 2019 but health and Covid-19 issues have delayed the launch while development has continued. A launch date has been booked for late 2021.

New Band Pass Filters

This week, just in time for this year’s Field Day event, the ARES team took delivery of three band pass filters, one each for 20 meters, 40 meters and 80 meters. These filters should reduce or eliminate completely HF radio frequency interference in our equipment when the hams must work in close proximity together such as at Field Day. Our Field Day antenna guru, Chuck, W5KAV along with some able assistance from Paul, KE7PCB, made sure the equipment arrived in time for Field Day.

Thanks Chuck and Paul for making this happen!

