

# Multi-agency effort makes fire radio upgrades a reality

By AARON BOHACHEK Staff writer | Posted: Thursday, June 19, 2014 10:45 am

BONNERS FERRY — By the end of summer, Boundary County firefighters and EMS will upgrade to a state of the art radio system that will provide greater reception and range for mobile radios all over the county.

The Fire 1 radio channel is broadcast from a tower at the top of Dawson ridge that shares space with cellular and other radio communication antennas.

The site provides excellent line-of-sight all over Boundary County but due to the mountainous nature of the area, firefighters have constantly dealt with dead spots all over the county, especially on the three-watt hand-held portable radios most volunteer firefighters carry.

The new system will broadcast on 2,013 mandated narrow-band compliant VHF frequencies. This allows Boundary County fire departments to keep the radio units they already have but will upgrade the Dawson tower to a repeater system that uses a microwave link to combine, time and rebroadcast signals from other towers throughout Boundary County.

Industrial Communications from Spokane won the bid for the antenna upgrade.

The U.S. Border Patrol, which owns the equipment building at the base of the Dawson tower, allowed the antenna upgrade to the tower provided an engineering study was done.

They wanted to make sure the tower wouldn't be overloaded, and plans provided for modification if need be. With the number of communication antennas already on the aging tower, this was a very real possibility, said South Boundary Fire Chief Tony Rohrwasser. Industrial Communications covered the cost of the engineering study, which concluded that the tower was stronger than originally thought, and that the new equipment was not significantly heavier than the older equipment being removed from the tower.

“Scott Grimmatt from Industrial Communications spent countless volunteer hours designing and



Fire radio upgrade

modifying the system and going to meetings before we could even start,” said Rohrwasser, who took the lead in grant writing and working out details to make the upgrade a reality.

Three more towers will be used to create the communication network around Boundary County. A brand new tower was built at the Fall Creek fire station south of Naples using a grant from the Idaho Bureau of Homeland Security. The Boundary County Translator Board has allowed use of a tower on Copper Creek with an upgrade of the batteries used on the site, since it is in a roadless area and uses a solar panel and generator for power. The final leg of the network uses the city tower located at the city maintenance lot. An 8’x8’ building will need to be constructed to house communication equipment on the site. Rohrwasser hopes to find in-kind donations of time and materials to build the building, which remains unfunded.

“The approximate total of this project with building costs included will be just under a half million dollars,” said Rohrwasser. “This is something we need desperately, but without the help of the grants we would not see this project happen.”

The radio upgrade project is funded by the “Assistance to Firefighters Grant” (AFG) program sponsored by FEMA. The total grant of \$408,516 requires a five percent match of \$20,426 split between the Fire Districts and Ambulance, leaving \$388,090 to be paid by FEMA.

FEMA funds can’t be used to build communications towers, so a second grant to build the Fall Creek tower was dispersed by the Idaho Bureau of Homeland Security’s SHSP Grant for \$27,306.71.

The next grant to move towards Copper Creek and put up a tactical channel for Ambulance and others to share came from the ASPR grant through Panhandle Health for \$26,147.

“We just received a grant from Trans Canada Corp. for \$5,000 to help us with the match for the AFG Grant,” reports Rohrwasser. This leaves the Boundary County Fire Districts and Ambulance Company with a cost of \$15,426 to raise to complete the project.

“A great thing about this is the collaboration,” says Rohrwasser. “I wrote the AFG grant as a regional grant for the whole county, Deanna Galbraith wrote the ASPR grant for Boundary Ambulance and all of the Fire and EMS agreed on the funds for the Fall Creek Tower from the SHSP grant.

“Trans Canada I wrote to on behalf of the whole county and all the agencies that own the existing towers were very helpful and willing to work with us.”

The system is upgradable, and can allow up to four more signals to broadcast from the towers once it is up and running. ISP, Bonners Ferry Police and the City of Bonners Ferry all have their own broadcast channels that could be incorporated into the system. More towers could also be incorporated into the network, says Rohrwasser, with possible future locations near Curley Creek and another northern Boundary County location.

Current upgrades should be completed mid July, with most of the bugs worked out by the end of

August.

“It shows what can be done when we all work as a team with a common goal,” says Rohrwasser. “It is a big accomplishment to have many agencies work together with the goal of improving emergency services to the whole county.”