Logging & Sawmilling Journal

The road to better safety

A pilot program has been initiated in the South Peace region of B.C. to reduce radio interference, and enhance road safety with truckers, and the lessons learned are now being implemented.

In the beginning

Long before cell phones, many truckers on B.C.'s northern logging roads used two-way radios to conduct their daily operations as well as for road safety. In those days there were not as many radio-equipped trucks, as the radios were bulky and expensive. In fact, it was mostly only the larger companies that used them and each radio was capable of only a few crystal-controlled channels.

Frequency congestion

In the last 30 years, however, times have changed greatly. Not only are there more roads and trucks, the radios themselves have become less expensive and each one can hold a vast amount of channels. This led to an increase in interference problems not only within other parts of B.C., but also anywhere else the trucks traveled, such as into Alberta.

So in the last ten years, in an effort to not only reduce the amount of interference, but also to enhance road safety, the number of frequencies assigned to resource use were reduced and consolidated which allowed for better channel management. These methods did work to some extent, but more work still needed to be done to address ongoing safety and frequency management concerns as the number of users continued to grow.

The pilot program

To better address the issue, a pilot program was introduced in the South Peace area of B.C. starting in 2009 to see if the situation could be handled more effectively. Among the parties involved were the B.C. Ministry of Forests, Lands and Natural Resource Operations, FPInnovations, the B.C. Forest Safety Council, Industry Canada, and the North East Road Safety Committee, with its membership of the many oil and gas, forestry and mining companies operating in the Peace area of B.C. Special recognition also goes to the numerous companies, radio equipment suppliers, contractors, and recreational resource road users whose willingness to participate in the pilot and whose valuable feedback helped to shape the final protocols to be implemented province wide.

Three main components were targeted in the program:

1 – Standardized road signs – these indicate what radio channel to use

2 – Standardized calling procedures – This relates the proper radio "lingo"

3 – And finally, a more effective use of existing radio channels.

Logging & Sawmilling Journal

The pilot project saw the first two aspects successfully implemented. However effective two-way radio usage was still lacking due to some of the technical complexities involved.

In the pilot, 28 frequencies were used, along with what is known as “tones”. Each frequency could therefore be split into three “channels” by assigning three separate tones to each frequency. In theory, if properly used in the field, this meant that 84 channels could be assigned to a region, keeping unrelated radio conversations separate from each other.

Problems being addressed

There were some problems identified during the pilot program due to the complexity in the technical system design; so a simpler approach is being implemented in the South Peace that will be incrementally rolled out across B.C. in the years to come.

Beyond the pilot stage to implementation for the South Peace region

What was learned in the pilot stage is now being implemented. Essentially this means the channel plan has been simplified and refined once more. More channels were added and the use of tones completely eliminated. As a result, there are now 40 separate channels assigned to specific resource roads and other areas across the South Peace. Users will now only require one bank of 40 channels to be programmed in their radio rather than having to select the exact frequency from a large list and then also to have to worry about using the correct tone. In short, this will greatly enhance road safety in the South Peace, and eventually in all areas of the province.