## NINE-AXLE TRUCKS: WHERE DOES THIS ROAD LEAD?

By Robin Brunet

Currently, four nine-axle trailers are being used on three routes in the Vanderhoof-Fort St. James area. Those who build and drive the trucks are bullish about their greater implementation.

"The nine-axle configuration is nothing new: the original trucks introduced over 20 years ago are still operating trouble-free," says Jim Bowman, manufacturer for FreFlyt, a leading manufacturer of logging trailers and light equipment in Vanderhoof.

George Funk, owner of Blue Valley Enterprises Ltd., adds, "Understandably there has been a lot of analysis pertaining to safety and feasibility, and my company has undergone audits in order to obtain letters of approval for operation." Funk hauls about 300,000 cubic metres of wood annually for Canfor-Plateau and purchased his first nine-axle rig from FreFlyt a year ago. (He purchased a second truck in December of 2016.) "Frankly, I haven't experienced any negatives about the nine-axle configuration."

Buzz about the rigs has been building ever since FPInnovations, major licensees, Ministry of Transportation and Infrastructure (MOTI), Commercial Vehicle Safety and Enforcement (CVSE), Ministry of Forests, Lands and Natural Resource Operations, the BC Forest Safety Council, and other parties got together four years ago to research, test, evaluate, review, and approve engineering and performance studies, in order to help shape the best implementation of both tridem and tandem drive nine-axle log trucks in BC.

Dustin Meierhofer, Director of Transportation at the BC Forest Safety Council, says the research and review process has included "assessment of the dynamic performance of the vehicle in terms of stability, handling, and steering. Predicted handling at highway speeds, rollover threshold, off-tracking and other key dynamic responses were analyzed against safe and accepted performance ranges, and it was ultimately determined that nine-axle B-trains would be well suited for safe use on certain BC highway and resource road routes." Tracking the performance of the vehicles over

Map courtesy of Canfor 9-Axle Working Group **Overview Map** 

Note: This map is current as of June 16, 2017.

time will be important in determining if the analysis is accurate.

All this said, when online news in February reported that the BC government believes as many as 800 nine-axle trailers could be incorporated into logging operations in the province, with a savings of up to \$40 million dollars in transportation costs for the forestry sector, concerns were voiced.

For example, one reader of a February 9<sup>th</sup> 250 News report stated, "I wouldn't drive one around here. I know my limit: 71 tons is doable in good conditions, but we don't always have good conditions. The kinetic energy of a longer, heavier load will make pulling hills much harder, which will be a huge safety concern."

Another reader stated, "Roads are battered and huge ruts [have been] made in

some places due to heavy loads; what is going to happen now?"

And another remarked, "This change to our law will enable big companies to make more profits; this one seems to directly cost taxpayers and have an impact on the safety on our roads."

Not all feedback was negative, but the cumulative opinions are enough to demonstrate that the ongoing study of the feasibility of nine-axle truck use in BC is accompanied by considerable controversy.

At the time of printing, three routes and surrounding forest service roads have been approved by Victoria-in the Fort St. James and Vanderhoof areas (see map on page 46). Additional designated routes in BC are under review for approval by MOTI, and Meierhofer says, "As safety is critical to maintaining operational efficiency and competitiveness, this will continue to be a key area of focus going forward in evaluating other routes." But he adds that the bid to open more routes is "seen as excellent opportunity for the BC log hauling sector to match similar developments in other jurisdictions, and to help ensure that our global competitiveness is enhanced."

David Elstone, Executive Director of the Truck Loggers Association, echoes the sentiments of many contractors when he says, "The nine-axle debate reminds me of the steep slope logging debate: contractors are being asked to retool before we have all the answers."

Elstone goes on to note, "The proposed configurations appear to offer some potential, but will contractors share in the gains? I can't help but look at this issue from the contractor's perspective. Are contractors once again being asked to rotate equipment adding new capital costs? Who is really benefitting and who is taking on the risk? I realize that the letters of authorization will be issued for five years moving forward. However, as use is not ingrained in regulation, if authorization is rescinded, who will bear that cost? From my perspective, it looks like the risk is once again sitting with the contractors."

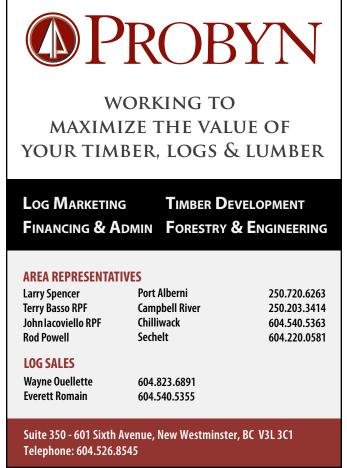
Other concerns voiced by contractors include: Will the roads the nineaxle trucks are approved for be more expensive to build and maintain and who will shoulder those costs? And, should an accident occur down the road, will government's approval of nine-axle usage be revoked, thus leaving contractors with trucks they can't drive?

For his part, Funk addresses another concern: The expense of the rigs. "Nineaxle haulers aren't cost prohibitive: about \$135,000 compared to \$110,000 for an eight-axle," he says. "I'm expecting a payback on my two trucks in only two years, so for Blue Valley the money spent is a no-brainer."

Both Funk and Bowman are confident that the process of approving wider use of the nine-axles will speed up in the foreseeable future. "Infrastructure is expanding, and the configuration is a proven asset to the industry," says Funk.

"Transportation makes up a significant portion of delivered wood costs," said Michael Armstrong, VP Policy & Operations for the BC Council of Forest Industries. "The nine-axle configuration has the potential to reduce transportation costs, which supports the goal of maintaining forest sector competitiveness for BC. This technology was developed here in BC at FPInnovations, and is really applicable for long, flat hauls, rather than steep slopes or tight switchbacks. This development has truly been a team effort





between industry, FPInnovations, and the provincial government."

Bowman offers this by way of conclusion, "It's especially beneficial to longer hauls, since you can carry four 16-foot bundles instead of three. Plus, in my opinion the nine-axle is safer than other configurations: better braking, and no

rocking or rolling due to a better centre of gravity. "I think it won't be long before we see a lot of these rigs on the roads."

## **Driving For Safety: Nine-Axle Truck Configuration Panel**

BC Forest Safety Council hosted a panel during the Canada North Resources Expo in June. The purpose of the panel session was to have the most informed people that have been working on the project share information and answer questions. Here are some of the highlights from the panel.

- · The nine-axle configuration is eight feet longer with nearly identical turning radius and higher braking power per ton. It also tracks better than quad trailers.
- · There will be fewer trucks on the road because nine-axle trucks will haul more logs per load.
- · FPInnovations has found a 5% reduction in pavement impact; nine-axle trucks are hauling more weight, but less weight per axle. The 5% reduction in road impact was a CVSE requirement addressed by FPInnovations in trailer design and is a key point in the debate on the impacts to roads.
- Bridges are going to be the biggest hurdle moving forward. Should the forest industry pay for all that infrastructure upgrade as they aren't the only people who use the bridges? We're still looking for solutions to this challenge.
- Nine-axle configurations are an opportunity for technological advancement but they'll never be able to be used everywhere.
- The question of investment risk by truck owners was brought up. All the panelists agreed that the early indications were that there would be no reason to remove the current letters of authorization (LOAs) that have been issued or not issue more of them. Moving forward, LOAs will be issued for five-year periods.

**Moderator:** Marty Hiemstra, Lo-Bar Log Transport

Panelists: Seamus Parker, FPInnovations; George Funk, Blue Valley Enterprises; Tom Hoffman, Tolko; Val Hunsaker, Commercial Vehicle Safety and Enforcement (CVSE)

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