

Maximize the Value of Remote-control Assets

“Tasverii™ has been an important tool in achieving our rail yard productivity and safety objectives. It has given us insight into remote control activities and performance data that were previously unavailable.”

— Doyle Cheatham, Norfolk Southern

Locomotive tracking software heightens Norfolk Southern rail yard productivity

As one of North America’s largest Class 1 rail companies, Norfolk Southern utilizes a complex network of rail yards to help support its thriving operations. Each of these yards has its own fleet of remote control locomotives to control and manage the flow of cargo on its main rail lines. Keeping track of these assets and monitoring their usage is critical to maintaining safe and efficient operations. With Laird Controls’ Tasverii™ for Rail monitoring and analytics software, Norfolk Southern has discovered numerous opportunities to improve productivity:

- Prevent downtime with proactive measures
- Identify potential risks to safety
- Receive real-time email alerts of undesirable rail yard situations
- Create and share reports with analytical insights about yard trends

Large rail yard network makes visibility a challenge. One of the biggest challenges Norfolk Southern faced was finding a system that could monitor the vast geographic range of their rail yard network. Consisting of 63 rail yards – some as long as five miles – their network required a robust monitoring solution that could account for every mile.

As a long-time Laird Controls customer, Norfolk Southern also sought new ways to keep yard expenses down and maximize the value of their remote control locomotive assets. To achieve this, Norfolk Southern needed better visibility to operational data – both from an individual rail yard basis and from a bigger picture that evaluated all the yards in their network.

Tasverii™ for Rail sheds light on entire rail yard operations

Norfolk Southern has utilized Laird Controls wireless remote-control solutions on its rail yard locomotives for several years. With the deployment of Tasverii™ for Rail software, the railroad industry leader is now able to monitor its assets in near real-time and securely access valuable operational data.

The Tasverii™ software has customizable end user permissions that give yard managers insight into the assets in their specific rail yard, while providing executives with an overview of their entire network. Not only can they track the live location of remote control locomotives on a map, they also have access to specific locomotive-level details – such as direction, speed, and brake pressure – through the Tasverii™ virtual dashboard.

Tasverii™ sends email alerts to yard managers as unsafe and unproductive practices occur – enabling the quick resolution of problems before they escalate. The ability to generate and share reports allows yard managers and executives to gain insights into the performance, safety, and health of their remote control locomotive assets. From wheel slip, time in remote, humping time, and speed violations to emergency braking and communications, Norfolk Southern now has enhanced visibility to every key performance indicator of their remote-control assets.

Tasverii™ also provides a direct link to Laird Controls' expert help desk, which is available to help remote control functionality and consult on productivity issues impacting the rail yard.

Proactive asset monitoring heads off potential downtime

For Norfolk Southern rail yard operation managers, access to Tasverii™ reports quickly contributed to productivity improvements. A daily Transportation report allowed them to monitor and measure productivity of remote control asset activities at specific yard locations. The Communications Health report identified remote control assets that were experiencing communications interruptions between the operator and machine control units.

Doyle Cheatham, Norfolk Southern operations manager, explained that the Transponder Health report was particularly beneficial in bringing a potential bottleneck into view. The report monitored the transponders on each track to see if they were operating at a level to support remote control activities. If two or more transponders are down at the same time, the track is rendered inoperable – a condition that can take up to 48 hours to remedy, during which all productivity ceases on the affected track.

“Before access to the Transponder Health report, we were not able to proactively monitor transponder conditions,” said Cheatham. “Now, when one is showing signs of degradation, we can replace it before it creates a major disruption to productivity,” he added.

With Tasverii™ software integrated into Norfolk Southern's remote control locomotive assets, the Class 1 rail leader gained unprecedented visibility into its rail yard network. Tasverii™ gave them the tools to increase productivity, safety, and efficiency for the long term through:

- Insightful reports uncovering unknown trends
- Real-time access to remote control asset location
- Virtual dashboard that displays a locomotive's operating parameters
- Email alerts of unsafe or unproductive practices

Visit our website to learn more how Laird Controls solutions can help you streamline your operations.
www.lairdtech.com/controls