Tauro Technologies Presents AI-Based Collision Avoidance System for Maintenance of Way Operations at Railway Interchange

• AI enhances maintenance crew/vehicle safety • Camera/radar detection offers hazard avoidance warnings • Multi-modal connectivity ensures situational awareness

Tauro Technologies logo

Railway Interchange logo

INDIANAPOLIS, IN, UNITED STATES, May 20, 2025 /EINPresswire.com/ -- Tauro Technologies, a leader in cutting-edge rugged systems, today announced its new MOW Collision Avoidance platform, an AI-powered solution designed to enhance safety for Maintenance of Way operations on railway tracks. The system will be showcased at Railway Interchange in Indianapolis, from May 20-22, 2025, at booth #310.

Unlike conventional LIDAR-based systems that can struggle to interpret complex maintenance of way (MOW) environments, Tauro's advanced multi-sensor-based solution delivers precise situational awareness that helps crews work faster and safer.

Key features of the MOW Collision Avoidance solution include:

- High-Performance AI Computing: Built on a powerful 275 TOPS AI platform that enables real-time object and personnel detection.
- Centimeter-Level Positioning: Integrates RTK (Real-Time Kinematic) GPS precision positioning technology to accurately track vehicle locations on parallel tracks.
- Multi-Modal Connectivity: Features LTE/5G for cloud communications with operations centers, plus XBee mesh networking for reliable vehicle-to-vehicle communication.
- Industrial-Grade Durability: Integrated in an IP67-rated rugged design that withstands the harsh conditions of railway maintenance environments.

Maintenance of Way operations demand fast, coordinated work within strict timeframes to minimize rail traffic disruption. Tauro Technologies' system provides supervisors with live

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> *Gevorg Sargsyan, CEO, Tauro Technologies*

tracking of all vehicles and personnel, ensuring tracks are cleared before trains arrive and reducing the risk of collisions between maintenance vehicles.

"Railway maintenance crews work under challenging conditions and tight deadlines, where safety is critical," said Gevorg Sargsyan, CEO of Tauro Technologies. "Our MOW Collision Avoidance platform combines precise positioning, AI-powered detection, and robust communications into one integrated solution, giving crews the situational awareness they need to stay safe on the tracks."

As a highly integrated system, the solution integrates quickly with existing rail maintenance workflows. The result is a marked improvement in safety compliance and operational risk—even in challenging conditions such as around curves or in dead zones.

Availability

The MOW Collision Avoidance Platform is available for demonstration at Railway Interchange, Booth 310. For more information or to schedule a meeting, contact marketing@taurotech.com.

About Tauro Technologies

Tauro Technologies (https://taurotech.com/) transforms the possibilities for rugged embedded systems by delivering high-performance, high-reliability designs grounded in deep multi-domain expertise. Tauro's team of engineering veterans bridges innovation with practical execution across industries where failure is not an option, including transportation, robotics, and defense applications.

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