Use of ITS-Proven Radar Detection in Railway Applications

FRA SYMPOSIUM ON HIGHWAY-RAIL GRADE CROSSING SAFETY

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Dual Radar-Based Vehicle and Train Detection

FRA RPD
Illinois Commerce Commission
BNSF Railway
Wavetronix
Island Radar Engineering Team

Wavetronix SmartSensor Radars

AREMA-Compliant VDR24 Dual Radar Controller

Radar-Based Vehicle Detection Detection
Dynamic Exit Gate Operating Mode Blocked (Obstructed) Crossing Detection
Radar-Based Train Detection Detection
Train Detection in Interlocker Dead Sections
FRA’s Spring 2019 Listening Session Requests

What ideas do the signal equipment manufactures or the railroads have for existing and new technology to improve crossing safety?

• Non-Track Circuit Train Detection
  • Non-Track Circuit Advance Preemption
  • Island Detection, Shunt Overlay
  • Low Speed Crossing Activation
• Dynamic Crossing Queuing Warning
• Automotive Crossing Proximity and Train-On-Approach Alert
• Blocked Crossing Detection and Notification
Blocked Crossing Detection and Notification

- Blocked or Obstructed Crossing Alert with Confirmation Image
- Embedded Link Provides Real-time Video Confirmation Stream
- Prompt Notification and Actionable Information to Railroad Personnel and Public Safety Officials

- Cellular Data, 5G, Local Wireless, and Conventional Networks
- Centralized Train Dispatch
- Localized Emergency Response
- Local Traffic Systems
- Railroad Signaling Systems

Prompt Notification and Actionable Information to Railroad Personnel Public Safety Officials

Blocked or Obstructed Crossing Alert with Confirmation Image

Embedded Link Provides Real-time Video Confirmation Stream
Thank You

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