

## Confirmed Breakout Session Leaders

Subject to Change – Last Update March 1<sup>st</sup>, 2022

**Honorable Tom Chapman, Joe Gordon, Troy Lloyd,  
Zach Zagata – National Transportation Safety Board**

*NTSB Most Wanted List: Railroad Worker Safety*

*What to Expect When the NTSB Investigates*

**Nicholas Dryer – BNSF Railway, et.al**

*Tentative Topic: Use of UAVs for Track and Railroad Safety*

**Professor Nii Attoh-Okine – University of Delaware**

*Cybersecurity and Blockchain Technologies in Railway Track Engineering*

**David Wilbur, et al. – Vetergy Group**

*Tentative Topic: Case Study – Engage in an Audience-Led Investigation to Learn About Human Factors Analysis*

**Gary Wolf – Wolf Railway Consultants**

*To Be Confirmed: PSR's Impact on Railroad Maintenance*

**Hugh Thompson, et al. – FRA Track Research Division**

*Track Structural Measurements Targeting Wide Gage Derailments*

**Rob Casitiglione & Cory Johnson – FRA Safety Partnerships Division**

*Part 243 Workshop – Update Post Implementation*

**Various Speakers – ENSCO and FRA**

*Vision of the Future of FRA's Transportation Technology Center in Pueblo, CO*

**Tom Julik, et al. – FRA Technology & Automation Division**

*FRA's Automated Track Inspection Program: Current Operations and Listening Discussion for the Future*

**Tim Elsberry – Railroad Software**

*Leveraging Digital Tools for Track Inspection and Defect Management*

**Michael Montgomery – Fiber Optic Sensing Association**

*Advances in Fiber Optic Sensing for Railroad Monitoring*

**Joe Denny, et al. – TekTracking**

*Correlating Geometry Car and Manual Track Inspection Data*

**Marcus Dersch – UIUC RailTec; Cam Stuart – FRA**

*Spike Failures in Elastic Fastening Systems: An Assessment of Root Causes and Available Mitigation Measures*

**Richard Stock, PhD – Plasser American**

*Rail Damage Mitigation and its Impact on System Safety and Rail/Wheel Life*

**Mark Allen – Union Pacific Railroad**

*Tentative Topic: Meeting the Challenges of a Heavy Grade and Curve Railroad*

**Jamie Maguire, et al. – Protran Technology**

*Tentative Topic: Leveraging Collision Avoidance and Secondary RWP Warning Systems to Prevent Roadway Worker Injuries and Fatalities.*

**Brian Marquis – VOLPE, et. al.**

*Tentative Topic: Vehicle Track Interaction and Simulation/Modeling Applications*

**William S. Riehl, PE – Genesee & Wyoming**

**Steve Krause – FRA Bridge Division**

*Fall Protection and Bridges for Track Maintainers*

**Anish Poudel, PhD; Brian Lindeman – TTCi**

**Survesh Shrestha – TTCi**

*Current and Future Nondestructive Evaluation (NDE) Technologies for Rail Flaw Inspection*

**Christine Nestor, Kevin Smith, Adam Woyczik – Zone**

**Guard, Miller Ingenuity; Charles Perry – San Diego MTS**

*Protecting Railway Workers with Roadway Worker Protection Systems*

**Troy Jackson, D Smith, Gerald Kosbab, et al. –**

**USDOT Transportation Safety Institute**

*Tentative Topic: Safety Management Systems*

*Safety Leadership*

*Human Factor Accident Cause System*

*BowTieXP – Visual Risk Assessment*

**Andrew Straatveit & Raquel Wright – FRA**

**Daniel Einbinder – ENSCO**

*FRA Data Science Applications for Agency Operations*

**Amanda Fletemeyer – MBTA**

*Tentative Topic: Changing Behavior to Instill a Safety Culture with Contractor's New to the Rail Industry*

**Kevin Oldknow – Simon Fraser University**

*Wheel-Rail Friction Management: Effects on Vehicle-Track Interaction, Safety, and Asset Life*

**Dimitri Rizos, PhD – Univ. South Carolina**

**John Popovics, PhD – Univ. of Illinois**

**Marcus Dersch, PE – Univ. Of Illinois**

*NDT Rail Neutral Temperature (RNT) Measurement Technology and the Impact of Longitudinal Track Resistance*

**Robert Wilson, et al. – FRA; Partners from Rutgers, Lehigh and Others**

*The Future of Predicting Rail Defects*

**Amanda K. Emo, PhD – FRA**

*CISP 101: An Overview of Critical Incidents, Their Impact, and Part 272 Regulatory Requirements*

*Fatigue: Overview, Risk Management, and Mitigation*

**Radim Bruzek, Serkan Sandikcioglu – ENSCO**

**Brad Kerchoff - Norfolk Southern Railway (Retired)**

*Track Buckle Prevention and Rail Adjustment Software*

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### **Lance Hawks – FRA Track Division**

#### **David Kannenberg – FAMES (Fatality Analysis of Maintenance-of-way Employees and Signalmen)**

*Roadway Worker Protection & FAMES*

### **Kenneth Campbell – Geo-Instruments**

*Fundamentals of Automated Rail Monitoring During Construction, Tunneling and as a Risk Mitigation Tool When a Failure Occurs.*

### **Ken Reed, et al. – TapRoot® Root Cause Analysis**

*Tentative Topic: Using TapRoot® Root Cause Analysis to Improve Performance and Prevent Accidents*

### **Brad Kerchof – Norfolk Southern Railway (Retired)**

*Switches & Frogs: Design, Inspection, Maintenance & Derailment Prevention*

*Adverse High Rail Profiles in Curves: Identification, Risks, a Solution, and a Case Study*

*A Panel Discussion: 'From Surviving to Thriving as a Roadmaster' with Three Veteran Track Supervisors*

### **Dr. Riley Edwards – UIUC; Richard Dox-lvey – Railmetrics; Cam Stuart – FRA**

*Automated Track Change Detection: A More Complete Track Safety Assessment*

### **Dimitris Rizos, PhD – University of South Carolina**

### **Yu Qian, PhD – University of South Carolina**

*Remote Sensing Technologies for Track Monitoring*

### **Brian Keller & Stefan Haas-Heye – Heartwood**

*Leveraging Advanced Virtual Interactive Simulations to Teach Complex Procedures Faster, Safer, and with Less Errors*

### **Mark Montoya – Union Pacific Railroad**

*Track Alignment / Alignment Rate of Change*

### **Dingqing Li, Duane Otter, Ananyo Banerjee, Yin Gao, Stephen Wilk – TTCi**

### **Mike Gilliam – Union Pacific Railroad**

### **Adam Bankston – BNSF Railway**

### **Jay Baillargeon – FRA Track Research**

*Heavy Axle Load Test Results from FAST and Revenue Service*

### **Daniel Baker – FRA Track Division, et al.**

*Automated Track Inspection Test Program Risk Analysis*

### **Alexander Franco, Jr – BNSF Railway**

*Beyond Part 243: How Do We Ensure our Employees and Supervisors Have the Skills to Work Safely?*

### **Jeffrey Dudley – Traxx Railroad Safety**

*Railroad Contractor's Cultural Shift to Safety*

### **Jay Baillargeon, M.S. – FRA Track Research**

### **Daniel Einbinder, M.S. – ENSCO, Inc.**

### **Mihir Phadke, M.S., MBA – Wi-Tronix, LLC**

### **Yu Qian, Ph.D. -- University of South Carolina**

*Artificial Intelligence for Track Inspection: A Research Perspective*

### **Todd Marklin – Pioneer Lines**

*Lessons Learned Managing an FRA CRISI Grant Project on a Short Line Railroad*

### **Shane Stiffler, et al. – FRA Track Division**

*Track Inspections: Remedial Actions and How to Know Your Inspections are Adequate*

### **Dillon Ondo – FRA Track Division**

### **Wayne Blalock – Brightline**

*Roadway Worker Protection Internal Monitoring Programs*

### **Jamie O'Rourke, et al. – Sperry Rail**

*Artificial Intelligence in Rail Flaw Detection*

### **Timothy Lesniak – MBTA**

*Tentative Topic: Working Safely in Corridors Shared With Other Railroads and Modes of Transportation.*

### **Tom Leiby – Harsco Rail, Todd Dragland – Genesee & Wyoming Inc**

*Utilizing MRail's vertical track deflection measurements to identify and quantify the risk of soft spots in track for maintenance prioritization*

### **Larry Warren – FRA PTC Division**

*Positive Train Control for Maintenance of Way: What it is, How it Works, and Other Things to Know.*

### **Michael Fellingner – Global Rail Consulting**

### **Rudolf Schilder – Advanced Rail Track Solutions**

*Track Elasticity and the Long-Term Effects of Reduced Track Tamping*

### **Christopher Parrott, Jamie Cater – CaterParrott Railnet**

*Short Line Track Safety Program: Increasing Safety While Growing Traffic*

### **Bob Hardwell – Linsinger**

### **Adam Doy, CMILT – Network Rail Consulting**

### **Elvis Kozica – Linsinger**

*Enhanced Rail Management Through Rail Milling: Network Rail's Rail Maintenance Journey*

### **Yujiang Zhang – FRA**

*Track Caused Accident Data Trends Over the Last 10 Years*

### **Adam Shepherd – NRSS**

*Topic To Be Determined*

### **Can Fry, Josiah Stiemann – FTS Tools**

*The Safety Advantages of Battery Operated Tools*

### **Peter Bartek, GMP – Marmon Holdings, a Berkshire Hathaway Company**

*Tentative Topic: Safety Technology Innovations*