



FOSTER J. PETERSON
PRINCIPAL

fjpeterson@engsys.com

Mr. Foster Peterson is a Principal with ESi. Prior to joining ESi, he was a partner with Full Service Railroad Consulting, Inc., where he provided clients with timely and accurate analysis of railroad operations issues, gave training in railroad safety, rules, and operating practices, and conducted operational and safety audits. Mr. Peterson also provided consulting and/or testifying expert services in railroad mechanical, operating, and engineering disciplines from accident/incident response through case analysis and report preparation.

Mr. Peterson has performed derailment and accident investigations, railroad operating practices and safety studies, train and vehicle dynamic studies, mechanical inspections, physical testing, and railroad training. He is an experienced user of simulation tools such as the AAR's Train Operations Simulator (TOS), Train Operations and Energy Simulator (TOES), and New and Untried Car Analytic Regime Simulation (NUCARS).

Mr. Peterson has extensive experience in the development and training of railroad safety, rules, and operating practices. He has created operating, safety, air brake, and train handling, as well as locomotive engineer and conductor training programs. He continues to be an active Operating/Safety Officer at several shortline railroads and is a certified conductor, locomotive engineer, and Designated Supervisor of Locomotive Engineers.

Areas of Specialization

Train and Vehicle Dynamics
Safety, Rules, and Operations
Accident/Incident Case Analysis
Accident/Incident Simulations
Certified Conductor, Locomotive Engineer, and Designated Supervisor of Locomotive Engineers

Education

B.S., Mechanical Engineering, Georgia Institute of Technology, 1990 – 1995
Participated in Cooperative Education Program

May 2023

Professional Affiliations/Honors

International Association of Railway Operating Officers

President, October 2015 – October 2016
Executive Committee, 2005 – Present
Regional Consultant, 1997 – 2005
Member, 1995 – Present

American Association of Railroad Superintendents

Member, 2002 – Present

Air Brake Association

Member, 1995 – Present

American Society of Mechanical Engineers

Member, 2000 – Present
Associate Member, 1994 – 2000

American Railway Engineering and Maintenance of Way Association

Member, 2002 – 2012, 2017 – Present

Positions Held - Consulting

Engineering Systems Inc., Norcross, GA

Principal, 2020 – Present (Director-Rail 2022-2023)
Senior Managing Consultant, 2017 – 2019

Full Service Railroad Consulting, Inc., Marietta, GA

Partner, 2002 – 2017

Rail Sciences Inc., Atlanta, GA

Senior Director Testing and Engineering Application, 2000 – 2001
Director Testing and Engineering Applications, 1999 – 2000
Engineer, 1995 – 1999

Positions Held - Railroad

Tennessee Valley Railroad Museum, Inc. and its Operating Subsidiaries:

Tennessee Valley Railroad Museum, Chattanooga, TN

East Chattanooga Belt Railroad, Chattanooga, TN

Hiwassee River Railroad, Copperhill, TN

Tyner Terminal Railway Company, Chattanooga, TN

Director, Safety and Operating Practices, 2011 – Present

Manager, Training, Rules & Safety, 1995 – 2011

Designated Supervisor of Locomotive Engineers 1995 – 2000, 2002 – Present

Locomotive Engineer, qualified in 1990, certified in 1993 continuously to Present

Railroad Operations, 1986 – 1990

White Pass & Yukon Route Railroad, Skagway, AK

Manager of Operating Practices, 2009 – Present (Contract Position)

New Georgia Railroad, Atlanta, GA

Locomotive Engineer, Machinist, 1993 – 1995

Continued Education

OSHA 30 Hour Outreach for General Industry, University of South Florida, May 2023

Quantum Engineering, Inc., Orange Park, FL, July 2002

Training of event recorder data analysis and operation of QDP software.

FRA/ASLRRA Engineer Certification Training Seminar, Baltimore, MD, December 2010

Railroad Track Inspection & Safety Standards presented by University of Tennessee Center for Transportation Research, March 21-25, 2011 in Chattanooga, TN

FRA/ASLRRA Operating Practices 101 Seminar (Including 49 CFR Parts 217, 218, 240, 242 and 243), Baltimore, MD, November 2016

Publications/Presentations

“The Basics of FRA vs. OSHA,” Webinar for NARTC, August 2022 (co-presented with B.C. Sooter and C.S. Moale)

“Data at a Distance: The Art of Remote Inspections,” American Short Line and Regional Railroad Association Liability Seminar, St. Louis, Missouri, July 2022

“The Basics of Railway Job Duties: Engineering Department,” Webinar for NARTC, May 2022 (co-presented with B.C. Sooter and C.S. Moale)

“The Basics of Railway Locomotives,” Webinar for NARTC, November 2021 (co-presented with B.C. Sooter and C.S. Moale)

“The Basics of 3-Step/Red Zone Protection,” National Association of Railroad Trial Counsel Fall Meeting – Philadelphia, Pennsylvania, October 2021

“The Basics of Railroad Worker Protection Rules: Roadway Worker Protection, Blue Signal Protection, and 3-Step/Red Zone Protection,” Webinar for NARTC, August 2021 (co-presented with B.C. Sooter and C.S. Moale)

“Basics of Railway Track Design and Inspection with a Focus on 49 CFR Part 213,” Webinar for NARTC, June 2021 (co-presented with B.C. Sooter and C.S. Moale)

“The Basics of the Operating Rules and Their Relationship to FRA Regulations,” Webinar for NARTC, September 2020 (co-presented with B.C. Sooter)

“Basics of Cars and Locomotives: Safety Appliance Act History and Application,” Webinar for NARTC, May 2020 (co-presented with B.C. Sooter)

“Fundamentals of Air Brakes: How Does a Train Stop?,” Webinar for NARTC, March 2020 (co-presented with B.C. Sooter)

“Use of Remote Control Locomotive Event Recorder Data in Reconstruction and Defense of Railroad Accidents ,” National Association of Railroad Trial Counsel Meeting, New Orleans, Louisiana, October 2018

“Remote Control Locomotive (RCL) Overview,” National Association of Railroad Trial Counsel Meeting, Chicago, Illinois, July 2017

“Basics of Train Handling: Braking” - International Association of Railway Operating Officers, Chicago, IL, September 2011

“The Train Is Unstoppable and Denzel Is Nowhere to Be Found (Are You Ready?),” American Short Line and Regional Railroad Association Annual Convention, San Antonio, TX, May 2011

“Basics of Train Handling: Getting Off to a Good Start” - International Association of Railway Operating Officers, Chicago, IL, September 2009

“Locomotive Camera Update” - International Association of Railway Operating Officers, Chicago, IL, September 2009

“Locomotive Event Recorder Update” - International Association of Railway Operating Officers, Chicago, IL, September 2008

“The Effect of Slack Action and Hard Couplings on Locomotive Occupants” – National Association of Railroad Trial Counsel Fall Meeting, Colorado Springs, CO, September 2008

“The Current State of Locomotive Event Recorders” – 13th Annual Railroad Liability Seminar, Denver, CO, July 2006

“The Current State of Locomotive Event Recorders” – Midwest Claims Conference, Naperville, IL, May 2006

“(Almost) Everything You Need to Know About Locomotive Event Recorders: These Are Not Your Father’s 8 Tracks...” – National Association of Railroad Trial Counsel Winter Meeting, Naples, FL, February 2006

“(Almost) Everything You Need to Know About Locomotive Event Recorders: These Are Not Your Father’s 8 Tracks...” – National Association of Railroad Trial Counsel Special Litigation Conference XVI, Park City, UT, February 2006

“Advances in the Locomotive Event Recorder Download Process: Class 1 vs. Shortline/Regional Perspective” - International Association of Railway Operating Officers, Chicago, IL, September 2005

“Risk Management: A Team Approach,” Twelfth Annual ASLRRA Liability/Claims Seminar, July 2005

“Car and Locomotive Brakes 101: Involvement of Brakes in Railroad Accidents/Incidents and Subsequent Litigation,” Eleventh Annual ASLRRA Liability/Claims Seminar, July 2004

“Modern Railroad Locomotive Technology,” Guest Lecturer at University of Minnesota Class AFEE & BIE3121, Communication, Power, Energy, Transportation and Machinery Technologies, March 2004

“Defending Against Claims of Careless Train Operation,” 49th Annual Meeting, National Association of Railroad Trial Counsel, July 2003 (Co-authored with B.P. Heikkila)

“On-Train Railroad Employee Injuries: Causation, Investigation, Analysis and Technical Defense,” Tenth Annual Regional Railroad Liability Seminar, July 2003

“The Manifest” Bulletin of the International Association of Railway Operating Officers, Editor, June 2003, September 2004, April 2006

“Investigating Derailments: Maintenance of Way and Track Integrity Considerations,” 9th Annual Railroad Liability Seminar, Indianapolis, IN, June 2002

“Causes, Analysis, and Prevention of Empty Tank Car Derailments,” International Association of Railway Operating Officers, Chicago, IL, September 2000 (Co-authored with G.P. Wolf)

“The Use of Event Recorder Data in Reconstructing Railway Accidents,” Regional Railroad Liability Seminar, Nashville, TN, July 2000 (Co-authored with G.P. Wolf)

“An Integrated Approach to a Comprehensive Wheel/Rail Management System,” Advanced Rail Management Rail/Wheel Interface Infozone Sessions, Chicago, IL, May 2000 (Co-authored with G.P. Wolf)

“Dynamic Response of High Speed Rail Vehicles over Perturbed Track,” Advanced Rail Management Rail/Wheel Interface Seminar, Chicago, IL, May 2000 (Co-authored with G.P. Wolf, RSI, and Jon Jeambey, TTX)

“Deployment of AC Power: Effect on Train Operations and Track Structure,” International Association of Railway Operating Officers, Chicago, IL, September 1999 (Co-authored with G.P. Wolf)

“The Relationship Among Operating Procedures, Track Geometry, Rail Profile, and Rail Wear Rates,” Advanced Rail Management Rail/Wheel Interface Seminar, Chicago, IL, May 1998 (Co-authored with G.S. Bachinsky and G.P. Wolf)

“Optimizing Curve Superelevation to Reduce Rail Wear, Maintenance, and Derailment Potential,” Advanced Rail Management Rail/Wheel Interface Seminar, Chicago, IL, May 1998

“Application and Validation of the Automated Truck Performance Measurement System,” American Society of Mechanical Engineers/Institute of Electrical and Electronic Engineers Joint Railroad Conference, Philadelphia, PA, April 1998 (Co-authored with G.P. Wolf)

“Automated Truck Performance Measurement System,” International Association of Railway Operating Officers, Chicago, IL, September 1997 (Co-authored with G.P. Wolf)

“Optimizing LOCOTROL Train Performance,” GE-Harris LOCOTROL Distributed Power Seminar, Melbourne, FL, February 1997 (Co-authored with G.P. Wolf)