



PATRICK RIEDLINGER, P.E., ACTAR, ASE, CFEI CVFI SENIOR CONSULTANT

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Mr. Riedlinger is a mechanical engineer and Senior Consultant with 23 years of progressive, technical experience in consumer product design, design verification, manufacturing processes, and material science, and with 12 years of that experience in high-tech manufacturing environments such as Tektronix, Trimble Navigation, and General Electric. Mr. Riedlinger has 12 years of experience in forensic engineering, failure analysis, accident reconstruction, and expert witness. He specializes in accident reconstruction and in fire origin and cause evaluations, including those where electrical activity or mechanical failure may have been involved.

In addition to accident general reconstruction, Mr. Riedlinger is trained and experienced in the collection and application of Event Data Recorder (“black box”) information from heavy trucks and passenger vehicles as it relates to accident reconstruction. He is also a certified vehicle fire investigator and a certified master mechanic.

Areas Of Specialization

Accident Reconstruction
Fire and Explosion Investigation
Failure Analysis
Vehicle Fire Investigation
Machinery Failure
Pedestrian v Automobile
Bicycle Accidents
Heavy Truck Accidents
“Black Box” data retrieval
Guarding
Failure to Warn/Labels
Slip, Trip, Fall

Education

B.S., Mechanical Engineering, Oregon State University, 1996
A.S., Electrical Engineering Technology, Chemeketa College, 1985



Licensed Professional Engineer (P.E.)

State of CaliforniaLicense No. M37661
State of OregonLicense No. 54794PE
State of WashingtonLicense No. 46261
State of IdahoLicense No. 18014
State of Utah.....License No. 10752421-2202

Certifications

ACTAR Accredited Traffic Accident Reconstructionist, No. 2237
Certified Fire and Explosion Investigator, NAFI, No. 5496-1480
Certified Vehicle Fire Investigator, NAFI, No. 5496-1480V
ASE Certified Master Automobile Technician, No. ASE-5625-4354
ASE Certified Master Medium/Heavy Truck Technician

Professional Affiliations/Honors

National Association of Fire Investigators (NAFI)

Member, 2017–present

National Society of Professional Engineers (NSPE)

Member, 2009–present

Professional Engineers of Oregon (PEO)

Member, 2009–present

Accreditation Commission for Traffic Accident Reconstruction (ACTAR)

Member, 2010–present

Awards

Electrical Generator Mechanic Award Of Excellence

USARMY, 1990

Positions Held

Engineering Systems, Inc., Portland, Oregon

Senior Consultant, 2021–present

Envista Forensics, Portland, Oregon

Senior Project Engineer, 2019–2021

Jensen Hughes, Portland, Oregon

Senior Mechanical Engineer, 2017–2019

Rimkus Consulting Group, Redmond, Washington

Consulting Engineer, 2014–2016

Oregon Forensic Engineering, Salem, Oregon

Principal Engineer, 2008–2014

Marquis Corp., Independence, Oregon

Engineering Manager, 2007–2008

General Electric, Inc., Tualatin, Oregon

Owner and President, 2003–2007

Trimble Corp., Corvallis, Oregon

Senior Manufacturing Engineer, 2000–2003

Precision Design Resources, Inc., Independence, Oregon

Consulting Design Engineer, 1998–2000

Tektronix Inc., Wilsonville, Oregon

Supplier Quality Engineer, 1996–1998

USARMY, Babenhausen, Germany

Electrical Generator Mechanic, 1988–1991

Supra Products, Salem, Oregon

EAC Technician, 1985–1988

Continued Education

IPTM Pedestrian Crash Investigation, 2020

IPTM Advanced CDR Analysis, 2020

NAFI Advanced Fire Investigation, 2018

NAFI CVFI Training, 2017

NAFI CFEI Training, 2016

IPTM CDR Technician, 2016

FARO Training, Motorcycle crash reconstruction and injuries, 2012

FARO Training, Advanced topics in Pedestrian Crashes, 2012

FARO Training, CDR Basics for the Investigator 2011 (Instructor)

FARO Training, Motorcycle-torque analysis, truck CDR training, 2010

FARO Training, Energy methods, truck inspection/crash, trailer, 2009

Traffic Accident Investigation 1, 2, NW University, 2009

NSPE, Slip/Trip/Fall parts 1 and 2, 2009

FARO Training, Speed calcs, yaw; drag, braking, and slope, 2008

Publications/Presentations/Patents

Apparatus for shielding H-field signals PAT#8,134,846 - An improved container configured to store a wireless-enabled device therein

Riedlinger, P., "Acquiring and Applying Black Box Data," OTLA, Oregon Trial Lawyers Association, Portland, Oregon, 2014

Riedlinger, P., "CDR Basics for the Investigator," Continuing Education Seminar for FARO, Eugene, Oregon, 2011