

CURRICULUM VITAE OF FRED B. SEMKE, P.E.

September 2023

I. General Information

A. Position
Principal Engineer
Semke Forensic
154 Hughes Lane
St. Charles, Missouri
Telephone: 636-896-9995

II. Professional Summary

A. Education:
Master of Science
Engineering Mechanics
University of Missouri
Rolla, Missouri
1986

Bachelor of Science - Magna Cum Laude
Mechanical Engineering
University of Missouri
University Scholar
Columbia, Missouri
1983

St. Charles R-5 High School
St. Charles, Missouri
Valedictorian
1978

B. Experience:

January 2003 to Present

Position: Principal Engineer
Semke Forensic
154 Hughes Lane
St. Charles, Missouri

Responsible for mechanical engineering projects with emphasis in vehicular accident reconstruction, failure analysis, mechanical design analysis, fire suppression systems and fuel-fired equipment.

March 1997 to January 2003

Position: Senior Project Engineer - Mechanical
FTI/S.E.A. Consulting
St. Louis, Missouri

Responsible for mechanical engineering projects with emphasis in vehicular accident reconstruction, failure analysis, mechanical design analysis, fire suppression systems and fuel-fired equipment.

May 1983 to March 1997

Position: Mechanical Engineer
McDonnell Douglas Corporation
St. Louis, Missouri

Responsible for aircraft design and analysis.

C. Hold a Class A Commercial Vehicle Driver's License (CDL) with all endorsements.

III. Seminars and Technical Courses Attended

1984 - Strength and Mass Properties
1985 - Ethical Decision Making Workshop
1986 - Hazardous Materials Communication
1987 - Effective Writing
1987 - Structural Analysis - Laminated Composites
1987 - Metal Matrix Composites
1988 - Respirator Training
1988 - Fatigue/Fracture Mechanics
1993 - Time Management
1998 - SAE Technical Session, Accident Reconstruction
1999 - SAE Technical Session, Accident Reconstruction
1999 - SAE Seminar, Braking Performance of Heavy Commercial Vehicles
2000 - World Reconstruction Exposition
2001 - SAE Technical Session, Accident Reconstruction
2002 - SAE Technical Session, Accident Reconstruction
2002 - MTC Truck Driver Training Course
2003 - SAE Technical Session, Accident Reconstruction
2004 - SAE Technical Session, Accident Reconstruction
2005 - SAE Seminar - Vehicle Accident Reconstruction Methods
2006 - Crash Data Retrieval (CDR) Technician Certification Course
2006 - Crash Data Retrieval (CDR) Data Analyst Certification Course
2007 - SAE Technical Session, Accident Reconstruction
2008 - Crash Data Retrieval User's Conference
2008 - SAE Seminar - Applied Vehicle Dynamics
2008 - BMW Performance Driving School - SAE Driving Event
2009 - SAE Technical Session, Accident Reconstruction / EDR's
2009 - Midwest Association of Technical Accident Investigators (MATAI) Seminar
2009 - Bendix Air Brake Class
2009 - Heavy Vehicle Crash Reconstruction Conference
2010 - Commercial Vehicle Event Data Recorders (University of Tulsa)
2010 - SAE Technical Session, Accident Reconstruction / EDR's
2010 - J. J. Keller, Forklifts: FAQs on OSHA's Standard
2010 - Accessing and Interpreting Heavy Vehicle Event Data Recorders (SAE)
2011 - SAE Highway Vehicle Event Data Recorder Symposium
2012 - SAE Technical Session, Accident Reconstruction / EDR's
2013 - Advanced Crash Reconstruction Utilizing Human Factors (NUCPS)
2013 - Midwest Association of Technical Accident Investigators (MATAI) Seminar
2014 - Midwest Association of Technical Accident Investigators (MATAI) Seminar
2015 - Digital Forensics of Heavy Vehicle Event Data Recorders (Univ. of Tulsa)
2016 - World Reconstruction Exposition

IV. Professional Affiliations

Society of Automotive Engineers (SAE)
Society of Accident Reconstructionists (SOAR)
National Assoc of Professional Accident Reconstruction Specialists (NAPARS)
Midwest Association of Technical Accident Investigators (MATAI)
European Association for Accident Research and Analysis (EVU)
American Society of Mechanical Engineers (ASME)
American Society of Agricultural and Biological Engineers (ASABE)
National Fire Protection Association (NFPA)
American Society of Heating, Refrigerating and Air-Conditioning Engr (ASHRAE)

V. Professional Registration

Registered Professional Engineer in the States of Missouri, Illinois, Arkansas,
Kentucky, Kansas, Oklahoma, Iowa, Alabama, and Idaho

VI. Civic Involvement

President, Board of Education, St. Charles R-5 Schools, January 1997 to April 2015