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#### PROFESSIONAL REGISTRATIONS AND CERTIFICATIONS

- Registered Professional Engineer: Washington, Idaho, Oregon, Virginia, Maryland, West Virginia, North Carolina, DC, South Carolina
- International Association of Arson Investigators (IAAI) – Certified Fire Investigator (CFI)
- National Association of Fire Investigators (NAFI)
  - Certified Fire and Explosion Investigator
  - Certified Vehicle Fire Investigator
- Northwestern University - Center for Public Safety - Crash Investigation
- Earlbeck Corporation - Fundamentals of Welding & Technology
- CCS Retired Motorcycle Road Racer
- Eaheart Industrial Service Inc. - Operator Safety Training - Forklifts

#### EDUCATION & CAREER DEVELOPMENT

- Master of Engineering Mechanical Engineering – Old Dominion University, Norfolk, Virginia
- Bachelor of Science Mechanical Engineering - Virginia Polytechnic Institute and State University, Blacksburg, Virginia
- Traffic Accident Reconstruction – Northwestern University Center for Public Safety
- Fire & Explosion Investigation - National Association of Fire Investigators
- Advance Motorcycle Rider Training - California Superbike School
- Vehicle Fire Investigations - National Association of Fire Investigators
- Bosch CDR Technician and Data Analyst - Northwestern University Center for Public Safety

#### PROFESSIONAL SOCIETIES

- National Society of Professional Engineers
- National Association of Fire Investigators
- International Association of Arson Investigators
- American Society of Mechanical Engineers



## FORENSIC INVESTIGATION & TECHNICAL EXPERTISE

- Motorcycle crash causation analysis with advanced rider experience
- Heavy equipment accident, failures and fire
- Vehicle parts and mechanical system failures
- Automotive crash data download and interpretation
- Vehicle/Equipment fire origin & cause
- Welding failures and analysis
- Power tools and consumer equipment accident analysis
- Product liability
- Workplace safety
- Plumbing fixture and component analysis
- Fatigue related failures
- Exercise equipment injury
- HVAC equipment malfunction and fires
- Fire sprinkler systems
- Appliance mechanical failures, flooding and fire
- Gas plumbing
- Wood fired appliances
- Industry standards
- Forklifts and aerial work platforms

## EXPERIENCE

Clear Analysis Engineering, PLLC (CAE), Bellingham, Washington

- Founder and President
- Conducting investigations and providing expert analysis

FORCON International, Richmond, Virginia

- Lead Engineer for FORCON International with 15 years and over 2000 forensic engineering investigations
- Conducted and led multidisciplinary investigations
- Testified at trial as an expert witness in a variety of cases

Virginia Tech, Blacksburg, Virginia - Research, Extreme Laboratories

- Conducted heat flux gauge testing for fire propagation analysis
- Analyzed data and designed experimental setup for gauge accuracy testing

US Army Aberdeen Testing Center, Aberdeen, Maryland - Engineering Technician

- Conducted testing and analyzed combat performance of military vehicles