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### **PROFESSIONAL REGISTRATIONS AND CERTIFICATIONS**

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

### **EDUCATION & CAREER DEVELOPMENT**

- Master of Engineering, Mechanical Engineering – Old Dominion University
- Bachelor of Science, Mechanical Engineering - Virginia Tech
- Vehicle 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 & 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
- National Academy of Forensic Engineers



## **FORENSIC INVESTIGATION & TECHNICAL EXPERTISE**

- Plumbing fixture and component analysis
- Motorcycle crash causation analysis
- Heavy equipment accidents, failures and fires
- Vehicle parts and mechanical system failures
- Automotive crash data (CDR) download and interpretation
- Vehicle and Equipment fire origin & cause
- Power tools and consumer equipment failure analysis
- Product liability
- Workplace safety
- Fatigue-related failures
- Exercise equipment injuries
- HVAC equipment malfunctions and fires
- Fire sprinkler systems
- Appliance mechanical failures, water losses and fire
- Natural gas and propane systems
- Wood-fired appliances
- Industry standards
- Forklifts and aerial work platforms
- Ladders

## **EXPERIENCE**

### **Clear Analysis Engineering, PLLC, Bellingham, Washington – Founder**

- Responsible for all company operations
- Provide forensic engineering and expert witness services

### **FORCON International, Richmond, Virginia – Director and Lead Engineer**

- 15 years conducting and leading multidisciplinary teams on over 2,000 inspections and failure analyses
- Trained engineers in investigation techniques and failure analysis
- Responsible for Mid-Atlantic operations
- Provided expert testimony

### **Virginia Tech, Blacksburg, Virginia - Research, Extreme Laboratories**

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

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

- Conducted testing and analyzed combat performance of military vehicles