

FORCON INTERNATIONAL

JAMES W. LAIRD, P.E., CFEI, CWI

FORENSIC INVESTIGATION & TECHNICAL EXPERTISE SUMMARY

James's experience and expertise include a wide array of fields, including but not limited to the following areas:

- 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
- Wood fired appliances
- Industry standards
- Forklifts and aerial work platforms

EDUCATION

B. S. Mechanical Engineering - Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA
Traffic Accident Reconstruction - Northwestern University Center for Public Safety

CONTINUING EDUCATION

Courses and Certifications completed in the following areas:

- National Association of Fire Investigators
 - Fire & Explosion Investigations
 - Vehicle Fire Investigations
- California Superbike School
 - Advance Motorcycle Rider Training
- Northwestern University Center for Public Safety
 - Bosch CDR Technician and Data Analyst
 - Crash Investigation
- Earlbeck Corporation
 - Fundamentals of Welding & Technology
- Eaheart Industrial Service Inc.
 - Operator Safety Training – Forklifts

PROFESSIONAL REGISTRATIONS & CERTIFICATIONS

- Registered Professional Engineer in the following States: District of Columbia, North Carolina, Maryland, Virginia & West Virginia.
- Certified Fire and Explosion Investigator, NAFI
- Certified Vehicle Fire Investigator, NAFI
- Retired Motorcycle Road Racer, CCS

- Certified Welding Inspector, AWS

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

- National Society of Professional Engineers (NSPE)
- National Association of Fire Investigators (NAFI)
- International Association of Arson Investigators (IAAI)
- American Society of Mechanical Engineers (ASME)
- American Welding Society (AWS)

CAREER HISTORY

FORCON International - Lead Mechanical Engineer

Lead Mechanical Engineer for FORCON International with over 8 years of responsibilities for conducting forensic engineering investigations and providing expert analysis on a variety of mechanical failures and issues. Has led and conducted over 1000 inspections, failure analyses and consultations, in addition to providing expert testimony services.

Virginia Tech, Blacksburg, VA - Research, Extreme Laboratories

- Conducting heat flux gauge testing for fire propagation analysis.
- Analyzing data and designed experimental setup for gauge accuracy testing.

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

- Conducting testing and analyzed combat performance of military vehicles.

Trident Engineering, Annapolis, MD - Forensic Engineering Intern

- Conducting forensic engineering investigations and failure analysis with regard, to household appliances, structures and vehicle crashes.