

J. Cord Guthrie | District Fire Sciences Principal, IAAI–CFI, NAFI–CFEI/CVFI

3030 S. Tejon St., Englewood, CO 80110

Cell Phone: 720-926-2377
cord.guthrie@efiglobal.com

Professional Summary:

Mr. Guthrie has over 23 years of forensic-related investigation experience – from vehicle accident reconstruction, including rollovers and large truck collisions, to fire origin and cause investigations, all across the United States, U.S. Virgin Islands, and Mexico. He has investigated large commercial fires, residential fires, oil-field explosions, and vehicle fires. He has a vast understanding of residential construction systems, and construction practices. He has studied and offered testimony on fire protection systems, such as smoke alarms, carbon monoxide alarms, and portable fire extinguishers.

He has a vast understanding of vehicle mechanical systems, and vehicle accident reconstruction. He has investigated several hundred rollover accidents over his career, and dozens of loss-of-directional-stability accidents. He has been involved with large-scale vehicle testing, including dynamic remote control and static tests. He has also conducted small-scale forensic tests relating to Hot-Shock, and mechanical component tests for a variety of products.

His areas of expertise include the following:

- Fire Origin & Cause (including explosions)
- Wildland Fire Investigation
- Forensic Photography
- Technical Research and Writing
- Forensic Testing

Licenses and Certifications:

Certified Fire Investigator (CFI), International Association of Arson Investigators #41-022247
Certified Fire and Explosion Investigator (CFEI), National Association of Fire Investigators, #9594-4436
Certified Vehicle Fire Investigator (CVFI), National Association of Fire Investigators, #9594-4436V
Private Investigator License, Arkansas, License #CMPY.0002176
Private Investigator License, New Mexico, License #PI13575
Private Investigator License, Utah
Remote Pilot License, DOT / FAA, License #4153570

Project Experience:

Ponderosa Associates, LLC, Lafayette, CO

Large Apartment Fire

A large, multi-unit apartment building suffered a catastrophic fire, determined to be arson, which resulted in two fatalities and numerous injuries. The fire caused the destruction of approximately 69 units. The investigation took an in-depth, multi-faceted approach – Mr. Guthrie worked with architects, engineers, and other experts during the investigation to develop his opinions regarding

origin, cause, fire flow, timing, and fire protection equipment. He was deposed, and the case settled before trial.

Ponderosa Associates, LLC, Lafayette, CO

Oil Field Explosion

A massive explosion occurred at an oil storage facility which resulted in one fatality and numerous injuries. The facility was being upgraded with new piping. It was believed that the on-site welder was not actively engaged in welding activities at the time of the explosion. On the site were heavy equipment operators, pipefitters, and welders. As a result of the explosion, there were hundreds of feet of mangled steel pipe that had to be identified and reconstructed. An investigation of various types of equipment and components that were present was necessary to identify the origin of the explosion. It was determined from a myriad of collected evidence, including a video of the event from a nearby facility, that the welder was indeed the cause of the explosion.

Renfroe Engineering, Inc., Farmington, AR

Large Commercial Fire

A large egg processing plant caught fire and resulted in the near complete destruction of the operation. The fire was contained to the interior of the structure – very little evidence of the fire was seen from outside. It was discovered during the investigation that during the time of the fire an HVAC company was conducting repairs to the cooling system, which was located outside the structure. During interviews, it was further discovered that the HVAC workers were brazing copper lines outside the building and failed to properly shield against the acetylene torch. A reconstruction of the exterior corrugated steel panels was conducted. The fire patterns (char marks) on the exterior surface of the panels matched up with the area that was determined to be the origin of the blaze on the other side of the wall. These small fire patterns (circular radiating patterns) were determined to be brazing marks from the acetylene torch used by the HVAC workers at the time of the fire. A careful attention to detail was needed to discover the brazing marks on the wall which ignited the internal combustible materials (insulation, wood framing members, etc.).

Court Qualifications/ Depositions:

Litigation CV available upon request.

Professional Experience:

E.i. Consultants, LLC (f.k.a. Renfroe Engineering, Inc.), Accident Reconstruction & Fire Investigations, 2001-2017

Ponderosa Associates, LLC, Accident Reconstruction & Fire Investigations, 2017-2022

EFI Global, Inc., District Fire Sciences Principal, 2022-current

Specialized Education:

National Fire, Arson & Explosion Investigation Training Program, NAFI, 2011

Vehicle Fire, Arson & Explosion Investigation Science & Technology Seminary, NAFI, 2013

CDR Summit – ACTAR, Collision Publishing & CSI, 2015

National Fire, Arson & Explosion Investigation Training Program, NAFI, 2018

Investigation of Death, Boulder County Sheriff's Office/Steve Ainsworth, 2019

NFPA 1033 and Your Career, IAAI, 2020 – TESTED

2021 NFPA 921 Chapter 6 – Fire Effects and Fire Patterns, IAAI, 2020 – TESTED

Documenting the Event, IAAI, 2020 – TESTED

Basic Electricity, IAAI, 2020 – TESTED
Arc Mapping Basics, IAAI, 2020 – TESTED
Fire Flow Analysis, IAAI, 2020 – TESTED
Explosion Dynamics, IAAI, 2020 – TESTED
Fire Chemistry, IAAI, 2020 – TESTED
MagneTek: A Case Study in the Daubert Challenge, IAAI, 2020 – TESTED
Investigating Motor Vehicle Fires, IAAI, 2020 – TESTED
An Analysis of The Station Nightclub Fire, IAAI, 2020 – TESTED
Electrical Safety, IAAI, 2020 – TESTED
Critical Evaluation and Testing of Commonly Reported Accidental Causes, IAAI, 2020 – TESTED
Effective Investigation and Testimony, IAAI, 2020 – TESTED
Ethics and the Fire Investigator, IAAI, 2020 – TESTED
Fire Investigator Scene Safety, IAAI, 2020 – TESTED
Fundamentals of Interviewing, IAAI, 2020 – TESTED
Insurance and the Fire Investigation, IAAI, 2020 – TESTED
Introduction to Evidence, IAAI, 2020 – TESTED
Charting Your Career Path in Fire Investigation, IAAI, 2020 – TESTED
Physical Evidence at the Fire Scene, IAAI, 2020 – TESTED
Residential Electrical Systems, IAAI, 2020 – TESTED
Residential Natural Gas Systems, IAAI, 2020 – TESTED
The Scientific Method for Fire and Explosion Investigation, IAAI, 2020 – TESTED
Understanding Undetermined, IAAI, 2020 – TESTED
Writing the Initial Origin & Cause Report, IAAI, 2020 – TESTED
Emerging Technologies in Fire Investigation, IAAI, 2020 – TESTED
Charleston Sofa Super Store Fire, IAAI, 2020 – TESTED
2021 NFPA 921 Chapter 17 – Physical & Canine Evidence, IAAI, 2020 – TESTED
Explosive Engineering 1 – Explosive Chemistry, Academy Blasting, 2021
Explosive Chemistry Decoded, Academy Blasting, 2021
Electric & Hybrid Vehicle Fires, IAAI, 2022 – TESTED
Electric and Hybrid Vehicle Design Basics, IAAI, 2022 – TESTED
Critical Thinking Solves Cases, IAAI, 2022 – TESTED
The Deposition Part 1: Format, Content, and Preparation, IAAI, 2022 – TESTED
The Deposition Part 2: Questioning Tactics and Effective Responses, IAAI, 2022 – TESTED
Introduction to Fire Dynamics and Modeling, IAAI, 2022 – TESTED
Investigating Natural Gas Systems, IAAI, 2022 – TESTED
The Practical Application of the Relationship Between NFPA 1033 and NFPA 921, IAAI, 2022 – TESTED
Thermometry, Heat, and Heat Transfer, IAAI, 2022 – TESTED
The Impact of Ventilation in Building Structures on Fire Development, IAAI, 2022 – TESTED
Post-flashover Fires, IAAI, 2022 – TESTED
Lithium-Ion Battery Fires, IAAI, 2022 – TESTED
Wildland Fires Investigation, IAAI, 2022 – TESTED
Introduction to Appliances, IAAI, 2022 – TESTED
Managing Complex Fire Scene Investigations, IAAI, 2022 – TESTED
Fundamentals of Residential Building Construction, IAAI, 2022 – TESTED
Ethical Duties Beyond the Fire Scene, IAAI, 2022 – TESTED
Understanding Fire Through the Candle Experiments, IAAI, 2022 – TESTED
Fire Protection Systems, IAAI, 2022 – TESTED
Digital Photography and the Fire Investigator, IAAI, 2022 – TESTED

Education:

Master's Degree, Forensic Science, George Washington University, Washington, D.C., 2001
Bachelor's Degree, Psychology (Pre-Med), University of Arkansas, Fayetteville, AR, 1999

Affiliations:

International Association of Arson Investigators - member
National Fire Protection Association – member
National Association of Fire Investigators – member

Courses Instructed/ Guest Lecturer:

Fire Origin & Cause Case Studies, Lecture, Longmont, CO
Fire Origin & Cause: Structures, Lecture, Worley Conference, Louisville, KY
The Forensic Scientist, Lecture, Springdale, AR
Accident Reconstruction: Investigation of Vehicle Accidents, Lecture, Fayetteville, AR

Publications and Presentations:

Guthrie, J. Cord. "Fire Loss from Gas-Fired Appliances in Your Home." Ponderosa Newsletter, August 2021.
Guthrie, J. Cord. "Fire Phenomena – Understanding the Process of Combustion." Ponderosa Newsletter, July 2021.
Guthrie, J. Cord. "Fueling the Fire – Understanding Fuel Loads for Fire Origin & Cause." Ponderosa Newsletter, June 2018.

Honors and Awards:

Honor Roll, University of Arkansas, 1999
Dean's List, University of Arkansas, 1999