

Fire Pattern Recognition and Identification

Course Objectives:

Chemistry and Physics: The determination of the origin of a fire involves the coordination of inform-ation derived from burn patterns, observations, chemistry and physics of fire. In this segment we will review the chemistry and physics of fire. It is important to have a thorough understanding of “fire” in order to make an accurate determination as to the area of origin and possible causes.

The Fingerprints of Fire: As with any scene there are several identifying characteristics that may be located and evaluated at the scene. In this segment, we will call these patterns the “Fingerprints of Fire.”

Fire Patterns are the visible or measurable physical effects that remains after the fire. Fire patterns must be validated for use in determining the origin of a fire. In this section we will cover the validated fire patterns and their various meanings.

Case Studies: We will review actual case studies. Students will review the provided information and report their conclusions to their peers in the class.

Purpose of Course:

The purpose of this training course is to provide Fire and Law Enforcement Investigators, Insurance Investigators, Private Investigators, Engineers and Prosecutors with an understanding of Fire Patterns and their Interpretations. depth course on Fire Scene Investigation and Evidence Collection Procedures.

Instructor Bio

Steve Riggs retired after twenty-two years of Law Enforcement, and Fire Service Experience in Oklahoma. Steve has been examining fire scenes for 40 years. Steve holds a Bachelors Degree in Emergency Management, and has extensive training in Fire Cause Determination, Criminal Investigation, Arson Investigation, Evidence Processing, Interviewing Techniques, and Case Management. He is a Certified Police and Fire Instructor and a Certified Fire Investigator Instructor. Mr. Riggs has successfully been involved in many Fire/Arson Prosecutions in Oklahoma and was involved in a Federal Prosecution. To date, he has never lost an Arson Case. Steve has authored and co-authored several fire training manuals and written “A Critical Analysis of NFPA 921 User’s Manual 2nd Edition”. Steve lectures nationally to Local, State, Federal Agencies, Insurance Companies, Private, and Military Investigators, Prosecutors, Vehicle Manufacture Representatives and their Engineers. Steve is on the Board of Directors for the National Association of Fire Investigators.



National Fire/Arson Investigation
Training Institute
700 N. Carr Rd., #595
Plainfield, IN 46168

Phone: 317-386-8325
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www.llrmi.com

December 9, 10 & 11, 2026 • Lansdale, Pennsylvania



TRAINING SEMINAR

Fire Pattern Recognition and Identification

December 9, 10 & 11, 2026
Lansdale, Pennsylvania

SPONSORED BY:

Lansdale Borough Fire Marshal’s Office
Lansdale, Pennsylvania

★ LLRMI Experienced Instructors ★
Make the Difference

Instructor

Steve Riggs, IAAI-CFI, CFEI, CVFI & CFII Certified
State of Oklahoma (Retired)

Register On-Line at: www.llrmi.com



National Fire Arson Investigation Training Institute
A Division of Legal and Liability Risk Management Institute

Steve Riggs, Director
www.llrmi.com

Seminar Agenda

Wednesday, December 9, 2026

8:00 – 8:30 am	Registration
8:30 – 10:00 am	Chemistry and Physics of Fire
10:00 am – 12:00 pm	Fingerprints of Fire
12:00 – 1:00 pm	Lunch (On Your Own)
1:00 – 4:30 pm	Fingerprints of Fire

Thursday, December 10, 2026

8:00 am – 12:00 pm	Fingerprints of Fire Pattern Recognition (Class Participation)
12:00 – 1:00 pm	Lunch (On Your Own)
1:00 – 4:30 pm	Fingerprints of Fire Pattern Recognition (Class Participation)

Friday, December 11, 2026

8:00 – 10:00 am	Fire Pattern Recognition (Class Participation)
10:00 am – 12:00 pm	Case Studies Pattern Recognition and Identification Group Testing
12:00 pm	Certificate Presentation

The Certified Fire and Explosion Investigator (C.F.E.I.) Examination
(National Association of Fire Investigators)

Certifications will be granted to those whose applications are accepted and pass the examination. Applications for membership must be completed on the NAFI Website at www.nafi.org. For additional information, call the NAFI office (877) 506-NAFI or visit the Website at www.nafi.org.

- Membership Requirement: You must be a member of NAFI to be eligible for certification.
- Membership fees: \$70 for one year.
- Certification fee: \$135 (separate from membership). * You must remain an active NAFI member to maintain your certification status.
- Application: Complete your membership and certification applications on the NAFI website: www.nafi.org.
- Download the CFEI application from the website, complete it before the class, and bring it to the class (do not mail it to NAFI).

Certification testing will be offered immediately following the first or second day of training.

Post-Test:

Practical exercises in pattern recognition and a post-test will be provided at the end of the seminar. Those who are C.F.I.’S C.F.E.I.’s or both, will receive 20 hours of continuing education for this seminar, toward re-certification or documentation for testing toward a national certification at a later date.

Note:

A Portion of This Class Involves Group Activities. Involving Fire Pattern Identification and Recognition. This will be a Certification Course on Pattern Recognition and Identification. Students are encouraged to bring a copy of N.F.P.A. 921 “Guide for Fire and Explosion Investigations” with you to class, if you have a copy available.

3 Ways to Register

Register Online at www.llrmi.com

Fax Form to: 317-386-8228

Mail Form to: Legal and Liability Risk Management
700 N. Carr Rd., #595
Plainfield, Indiana 46168
Federal ID: 81-0692135



If you have any questions please call: 317-386-8325

❖PREPAYMENT IS NOT REQUIRED TO REGISTER❖

Upon receiving your registration we will send an Invoice to your department or agency. Checks, claim forms, purchase orders should be made payable to LLRMI.

Seminar Title:	Fire Pattern Recognition and Identification
Seminar ID:	#17387
Dates:	December 9, 10 & 11, 2026
Registration Time:	December 9, 2026, 8am
Instructor:	Steve Riggs
Seminar Location:	Lansdale Borough Fire Marshal’s Office 1 Vine Street Lansdale, Pennsylvania 19446
Hotel Reservations:	Homewood Suites by Hilton Lansdale 1200 Pennbrook Parkway Lansdale, Pennsylvania 19446 1-215-362-6400 State Gov’t Rate
Group Code:	State Gov’t Rate - Must show State Gov’t ID at check in to receive rate
Registration Fee:	\$350.00 Includes Fire Pattern Recognition and Identification, Printed Training Manual and Certificate of Completion



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