



## Curriculum Vitae (CV)

**Lorne L. Brunner, MS-Forensics, IAAI-CFI(v)**  
13033 Ridgedale Dr. #133 | Minnetonka, MN 55305  
Mobile: 651-300-3451 | [Lorne@fire-pi.com](mailto:Lorne@fire-pi.com)  
[www.fire-pi.com](http://www.fire-pi.com)



Lorne Brunner is a Certified Fire Investigator through the International Association of Arson Investigators (IAAI) and National Association of Fire Investigators (NAFI), with 18-plus years of experience conducting forensic fire and explosion origin and cause investigations, and liability/subrogation identification. He is Founder and Principal of Fire-pi, Inc., Minnesota's only Veteran Owned Small Business, certified by the Veteran's Administration.

Lorne served 20 years in the US Navy; 12 as a Chief Petty Officer. He has testified as an expert in fire and explosion investigation in state courts. Lorne's experience includes large/complex loss management and investigations that have involved long duration deployments and team responses. Lorne's fire/explosion investigations include petrol-chemical refinery, ethanol refinery, gun range, warehousing, multi-residential complexes, large retail centers, Ag and heavy equipment, dwellings, vehicles, and multiple fatality incidents. He is experienced in providing opinions and assistance on fire litigation, including witness interviews, report review, photograph analysis and evidence. He has conducted live burns of motor vehicles, products, and structures, and burning dirt, as well as teaching continuing education seminars for the insurance industry. Lorne was the recipient of the 2012 International Association of Arson Investigators (IAAI) - ND Chapter Distinguished Service Award.

### Highlights of Major Lead Investigations

- 2023 St. Paul, MN, successful liability defense (fatal).
- 2022, Hibbing, MN, successful product defect defense \$2.5 million.
- 2020, Marshall, MN, double-fatal farm dwelling explosion resulting in more than \$5 million in successful subrogation.
- 2019 Cameroon, Africa, \$600 million explosion destroyed the SONARA petrochemical refinery; led an international team of forensic investigators that identified the cause.
- 2015, Fargo, ND, double-fatal apartment complex fire caused more than \$5 million in damages, investigating the claim, collecting artifacts, and providing deposition testimony.
- 2012 - \$2 million-plus bar/grill fire in South Dakota: Served as lead, forensic investigator and provided testimony in deposition and trial settings.

### Professional Experience

#### Fire-pi, Inc., October 2019 – Present – Owner/Founder

- Responsible for timely investigation of forensic fire and explosion events including Origin and Cause determination.

#### Envista Forensics / EFI Global, Inc., / Lomprey-Brunner Investigations / Unified Investigations, 2005 – 2019, Forensic Fire & Explosion Investigator

- Responsible for timely investigation of fire and explosion events including origin and cause determination.

## **Education**

- Eastern Kentucky University: Post-graduate study in Fire Protection, 2016-2017.
- National University, 1996, Master of Science, Forensics.

## **Certifications**

- Certified Fire/Explosion (vehicle credential) Investigator (CFI-v) #16-100331: International Association of Arson Investigators (IAAI) attached with Pro Board Accreditation #1254554.
- Certified Evidence Collection Technician (ECT) #255: International Association of Arson Investigators (IAAI).
- Certified Fire/Explosion Investigator and Instructor (CFEI-i) #11968-6967i: National Association of Fire Investigators (NAFI).
- Certified International Fire/Explosion Investigator (CIFI): NAFI

## **Licenses**

- State of Minnesota Private Detective #PDC-2151.
- State of Wisconsin Private Detective #12677-63.
- State of Iowa Private Detective #133633.
- State of Illinois Private Detective #115-002780.
- States of North Dakota Private Detective #602.
- South Dakota, contact AHJ.

## **Professional Organizations**

- International Association of Arson Investigators (IAAI).
- International Fire Investigation Research Institute (IFIRI).
- National Association of Fire Investigators (NAFI).
- Minnesota Association of Private Investigators (MAPI).

## **Guest Lecturer | Instructor**

- See attached guest lecturer /instructor matrix.

## **Publications**

- See attached publications matrix.

## **Training Courses Taken**

- See attached 1033 matrix.

## **Expert Testimony**

- See attached Expert Testimony matrix.

## **Awards | Achievements | Military Service**

- Distinguished Service Award (2014) - ND-IAAI Chapter
- *Burn to Learn Training* for small to large cities.
- U.S. Navy service as a Chief Petty Officer and Electronic Warfare Cryptologist, 1979-1999.
- Awarded the Navy and Marine Corps Commendation medal for meritorious service.
- Awarded the Navy & Marine Corps Achievement Medal for exceptional achievement with a gold star (second award).

## Guest Lecturer / Instructor

November 2010, South Dakota Claims Association, Arson – Red Flags

November 2011, Western Dakota Claims Association, Arson – Red Flags

November 2012, North Dakota Claims Association, Why Hire Fire Investigation Experts?

November 2012, Western Dakota Claims Association, Why Hire Experts?

December 2012, Colorado Technical University, Tort Law and Fires

September 2013, Grand Forks Claims Association, Missed Subrogation Opportunities

March 2014, Grand Forks Claims Association, Why Fire Investigators Use the Scientific Method

April 2015, Fargo-Moorhead Claims Association, Fire Investigation and Cause Analysis

September 2015, IAAI – ND Chapter, Expert Witness Testimony Course

May 2016, Grand Forks Claims Association, Subrogation, and the Fire Investigator

September 2016, International Association of Arson Investigators (IAAI) – North Dakota Chapter Annual Training Conference, Evidence Collection Course

December 2016, Auto Owners Annual Insurance, Subrogation and Vehicle / Ag Fire Investigations

February 2017, Auto Owners Quarterly Insurance, Subrogation and Vehicle / Ag Fire

February 2019, Fox Valley Adjusters Association, Vehicle Fire's for the Adjuster

January 2020, Minnesota Reliability Consortium (MRC), Scientific Method capable of withstanding cross examinations in court

August 2022, Criminal Justice Institute, Forensic Sciences and Fire Investigation

April 2024, Western National SIU, Vehicle Fire and Fraud

Origin • Cause • Subrogation • Liability



Origin • Cause • Subrogation • Liability

## Publications

June 2010 to Present, Founder / Publisher of LinkedIn Fire and Explosion Blog

October 2011, "Forensics and Fire Investigations", MT-IAAI Quarterly Newsletter

October 2011, "Forensics and Fire Investigations", ND-IAAI Quarterly Newsletter

April 2012, "How Technology Can Be Used at a Fire Scene", ND-IAAI Quarterly Newsletter

October 2013, "The Tomes", ND-IAAI Quarterly Newsletter

December 2013, "The Dance of the Public, Private and the Tomes", North Dakota Fire Chief

December 2014, "The Journey of the Tomes and the Dance", North Dakota Fire Chief (Vol. 21, No. 112)

April 2016, "Fire Investigation and Documenting the Scene", North Dakota Fire Chief

July 2016, "Fire Chemistry Basics", ND-IAAI Quarterly Newsletter

January 2017, "Hydrocarbon Chemistry", ND-IAAI Quarterly Newsletter



Origin • Cause • Subrogation • Liability













	CFITrainer.net (IAAI) Fire Chemistry	4									
	CFITrainer.net (IAAI) Postflashover Fires (Refresher)		4								
	CFITrainer.net (IAAI) The Deposition Part I: Format, Content, and Preparation (Refresher)							3			
	CFITrainer.net (IAAI) Fire Investigator Scene Safety (Refresher)										
	CFITrainer.net (IAAI) DNA (Refresher)							3			
	CFITrainer.net (IAAI) Introduction to Evidence							4			
	2018 HAZWOPER Refresher										
2019	CFITrainer.net (IAAI) Discovery in Civil Cases							3			
	CFITrainer.net (IAAI) Digital Photography and the Fire Invest							3			
	CFITrainer.net (IAAI) Accidental Common Causes							3			
	CFITrainer.net (IAAI) Critical Evaluation and Testing of Common Reported Accidental Causes							3			
	CFITrainer.net (IAAI) Principles of Fire Investigation and Multi-Program Concentration							3			
	MN-IAAI Vehicle Fire Class										
	CFITrainer.net (IAAI) Fire Flow Analysis						3				
	CFITrainer.net (IAAI) FI for Fire Officers and Multi-Program Concentration if MV Fires										
	2019 HAZWOPER Refresher										
	CFITrainer.net (IAAI) Knowledge 1 Motor Vehicle Fires Tier1										
	CFITrainer.net (IAAI) Using Resources to Validate Hypothesis (Refresh)							3			
	CFITrainer.net (IAAI) Motor Vehicle Fires (Refresh)										
	CFITrainer.net (IAAI) Motor Vehicles: Engine, ignition, Electrical and Fuel Systems										
	CFITrainer.net (IAAI) Accreditation, Certification and Certificates							1			
	CFITrainer.net (IAAI) Arc Mapping Basics (Refresh)										
	CFITrainer.net (IAAI) Basic Electricity (Refresh)										
	CFITrainer.net (IAAI) Value of IAAI Membership							1			
	CFITrainer.net (IAAI) Investigating Motor Vehicle Fires (Refresher)										
	WI IAAI 2019 Spring Seminar			1	1	1	1	2	1	1	2
	MN-IAAI ATC			2	1	1	1	1	1	1	
	CFITrainer.net (IAAI) Charting Your Career Path In Fire Inv.								2		
	CFITrainer.net (IAAI) Understanding Fire Through the Candle Experiments (Refresher)			3							
	CFITrainer.net (IAAI) 2019 HAZWOPER Refresher										
2020	CFITrainer.net (IAAI) Fire Flow Analysis (Refresh)							3			
	CFITrainer.net (IAAI) Documenting the Event (Refresh)										3
	CFITrainer.net (IAAI) Process of Elimination (Refresh)								3		

Hazwoper Refresh 8-hr		
CFITrainer.net (IAAI) Arc Mapping Basics (Refresh)		
CFITrainer.net (IAAI) Electrical Safety (Refresh)		
CFITrainer.net (IAAI) Basic Electricity (Refresh)		
CFITrainer.net (IAAI) Residential Electrical Systems (Refresh)		
CFITrainer.net (IAAI) Fundamentals of Interviewing (Refresh)		3
CFITrainer.net (IAAI) Fire Scene Safety (Refresh)		
CFITrainer.net (IAAI) Scientific Method (Refresh)		3
MN Certified Private Detective Seminar		3
CFITrainer.net (IAAI) Fire Chemistry	3	
CFITrainer.net (IAAI) Ethics and Fire Investigation (Refresh)		3
Dane County Arson Response Initiative, Inc. (DCARI) - Id damage to Electrical Conductors		3
CFITrainer.net (IAAI) Practical Application NFPA 1033/921 (Refresh)		1
CFITrainer.net (IAAI) Introduction To Appliances		
CFITrainer.net (IAAI) NFPA 1033 and Career (Refresh)		1
2021 2021 HAZWOPER Refresher		
CFITrainer.net (IAAI) Value of IAAI Membership (Refresh)		1
CFITrainer.net (IAAI) Accreditation, Certification and Certificates		1
CFITrainer.net (IAAI) Charting Your Career Path In Fire Inv. (Refresh)		1
CFITrainer.net (IAAI) Critical Evaluation/Testing Common Reported Acc. Causes (Refresh)		3
Illinois Private Detective Training		20
CFITrainer.net (IAAI) Charleston Sofa Super Store Fire (Refresh)	4	
CFITrainer.net (IAAI) Station Nightclub Fire Analysis (Refresh)	4	
CFITrainer.net (IAAI) Arc Mapping Basics (Refresh)		
CFITrainer.net (IAAI) Basic Electricity (Refresh)		
CFITrainer.net (IAAI) Electrical Safety (Refresh)		
CFITrainer.net (IAAI) Residential Electrical Systems (Refresh)		
CFITrainer.net (IAAI) Fire Chemistry	3	
CFITrainer.net (IAAI) Alternative Fuel Vehicles		
CFITrainer.net (IAAI) Electric & Hybrid Vehicle Design Basics		
CFITrainer.net (IAAI) Electric & Hybrid Vehicle Fires		
CFITrainer.net (IAAI) Motor Vehicles: Engine, ignition, Electrical and Fuel Systems (Refresher)		
CFITrainer.net (IAAI) Investigating Motor Vehicle Fires (Refresher)		

	CFITrainer.net (IAAI) Scientific Method (Refresh)		3	
2022	CFITrainer.net (IAAI) EmergingTechnologies in FI			3
	CFITrainer.net (IAAI) LithiumIonBatteryFires		1	
	2021 HAZWOPER Refresher			
	Learning Shop Arson Investigation CLTR001150			6
	CFITrainer.net (IAAI) Fire Dynamis and Modeling (Refresh)	4		
	CFITrainer.net (IAAI) Fundamentals of Interviewing (Refresh)			4
	CFITrainer.net (IAAI) Explosion Dynamics (Refresh)	4		
	CFITrainer.net (IAAI) Ethics and Social Media (Refresh)			3
	CFI-Trainer.net (IAAI) Investigating Natural Gas Systems (Refresh)			
	CFITrainer.net (IAAI) Fundamentals of Residential Building Construction (Refresh)			
	CFITrainer.net (IAAI) Understanding Undetermined (Refresh)			3
	CFITrainer.net (IAAI) Fire Protection Systems (Refresh)			
	MN-IAAI Building Construction for the Fire Investigator			
2023	MN-IAAI Origin Determination Relationship btn Fire Dynamics, Fire Effects and Patterns	5		
	CFITrainer.net (IAAI) Documenting the Event (Refresh)			3
	CFITrainer.net (IAAI) Introduction to Evidence (Refresh)			4
	CFITrainer.net (IAAI) Thermometry, Heat, and Heat Transfer (Refresh)	3		
	CFITrainer.net (IAAI) Writing the initial Origin and Cause Report (Refresh)			3
	CFITrainer.net (IAAI) Using Resources to Validate Hypothesis (Refresh)			3
	CFITrainer.net (IAAI) Insurance Professional Need to Know About FI (Refresh)			3
	CFITrainer.net (IAAI) Wildland Fire Investigation (Refresh)			5
	CFITrainer.net (IAAI) Practical Application NFPA 1033/921 (Refresh)			2
	CFITrainer.net (IAAI) Understanding Undetermined (Refresh)			3
	CFITrainer.net (IAAI) Physical Evidence at the Fire Scene (Refresh)			4
	CFITrainer.net (IAAI) Arc Mapping Basics (Refresh)			
	CFITrainer.net (IAAI) Site Safety Assessment			
	CFITrainer.net (IAAI) Scientific Method (Refresh)			3
	CFITrainer.net (IAAI) Search Seizure (Refresh)			4
	CFITrainer.net (IAAI) Preventing Occupational Exposures to Carcinogens at the Fire Scene			
	CFITrainer.net (IAAI) Understanding Fire Through the Candle Experiments (Refresher)	3		
	CFITrainer.net (IAAI) Accreditation, Certification and Certificates			1
	CFITrainer.net (IAAI) Fire Chemistry	3		

Private Detective CTTA303, CTTA 304	6	
CFITrainer.net (IAAI) PPE for Post Fire Scenes		
CFITrainer.net (IAAI) Alternative Fuel Vehicles		
CFITrainer.net (IAAI) Critical Evaluation/Testing Common Reported Acc. Causes (Refresh)	3	
2024 CFITrainer.net (IAAI) Digital Photography and the Fire Invest (Refresh)	3	
CFITrainer.net (IAAI) Critical Evaluation and Testing of Common Reported Accidental Causes (Refresh)	3	
CFITrainer.net (IAAI) Discovery in Civil Cases (Refresh)	3	
CFITrainer.net (IAAI) Documenting the Event (Refresh)		3
CFITrainer.net (IAAI) Electric & Hybrid Vehicle Design Basics (Refresh)		
CFITrainer.net (IAAI) Electric & Hybrid Vehicle Fires (Refresh)		
CFITrainer.net (IAAI) Donning and Doffing Personal Protective Equipment		
CFITrainer.net (IAAI) Basic Electricity (Refresh)		
CFITrainer.net (IAAI) Emerging Technologies in FI (Refresh)		3
CFITrainer.net (IAAI) Ethics and Social Media (Refresh)	3	
CFITrainer.net (IAAI) Ethics and Fire Investigation (Refresh)	3	
CFITrainer.net (IAAI) Ethical Duties Beyond Fire Scene (Refresh)	3	



1 1 1 1 2 2 1 1 20  
1

1 1 1 1 2 1 1 1 1 20

1 1 1 1 1 1 1 1 1 20

2 1 1 1 1 1 1 20

3

4  
4  
4  
2  
20  
20  
3  
5  
3  
20  
5  
3  
4  
4  
4  
4  
4  
4  
20  
2  
4  
4  
20  
2  
2  
1  
4  
2  
2  
2  
3  
3  
2



2	2	2	2	2	4	2	2	2	40
	2	2							4
2	2			2	2	2	2	2	20
				1	1	1	1	1	20
1	2	1	1	2	1	1	2	1	20
								20	20
3	2	2	2	2	2	2	2	2	40
		8							3
			2						8
									2
									3
									1
1	1	1	1	1	1	1	1	2	20
		8							8
						4			4
2	2	2	2	2	4	4	2	4	40
									2
									4
									3
									3
									1
									1
1	2	1	1	1	1	1	1	1	20
									16
									2
2	2	2	2	3	3	2	2	2	40
									4
									3
									16
1	1	1	1	1	1	1	1	1	20
						3			3
									3
		8							8

1 1 1 1 2 1 1 1 1

1

1

1

1

2

1

1

1

1

1

4

3

3

3

3

3

8

5  
1  
3  
3  
3  
3  
4  
24  
20  
1  
4  
3  
3  
3  
4  
4  
4  
4  
4  
4  
3  
3  
5  
3  
3  
3  
4  
2  
3  
3  
3  
2  
4  
4  
4  
3  
8  
3  
2  
4  
4







8

3

3

4

3

4

3

3

3

3

3

3

1

8

6

4

3

4

3

3

3

3

3

4

5

3

4

3

3

3

3

5

2

3

4

4

3

3

4

3

3

1

3

3

3

4

3

3

3

6

3

3

3

3

3

3

3

3

3

3

4

3

3

3

3

## Expert Testimony

Date	Type of Testimony	Case	Plaintiff / Defendant	Case Number	District/City/State
12-28-12	Depo	State of SD v. Charles Johnson	Plaintiff	CRI 12-15	First Judicial Ct. of Bon Homme, SD
6-18-13	Trial	State of SD v. Charles Johnson	Plaintiff	CRI 12-15	First Judicial Ct. of Bon Homme, SD
7-1-15	Depo	Page Meadows, LLC and VLN 2014, LLP v. Thomas Olsen	Defendant	09-2014-CV-01552	District Ct. County of Cass, ND
11-23-16	Depo	Jack Mutnick v. State Farm Ins.	Plaintiff	15-2476 (DWF/FLN)	US Dist. Ct. of MN
3-20-18	Depo	Derek Depauw v. State Farm Ins.	Defendant	40-2016-CV-00141	Dist. Ct. County of Rolette, ND
4-19-21	Depo	American Family Ins. Co. - Thomas Patton v. Stanley Black & Decker, Inc.	Plaintiff	02-CV-19-5278	MN, County of Anoka, Dist. Ct. Tenth Judicial District
6-1-21	Depo	State Farm - John Tolkinen v. Liberty Mutual - Spectrum Brands (Tetra United Pet Group)	Defendant	20-1816	MN, County of Hennepin
8-01-23	Trial	State v. Ellis Houk	Defendant	22-224, SWCR005247-22	Dist Ct of Taylor County, IA

Origin • Cause • Subrogation • Liability