



## **CURRICULUM VITAE**

### **MATTHEW J. WILKE**

#### **IAAI-CFI®**

Mr. Wilke's background consists of education/technical training and over 25 years of professional fire service experience.

Mr. Wilke continues to work for a municipal fire department in the capacity of a Fire Captain since 2001. Fire department duties Mr. Wilke is responsible for include fire suppression, EMS responses, conducting daily training, code enforcement (commercial fire inspections) and fire investigations. He is responsible for conducting quarterly fire investigation training for the fire department. He has been involved in over 100 investigations including investigating, report writing or technical review of fire losses.

Mr. Wilke began his employment with Fire Cause Analysis in 2013 as a fire investigator. He has conducted over 250 fire investigations including vehicle, single family homes and commercial fires. Mr. Wilke is an expert in the fire and explosion investigation process, including managing and the collection and preservation of evidence.

Mr. Wilke has been a member of the North Dakota Chapter - International Association of Arson Investigators since 2001, and a member of the International Association of Arson Investigators since 2002. He has successfully challenged the International Association of Arson Investigators examination achieving the Certified Fire Investigator (CFI) credential in 2009 and has successfully renewed it to maintain the certification.

Mr. Wilke has his Private Detective Licenses in Minnesota and Montana. He is Firefighter 1 and Firefighter 2 certified through the North Dakota State Fire Association. He is a Registered Emergency Medical Technician.

In 1989 Mr. Wilke graduated with a BA in Communications from the University of Mary.

**FIRE INVESTIGATION - FORENSICS - FIRE SCIENCE & ENGINEERING**

**ANSWERS FROM ASHES™**

***Serving Clients Nationwide***

**Offices:** Arizona, California, Idaho, Minnesota, Nevada, North Dakota, Oregon, South Dakota, Washington

**Corporate Office**  
935 Pardee St  
Berkeley, CA 94710  
800.726.5939  
**[www.fcafire.com](http://www.fcafire.com)**

## **Professional Experience**

Fire Cause Analysis, Berkeley, CA

### **Fire Investigator**

November 2013 - present

Conducts fire and explosion investigations to determine the origin and cause.

Bismarck Fire Department, Bismarck, ND

### **Captain - Fire Investigation Training**

2008 - present

Prepares and conducts quarterly training for the department's investigation team. Conducts fire and explosion investigations. Moderates case studies within the department.

### **Captain**

2001 - present

Completes and directs Fire Safety Inspections for a fire department company. Conducts fire investigations assigned to our shift, including scene examination and report writing to determine origin and cause.

### **Investigation Team**

2000 - present

Fire investigator responsible for conducting fire and explosion investigations to determine origin and cause

### **Firefighter**

1996 - 2001

## **Education**

Communications, BA, University of Mary, Bismarck, ND

1989

## **Professional Designations and Certifications**

**Certified Fire Investigator** – International Association of Arson Investigators

# 64-071602

07/16/2009

## **Professional Licenses**

State of Minnesota Private Detective License # 1059

State of Montana Private Detective License #PSP-PI-LIC-22506

## **Professional Associations**

International Association Arson Investigators

2002 - present

North Dakota Chapter - International Association Arson Investigators

2001 - present

**[matt.wilke@fcfire.com](mailto:matt.wilke@fcfire.com)**

**701.226.7501**

**PO Box 303, Bismarck, ND 58502-0303**

***M Wilke CV 2/2023***

## **Teaching Experience**

- 01/15/19 North Dakota Chapter - International Association of Arson Investigators Quarterly Training, *Testing your Hypothesis*
- 05/07/19 North Dakota State Claims Seminar, *Spoliation & the Clams Adjuster*
- 05/07/19 North Dakota State Claims Seminar, *Fire & Explosion Invest that Sizzle*
- 03/06/19 Upper Red River Valley Claim Association Monthly Training, *Fireproofing Your Case*
- 09/20/17 North Dakota Chapter - International Association of Arson Investigators Annual Training Conference, *Application and Use of NFPA 921*, 4 hours
- 09/11/15 North Dakota Chapter - International Association of Arson Investigators Fire Dynamics, 8 hours
- 10/07/14 Fire Cause Analysis and Western Dakota Claim Association, *Live Training Burn* workshop with live burn & discussion on fire development, fire patterns and determining the cause
- 2008 to present Responsible for setting up and conducting quarterly training for the Bismarck Fire Department investigation team.

## **Publications**

- 07/2011 North Dakota Chapter - International Association of Arson Investigators, *Incendiary News* - 'You Make the Call, a Case Study'

## **Deposition and Trial Testimony**

Ace American Insurance Company vs Ferrellgas, Inc. and Ferrellgas, LP - Deposition

- 51-2021-CV-386 consolidated with 51-2021-CV-177
- January 12, 2023

National Surety Corp vs Black & Decker (U.S.) Inc. - Deposition

- 1:20-cv-00083
- June 30, 2021

Sentry Select Insurance Company vs Norcold, Inc. - Deposition

- 08-2020-CV-1921
- July 12, 2021

State of North Dakota vs Josh Schmidt

- Morton County District Court

**[matt.wilke@fcfire.com](mailto:matt.wilke@fcfire.com)**

**701.226.7501**

**PO Box 303, Bismarck, ND 58502-0303**

**M Wilke CV 2/2023**

- 30-2019-CR-854
- Filed 8/22/19 - Testified 6/22/21

State of ND vs Nicolas Yellowbird

- 08-2018-639
- March 26, 2019
- Filed: Endangerment by Fire
- Guilty plea: Endangerment by Fire
- Origin and cause investigation

State of ND vs Quang Son

- 09-2016-CR-3417
- November 13, 2018
- Filed: Arson and Insurance Fraud
- Conviction: Arson and Insurance Fraud
- Origin and cause investigation

State of ND vs Gregory Leingang

- 08-2017-CR-2776
- April 24, 2018
- Filed: Two counts of Arson
- Guilty plea: Two counts of Arson
- Origin and cause investigation

State of ND vs Darren Weber

- 08-2017-CR-3825
- January 16, 2018
- Filed: Endangerment by Fire
- Guilty plea: Endangerment by Fire
- Origin and cause investigation

State of ND vs Tanner Wold

- 08-2017-CR-414
- April 17, 2017

- Filed: Endangerment by Fire
- Guilty plea: Endangerment by Fire
- Origin and cause investigation

USA vs Anthony DeGroot

- ND US Federal Court
- 1:14-cr-00191
- February 15, 2015
- Testified as a fire origin and cause forensic expert

State of ND vs James West

- 08-09-K-2120
- December 21, 2009
- Filed: Endangerment by Fire
- Guilty plea: Endangerment by Fire
- Origin and cause investigation

State of ND vs Lawrence Bailey

- 08-07-K-00770
- June 18, 2009
- Filed: Criminal Mischief
- Guilty plea: Criminal Mischief
- Origin and cause investigation

**Professional Development**

[H = Hours; TH = Tested Hours]

**Bureau of Alcohol, Tobacco, Firearms and Explosives:**

12/2016    Advanced Origin & Cause/Courtroom Testimony                                 76 TH

**North Dakota Chapter – International Association of Arson Investigators**

01/23	Quarterly Training-Fatal Fire Investigations-Derek Hill ATF	2 TH
10/22	Quarterly Training - NFPA 1321 - Randy Watson	2 TH
2022	2022 Annual Training Conference: Scientific Protocols for Fire Investigation - 16 hrs; North Dakota State Crime Lab - 2 hrs; Round table - 2 hrs	20 TH
09/2022	Quarterly Training - Case Study - Maternal Filicide	2 TH
04/2022	Quarterly Training - Lithium-Ion ESS by Fire Safety Research Institute	1 TH

**[matt.wilke@fcfire.com](mailto:matt.wilke@fcfire.com)**  
**701.226.7501**  
**PO Box 303, Bismarck, ND 58502-0303**

*M Wilke CV 2/2023*

07/2021	Quarterly Training - Origin Fire Pattern Persistence-Chad Campanell, ATF2	TH
04/2021	Quarterly Training - Clandestine Labs - Chris Holte Fargo PD	2 TH
01/2021	Quarterly Training - Expert Report Writing, Bob Toth, Iris Investigations	2 TH
07/2020	Quarterly Training - Ignition Matrix, Jamie Garvey, Fargo Fire Dept	1 TH
10/2019	Quarterly Training - Fire Safer Cigarettes, ND State Fire Marshal's office	2 TH
07/2019	Quarterly Training - Scene Safety - ND-IAAI chapter training	1 TH
01/2019	Quarterly Training - Curriculum Vitae-Importance, How To & Advice	1 TH
2018	20th Annual Training Conference: Camera and Lighting Techniques for Fire Scenes; Strategic Social Media; Exploitation for Fire Investigations; Fire Origin Pattern Persistence; Electrical Failure Analysis - Arc Melting Identification/Portable Space Heaters	20 TH
2017	19th Annual Training Conference: 2017 921 Changes and Updates; Accelerant Detection Dog; Application and Use of NFPA 912; Explosion Dynamics	20 TH
07/2017	Quarterly Training - UL Listing, Jon Roberts	2 TH
2015	17th Annual Training Conference: Fire Behavior & Dynamics; Residential Gas & Electrical Systems; Crude by Rail Working Around Rail Cars	20 TH
07/2016	Quarterly Training - Fire Modeling	2 TH
2014	16th Annual Training Conference: Complex Arson Investigations; Effects of Multiple Ventilation Openings on Post-Flashover Compartment Fires; Fire Dynamics for Fire Investigators	20 TH
2012	14th Annual Training Conference: Documenting the Fire Scene; Conducting Interviews; Building Construction; Investigative Report Writing; Safety/Hazmat	20 TH
2011	13th Annual Training Conference: Progressive Burn Pattern Development in Post-Flashover Fires; Fire Dynamics above Floor Level; NFPA 921 & 1033; Forensic Evidence Labeling & Handling; Fire Debris Analysis	20 TH
2009	11th Annual Training Conference: Documenting the Scene; Report Writing; Case Studies; Appliance Fires; Interviewing	20 TH
2008	10th Annual Training Conference: Basic Fire Investigation Techniques - Live-Burn & Fire Scene Scenario Investigations	20 TH
2007	9th Annual Training Conference: Courtroom Testimony	20 TH
2006	8th Annual Training Conference: Vehicle Fire Investigative Techniques with Live Burns	20 TH

2003	5 <sup>th</sup> Annual Training Conference: Legal Aspects of Fire Investigations; Determining Origin & Cause; Fatal Fire Investigations; Structure Fire Investigations; Live Burn Cells	20 TH
2001	3 <sup>rd</sup> Annual Training Conference: Fire Investigation Techniques	20 TH

### **International Association of Arson Investigators**

09/2007 *Expert Witness -Courtroom Testimony* Course

#### **CFI Trainer.net**

05/2022	Electric & Hybrid Vehicle Design Basics	3 TH
05/2022	Electric & Hybrid Vehicle Fires	3 TH
05/2022	NFPA 1033 and Your Career	2 TH
11/2021	Charting Your Career Path in Fire Investigation	3 TH
11/2021	Fundamentals of Interviewing	4 TH
11/2021	Fire Investigation for Fire Officers	3 TH
11/2021	Fire Flow Analysis	3 TH
09/2021	What Happens with loss goes to court - Chris Konselmann	1 TH
11/2006	Analysis of Station Nightclub Fire	4 TH
09/2010	Arc Mapping Basics	4 TH
03/2014	Basic Electricity	4 TH
05/2011	Charleston Sofa Super Store Fire	4 TH
09/2019	Critical Evaluation and Testing of Commonly Reported Accidental Causes	3 TH
02/2013	Critical Thinking Solves Cases	4 TH
12/2009	Digital Photography & the Fire Investigator	4 TH
10/2017	DNA	3 TH
12/2009	Documenting the Event	4 TH
06/2016	Effective Investigation & Testimony	3 TH
11/2010	Electrical Safety	3 TH
12/2019	Ethical Duties Beyond the Fire Scene	3 TH
11/2013	Ethics and the Fire Investigator	3 TH
02/2018	Ethics & Social Media	3 TH
09/2017	Evidence Examination: What Happens at the Lab?	4 TH

12/2010	Explosion Dynamics	4 TH
07/2009	Fire & Explosion Investigations: Utilizing NFPA 1033 & 921	4 TH
12/2019	Fire Chemistry	3 TH
06/2006	Fire Investigator Scene Safety	3 TH
12/2014	Fundamentals of Residential Building Construction	3 TH
02/2011	How First Responders Impact the Fire Investigation	2 TH
02/2012	Insurance and the Fire Investigation	4 TH
11/2007	Introduction to Evidence	4 TH
11/2006	Introduction to Fire Dynamics and Modeling	4 TH
07/2008	Introduction to Fatal Fires	4 TH
02/2007	Investigating Motor Vehicle Fires	4 TH
02/2018	Investigating Natural Gas Systems	3 TH
02/2013	MagneTek: A Case Study in the Daubert Challenge	2 TH
09/2008	Managing Complex Fire Scene Investigations	4 TH
02/2010	Physical Evidence at the Fire Scene	4 TH
05/2015	Post Flashover Fires	4 TH
02/2018	Process of Elimination	3 TH
06/2015	Residential Electrical Systems	4 TH
20/2018	Residential Natural Gas Systems	3 TH
04/2012	Search & Seizure	4 TH
07/2015	The Deposition part 1: Format, Content, and Preparation	3 TH
07/2015	The Deposition part 2: Questioning Tactics and Effective Responses	3 TH
12/2012	The fire Investigator & the 2011 NFPA 921 Changes	4 TH
08/2008	The Impact of Ventilation in Building Structures on Fire Development	4 TH
07/2007	The Scientific Method for Fire & Explosion Investigation	3 TH
12/2019	Thermometry, Heat, and Heat Transfer	3 TH
01/2009	Understanding Fire Through the Candle Experiments	4 TH
12/2018	Understanding Undetermined	3 TH
01/2013	Using Resources to Validate your Hypothesis	2 TH
06/2009	Vacant and Abandoned Buildings; Hazards & Solutions	4 TH



06/2015	Writing the Initial Cause & Origin Report	3 TH
<b>Fire Cause Analysis, Inc.</b>		
07/2022	Fire Science & Fire Dynamics - California Conference of Arson Investigators Carmen & Associates Fire Investigation, Inc	4H
02/2021	Fire Cause Analysis - Evidence & Engineering	2.75 H
04/2017	FCA Training-NFPA updates; West Texas Explosion; Electric Field Notes	3 H
08//2014	FCA - NFPA 921 2014 Changes	2 H
02/2014	Basic Electricity and the Fire Scene by Hal Lyson and John White / FCA	1 H
<b>Dane County (WI) Arson Initiative, Inc.</b>		
02/2023	Lithium Ion Battery Fires-ATF EE Michael Abraham	1.5 TH
01/2023	NFPA 1321 Fire Investigation Units - DCI State FM William Boswell	1 TH
05/2022	The Fire Origin Matrix - ATF/SA Andy Cox	2 TH
02/2022	Internet of Things (IOT)	1.5 TH
11/2021	Arson Profiling/BAU - ATF Melissa Merola	1.5 TH
11/2021	Thomas Sweatt Case Study - ATF Fulkerson & Dep FM Luckett	3.5 TH
10/2021	Forensic Anthropology & Fire Investigations	1TH
03/2021	Digital Evidence	1.5TH
01/2021	Arson Profiling/Behavioral Analysis Unit	1.5TH
12/2020	Fire Patterns Post Flashover	2 TH
12/2020	Corrugated Stainless Steel Tubing	1.5 TH
11/2020	Fire Dynamics	1.5 TH
10/2020	Myths & Legends in Fire Service	1.5 TH
09/2020	Report Writing - Public Sector	1.5 TH
08/2020	Wildland Fire Investigations	1.5 TH
06/2020	Fire Investigation Report Writing	1 TH
05/2020	Timeline Analysis	1 TH
05/2020	Fire Alarm Control Panels	1 TH
05/2020	Receptacle Fires	1 TH
05/2020	Identifying Damage to Electrical Connectors	1 TH

**Underwriters Laboratories**

01/2021 Impact of Ventilation on Fire Patterns 1.25 TH

**Safety Unlimited, Inc.**

08/2022 Lead Awareness Training for General Industry 2 TH

08/2022 Asbestos Awareness Training 2 TH

08/2020 Lead Awareness Training for General Industry 2 TH

08/2020 Asbestos Awareness Training 2 TH

**Terracon**

08/2019 Lead Awareness 2 TH

08/2019 Asbestos Awareness 2 TH

**Argus Pacific, Inc**

09/2016 Asbestos Awareness & Lead Awareness 3 H

**Armstrong Forensic Laboratories, Inc.**

09/2011 Identifying the Source & Fire Debris Analysis – From the Laboratory to the Final Report 1 H

02/22/97 Arson Detection for the First Responder - National Fire Academy Course 2 H

**Bismarck Fire Department**

07/2022 Hazardous Materials Responder at the Awareness Level

07/2022 Hazardous Materials Responder at the Operations Level

**NFPA 1033**

Compliance with NFPA 1033 (2014) Chapter 1 – This chapter identifies the minimum job performance requirements for fire investigators. More specifically section 1.3.7 details what the fire investigator must maintain at a minimum and up-to-date basic knowledge of the following topics beyond a high school level. They fall into 16 categories and they may be maintained by attending formal education courses, workshops and seminars and/or through professional publications and journals. The categories are listed below and are supported by the applicable training that corresponds with each competency. This list is not all inclusive and will not reference all courses that may have provided instruction on a variety of NFPA 1033 related topics simultaneously.

## Fire Science

12/20/2020	Dane County Arson Initiative, Inc. (DCARI) - Corrugated Stainless-Steel Tubing	1.5 H
11/02/2020	DCARI -Fire Dynamics	1.5 H
10/08/2020	DCARI - Myths & Legends in Fire Service	1.5 H
02/01/2018	CFI - Investigating Natural Gas Systems	3 H
12/08/2016	Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) - Advanced Origin and Cause Courtroom Testimony (AOCCT) - Fire Chemistry/Fire Scene Forensics	1 H
12/05/2016	ATF-AOCCT - Fire Dynamics	1 H
09/16/2011	Armstrong Forensic Laboratories, Inc. (AFL) - Fire Debris Analysis	1 H
09/14/2011	North Dakota Chapter - International Association of Arson Investigators Annual Training Conference (ND IAAI-ATC) - Post flashover fires	8 H

## Fire Chemistry

09/12/2022	2022 Annual Training Conference: Scientific Protocols for Fire Investigation - 16 hrs; North Dakota State Crime Lab - 2 hrs; Round table - 2 hrs	20 TH
07/18/2022	California Conference of Arson Investigators - Fire Science & Fire Dynamics - Carmen & Associates	4H
10/08/2020	DCARI - Myths & Legends in Fire Service	1.5 H
12/31/2019	International Association of Arson Investigators CFITrainer.net (IAAI CFITrainer) - Fire Chemistry	3 H
02/01/2018	IAAI CFITrainer - Investigating Natural Gas Systems	3 TH
04/19/2017	ND-IAAI Quarterly Training - Butane Hash Oil Investigations	1 H
12/12/2016	ATF-AOCCT - Fatal Fire Investigations	1 H
12/08/2016	ATF-AOCCT - Fire Chemistry/Fire Scene Forensics	2 H
12/05/2016	ATF-AOCCT - Fire Dynamics	1 H
09/09/2015	ND-IAAI ATC - Fire Behavior & Fire Dynamics	2 H
05/07/2015	IAAI CFITrainer - Post Flashover Fires	1 TH
05/24/2010	IAAI CFITrainer - Physical Evidence	1 TH
01/23/2009	IAAI CFITrainer - Understanding Fire Through the Candle Experiments	2 TH
11/23/2006	IAAI CFITrainer - Station Nightclub Fire	1 TH

## **Thermodynamics**

09/12/2022	2022 Annual Training Conference: Scientific Protocols for Fire Investigation - 16 hrs; North Dakota State Crime Lab - 2 hrs; Round table - 2 hrs	20 TH
11/02/2020	DCARI -Fire Dynamics	1.5 H
12/05/2016	ATF-AOCCT - Fire Dynamics	1 H
09/09/2015	ND-IAAI ATC - Fire Behavior and Fire Dynamics	1 H
05/07/2015	IAAI CFITrainer - Post flashover fires	2 TH
05/08/2011	IAAI CFITrainer - Sofa Super Store Fire	1 TH
12/08/2010	IAAI CFITrainer - Explosion Dynamics	1 TH
08/30/2008	IAAI CFITrainer - Ventilation and Fire Investigation	2 TH
11/23/2006	IAAI CFITrainer - Station Nightclub Fire	1 TH

## **Thermometry**

11/02/20	DCARI - Fire Dynamics	1.5 H
12/15/19	IAAI CFITrainer - Thermometry, Heat, and Heat Transfer	3 H
09/10/15	ND-IAAI ATC - Residential Electrical and Gas Systems	1 H

## **Fire Dynamics**

02/11/2023	Lithium Ion Battery Fires-ATF EE Michael Abraham	1.5 TH
09/12/2022	2022 Annual Training Conference: Scientific Protocols for Fire Investigation - 16 hrs; North Dakota State Crime Lab - 2 hrs; Round table - 2 hrs	20 TH
07/18/2022	California Conference of Arson Investigators - Fire Science & Fire Dynamics - Carmen & Associates	4H
05/15/2022	The Fire Origin Matrix - ATF/SA Andy Cox	2 TH
04/24/2022	ND-IAAI Quarterly Training-Lithium-Ion ESS-FSI	1 TH
11/14/2021	Fire Flow Analysis	3 TH
08/03/2021	NDIAAI Quarterly Training - Origin Fire Pattern Persistence	2 TH
01/31/2021	UL - Impact of Ventilation on Fire Patterns	1.25 TH
01/31/2021	UL - Impact of Ventilation on Fire Patterns	1.25 H
12/28/2020	DCARI - Fire Patterns Post Flashover	2 H
12/20/2020	DCARI - Corrugated Stainless Steel Tubing	1.5 H
11/02/2020	DCARI -Fire Dynamics	1.5 H
09/21/2018	ND-IAAI ATC - Fire Origin Pattern Persistence	8 H

02/01/2018	IAAI CFITrainer - Investigating Natural Gas Systems	3 TH
12/05/2016	ATF-AOCCT - Fire Dynamics	7 H
10/15/2016	Fire & Arson Mag; Fire origin pattern persistence	1 H
09/09/2015	ND-IAAI ATC - Fire Behavior & Fire Dynamics	8 H
05/07/2015	IAAI CFITrainer - Post flashover fires	1 TH
10/07/2014	Fire Cause Analysis (FCA) - Live Fire Training	5 H
09/18/2014	ND-IAAI ATC - Fire Dynamics for Fire Investigators	4 H
09/14/2011	ND-IAAI ATC - Above floor level fires	4 H
05/08/2011	IAAI CFITrainer - Sofa Super Store Fire	2 TH
02/08/2010	IAAI CFITrainer - Explosion Dynamics	1 TH
05/24/2010	IAAI CFITrainer - Physical Evidence	2 TH
01/23/2009	IAAI CFITrainer - Fire thru Candle Experiments	2 TH
11/23/2006	IAAI CFITrainer - Intro to Fire Dynamics & Modeling	2 TH
11/23/2006	IAAI CFITrainer - Station Nightclub fire	1 TH
08/23/2006	ND-IAAI ATC - Vehicle Fires	20 H

### **Explosion Dynamics**

12/20/2020	DCARI - Corrugated Stainless Steel Tubing	1.5 H
02/01/2018	IAAI CFITrainer - Investigating Natural Gas Systems	3 TH
09/21/2017	ND-IAAI ATC - Explosion Dynamics Scott Davis	8 H
04/19/2017	ND-IAAI Quarterly training - Butane Hash Oil Investigations	1 H
04/04/2017	FCA - West Texas Explosion	1 H
12/12/2016	ATF-AOCCT - Fuel Air Explosions with Demo	3 H
02/08/2010	IAAI CFITrainer - Explosion Dynamics	2 TH
07/05/2009	IAAI CFITrainer - Fire and Explosion; utilizing NFPA 921 and NFPA 1033	2 TH

### **Computer Fire Modeling**

11/02/2020	DCARI - Fire Dynamics	1.5 H
09/20/2018	ND-IAAI ATC - Fire Origin Pattern Persistence	8 H
12/12/2016	ATF-AOCCT - Fuel Air Explosions with Demo	1 H
07/20/2016	ND-IAAI Quarterly Training - Fire Modeling 2016	2 H
11/23/2006	IAAI CFITrainer - Intro to Fire Dynamics & Modeling	2 TH
11/23/2006	IAAI CFITrainer - Station Nightclub fire	1 TH

## Fire Investigation

12/28/2020	DCARI - Fire Patterns Post Flashover	2 H
12/20/2020	DCARI - Corrugated Stainless Steel Tubing	1.5 H
08/27/2020	DCARI - Wildland Fire Investigations	1.5 H
09/20/2018	ND-IAAI ATC - Fire Origin Pattern Persistence	8 H
02/01/2018	IAAI CFITrainer - Investigating Natural Gas Systems	3 TH
02/01/2018	IAAI CFITrainer - Ethics & Social Media	1 TH
09/20/2017	ND-IAAI ATC - NFPA 921 Application & Use	4 H
12/09/2016	ATF-AOCCT - Mock Trial	4 H
12/09/2016	ATF-AOCCT - Complex Scene Practical	2 H
12/06/2016	ATF-AOCCT - Complex Scene Walk Through/Demo	2 H
07/08/2016	IAAI CFITrainer - Effective Investigation & Testimony	3 TH
09/17/2014	ND-IAAI ATC - Complex Arson Investigation	3.5 H
08/25/2014	FCA - NFPA 921 (2014) Changes	2 H
11/24/2013	IAAI CFITrainer - Ethics & Fire investigator	3 TH
12/24/2012	IAAI CFITrainer - 2011 921 Changes	4 TH
09/19/2012	ND-IAAI ATC - Documenting scene	4 H
09/14/2011	ND-IAAI ATC - NFPA 921 and NFPA 1033 changes	4
05/08/2011	IAAI CFITrainer - Sofa Super Store Fire	1 TH
04/21/2011	IAAI CFITrainer - First Responder & Investigation	2 TH
08/19/2009	ND-IAAI ATC - Appliance fires	4 H
08/30/2008	IAAI CFITrainer - Ventilation & Fire Investigation	2 TH
08/20/2008	ND-IAAI ATC - Basic Fire Investigation	20 H
02/12/2007	IAAI CFITrainer - Motor Vehicle Fires	4 TH
08/27/2003	ND-IAAI ATC - Fire investigation	8 H
08/22/2001	ND-IAAI ATC - Fire investigation	8 H
02/20/2000	Fire Academy Course - Arson Detection for the 1 <sup>st</sup> Responder	4 H

## Fire Analysis

02/11/2023	Lithium Ion Battery Fires-ATF EE Michael Abraham	1.5 TH
01/18/2023	Quarterly Training-Fatal Fire Investigations-Derek Hill ATF	2 TH

09/13/2022	2022 Annual Training Conference: Scientific Protocols for Fire Investigation - 16 hrs; North Dakota State Crime Lab - 2 hrs; Round table - 2 hrs	20 TH
10/06/2021	DCARI-Forensic Anthropology & Fire Investigations Dr. Cristina Figueroa Soto	1TH
08/03/2021	NDIAAI Quarterly Training - Origin Fire Pattern Persistence	2 TH
01/31/2021	UL - Impact of Ventilation on Fire Patterns	1.25 H
10/08/2020	DCARI - Myths & Legends in Fire Service	1.5 H
07/15/2020	ND-IAAI Quarterly Training - Ignition Matrix	1 H
09/20/2018	ND-IAAI ATC - Fire Origin Pattern Persistence	8 H
12/09/2016	ATF-AOCCT - Review of Burns	1.5 H
12/09/2016	ATF-AOCCT - Prosecutor Relations	3 H
12/14/2016	ATF-AOCCT - Surviving the Defense Expert Challenge	1 H
12/13/2016	ATF-AOCCT - Facing the Defense Expert Challenge	4 H
12/13/2016	ATF-AOCCT - Current Case Law & NFPA 1033 and NFPA 921	4 H
12/09/2016	ATF-AOCCT - Complex Scene Practical	7 H
06/08/2016	IAAI CFITrainer - Effective Investigation & Testimony	3 TH
09/17/2014	ND-IAAI ATC - Effects of Multiple Ventilation Openings	4 H
02/18/2013	IAAI CFITrainer - Critical Thinking Solves Cases	2 TH
07/08/2008	IAAI CFITrainer - Fatal Fires	4 TH

**Fire Investigation Methodology**

02/11/2023	Lithium Ion Battery Fires-ATF EE Michael Abraham	1.5 TH
01/18/2023	Quarterly Training-Fatal Fire Investigations-Derek Hill ATF	2 TH
01/18/2023	NFPA 1321 Fire Investigation Units - DCI State FM William Boswell	1 TH
10/27/2022	Quarterly Training - NFPA 1321 - Randy Watson	2 TH
09/13/2022	2022 Annual Training Conference: Scientific Protocols for Fire Investigation - 16 hrs; North Dakota State Crime Lab - 2 hrs; Round table - 2 hrs	20 TH
09/08/2022	Quarterly Training - Case Study - Maternal Filicide	2 TH
05/24/2022	IAAI CFITrainer - NFPA 1033 and Your Career	2 TH
05/15/2022	The Fire Origin Matrix - ATF/SA Andy Cox	2 TH
11/18/2021	Arson Profiling/BAU - ATF Melissa Merola	1.5 TH
11/16/2021	IAAI CFITrainer - Fundamentals Of Interviewing	4 TH

11/16/2021	IAAI CFITrainer - Fire Investigation for Fire Officers	3 TH
11/14/2021	DCARI-Thomas Sweatt Case Study - ATF Fulkerson & Deputy FM Luckett	3.5 TH
08/03/2021	NDIAAI Quarterly Training - Origin Fire Pattern Persistence	2 TH
12/28/2020	DCARI - Fire Patterns Post Flashover	2 H
05/31/2020	Dane County Arson Response Initiative - Timeline Analysis	1 H
12/22/2018	IAAI CFITrainer - Understanding Undetermined	3 TH
09/20/2018	ND-IAAI ATC - Fire Origin Pattern Persistence	8 H
02/01/2018	IAAI CFITrainer - Ethics & Social Media	1 TH
09/19/2017	ND-IAAI ATC - NFPA 921 Changes	8 H
12/09/2016	ATF-AOCCT - Complex Scene Practical	1 H
02/18/2013	IAAI CFITrainer - Magnetek/Daubert	2 TH
01/18/2013	IAAI CFITrainer - Validating Hypothesis	2 TH
07/05/2009	IAAI CFITrainer - Fire & Explosion Investigations Utilizing NFPA 921 and NFPA 1033	2 TH
09/01/2008	IAAI CFITrainer - Complex Fire Scene	4 TH
07/20/2007	IAAI CFITrainer - Scientific Method	3 TH
08/27/2003	ND-IAAI ATC - Fire investigation	8 H
08/22/2001	ND-IAAI ATC - Fire investigation	8 H

### **Fire Investigation Technology**

02/21/2022	Internet of Things (IOT)	1.5 TH
03/18/2021	DCARI - Digital Evidence	1.5 H
02/23/2021	Fire Cause Analysis - Evidence & Engineering	2.75 H
10/21/2019	ND-IAAI Quarterly Training- Fire Safer Cigarettes	2 H
04/19/2018	ND-IAAI ATC - Strategic Social Media for Fire Invest	4 H
02/01/2018	IAAI CFITrainer - Investigating Natural Gas Systems	3 TH
10/16/2017	IAAI CFITrainer - DNA	3 TH
09/20/2017	ND-IAAI ATC - Accelerant Detection Dog presentation	4 H
07/19/2017	ND-IAAI Quarterly Training - UL Class	2 H
10/19/2016	ND-IAAI Quarterly Training - Accelerant K-9 course	2 H
09/17/2014	ND-IAAI ATC - Complex Arson Investigation	2 TH
02/20/2012	IAAI CFITrainer - Insurance & the Fire Investigator	4 TH



09/14/2011	ND-IAAI ATC – Forensic Evaluation of Lubricants	4 H
12/13/2009	IAAI CFITrainer - Digital photography	4 TH

**Failure Analysis and Analytical Tools**

01/26/2021	DCARI - Arson Profiling/Behavioral Analysis Unit	1.5 H
07/15/2020	ND-IAAI Quarterly Training - Ignition Matrix	1 H
12/31/2019	IAAI CFITrainer - Ethical Duties Beyond the Fire Scene	3 TH
09/21/2018	ND-IAAI ATC - Electrical Fire Investigation	4 H
12/12/2016	ATF-AOCCT - Fatal Fire Investigations	1 H
12/09/2016	ATF-AOCCT - Complex Scene Practical	1 H
03/19/2014	IAAI CFITrainer - Basic Electricity	1 TH
02/18/2013	IAAI CFITrainer - Critical Thinking Solves Cases	2 TH

**Fire Protection Systems**

05/24/2020	Dane Co. Arson Response Initiative - Fire Alarm Control Panels	1 H
12/12/216	ATF-AOCCT - Building Construction	2 H
12/06/2016	ATF-AOCCT - Fire Protection Systems	4 H
12/21/2014	IAAI CFITrainer - Residential Building Construction	3 TH
09/19/2012	ND-IAAI ATC - Building Construction	4 H
10/22/2004	International Fire Code transition from 1997 Uniform Fire Code	.6 H

**Evidence Documentation, Collection and Preservation**

02/11/2023	Lithium Ion Battery Fires-ATF EE Michael Abraham	1.5 TH
01/18/2023	Quarterly Training-Fatal Fire Investigations-Derek Hill ATF	2 TH
09/28/2021	IAAI, Inc-What Happens with loss goes to court-Chris Konzelmann	1TH
06/01/2021	IAAI, Inc-Giving Stronger Depo & Trial Testimony-Chris Konzelmann	2 TH
03/18/2021	DCARI - Digital Evidence	1.5 H
01/20/2021	ND-IAAI Quarterly Training - Expert Report Writing	2 H
12/28/2020	DCARI - Fire Patterns Post Flashover	2 H
09/23/2020	DCARI - Report Writing - Public Sector	1.5 H
08/27/2020	DCARI - Wildland Fire Investigations	1 H
06/08/2020	DCARI - Fire Investigation Report Writing	1 H
09/19/2018	ND-IAAI ATC - Camera & Lighting Techniques for Fire Scenes	4 H

02/01/2018	IAAI CFITrainer - Investigating Natural Gas Systems	3 TH
02/01/2018	IAAI CFITrainer - Ethics & Social Media	1 TH
09/17/2017	IAAI CFITrainer - Evidence Examination: What Happens at the Lab?	4 TH
12/09/2016	ATF-AOCCT - CV/Resume	1 H
12/09/2016	ATF-AOCCT - Complex Scene Practical	1 H
12/08/2016	ATF-AOCCT - Fire Chemistry/Fire Scene Forensics	1 H
12/06/2016	ATF-AOCCT - Report Writing	2 H
10/19/2016	ND-IAAI Chapter Training - Accelerant K-9	2 H
09/10/2015	ND-IAAI ATC - Residential Electrical & Gas Systems	4 H
09/19/2012	ND-IAAI ATC - Interviewing	4 H
09/19/2012	ND-IAAI ATC - Report Writing	4 H
04/16/2012	IAAI CFITrainer - Search & Seizure	4 TH
09/16/2011	Armstrong Forensic Laboratory, Inc - Identifying the source	1.5 H
05/24/2010	IAAI CFITrainer - Physical Evidence	1 TH
12/13/2009	IAAI CFITrainer - Documenting the Event	4 TH
08/19/2009	ND-IAAI ATC - Documenting the Scene	4 H
08/19/2009	ND-IAAI ATC - Report Writing	4 H
08/19/2009	ND-IAAI ATC - Evidence Collection	4 H
08/19/2009	ND-IAAI ATC - Interviewing	4 H
11/09/2007	IAAI CFITrainer - Introduction to Evidence	4 TH
08/22/2007	ND-IAAI & ATF - IAAI Courtroom Testimony	20 H

## **Fire Scene Safety**

### **(a) Hazard Recognition, evaluation and basic Mitigation procedures**

07/08/2022	ND Firemen's Assoc-Hazmat Operation & Awareness Certificate	2 TH
04/24/2022	ND-IAAI Quarterly Training-Lithium-Ion ESS-FSI	1 TH
04/21/2021	NDIAAI Chapter Training - Clandestine Labs - Chris Holte FPD	2 TH
08/27/2020	Safety Unlimited - Asbestos Awareness Training	1 H
08/11/2020	Safety Unlimited - Lead Awareness Training for General Industry	1 H
09/26/2016	Argus Pacific - Asbestos Awareness & Lead Awareness	1 H
09/17/2014	ND-IAAI ATC - Complex Arson Investigation	1 TH

09/19/2012	ND-IAAI ATC - Safety/Hazmat	4 TH
06/15/2009	IAAI CFITrainer - Vacant/Abandoned Buildings	4 TH
07/07/2006	IAAI CFITrainer - Scene Safety	3 TH

**(b) Hazardous Materials**

04/24/2022	ND-IAAI Quarterly Training-Lithium-Ion ESS-FSI	1 TH
04/21/2021	NDIAAI Chapter Training - Clandestine Labs - Chris Holte FPD	2 TH
08/27/2020	Safety Unlimited - Asbestos Awareness Training	1 H
08/11/2020	Safety Unlimited - Lead Awareness Training for General Industry	1 H
09/26/2016	Argus Pacific - Asbestos Awareness & Lead Awareness	1 H
09/17/2014	ND-IAAI ATC - Complex Arson Investigation	1 H
09/19/2012	ND-IAAI ATC - Safety/Hazmat	4 H
06/15/2009	IAAI CFITrainer - Vacant/Abandoned Buildings	4 TH
07/07/2006	IAAI CFITrainer - Scene Safety	3 TH

**(c) Safety Regulations**

03/31/2022	ND Firemen's Assoc-Hazmat Operation & Awareness Certificate	2 TH
11/22/2010	IAAI CFITrainer - Electrical Safety	3 TH

**Building systems**

**(a) Types of Construction**

12/12/2016	ATF-AOCCT - Building Construction	2 TH
12/21/2014	IAAI CFITrainer - Residential Building Construction	3 TH
09/19/2012	ND-IAAI ATC - Building Construction	4 TH

**(b) Fire Protection Systems**

05/24/2020	Dane Co. Arson Response Initiative - Fire Alarm Control Panels	1 TH
12/12/2016	ATF-AOCCT - Building Construction	2 TH
12/06/2016	ATF-AOCCT - Fire Protection Systems	4 TH
12/21/2014	IAAI CFITrainer - Residential Building Construction	3 TH
09/19/2012	ND-IAAI ATC - Building Construction	4 TH
10/22/2004	International Fire Code transition from 1997 Uniform Fire Code	0.6 H

### **(c) Electricity and Electrical Systems**

05/14/2020	Dane County Arson Response Initiative - Receptacle Fires	1 H
05/12/2020	DCARI - Identifying Damage to Electrical Connectors	1 H
09/21/2018	ND-IAAI ATC - Electrical Fire Investigation	4 H
12/08/2016	ATF-AOCCT - Appliance Fires with Demo	4 H
12/07/2016	ATF-AOCCT - Electrical Aspects of Fire Scenes with Lab	4 H
09/10/2015	ND-IAAI ATC-Residential Electrical & Gas Systems	4 H
06/14/2015	IAAI CFITrainer - Residential Electrical	4 TH
09/17/2014	ND-IAAI ATC - Complex Arson Investigation	4 H
03/19/2014	IAAI CFITrainer - Basic Electricity	1 TH
02/11/2014	NFPA - Responding to Electrical Vehicle Battery Fires Webinar	2 H
11/22/2010	IAAI CFITrainer - Electrical Safety	3 TH
09/29/2010	IAAI CFITrainer - Arc Mapping	4 TH

### **(d) Fuel Gas Systems**

12/20/2020	Dane County Arson Initiative, Inc. (DCARI) - Corrugated Stainless-Steel Tubing	1.5 TH
02/01/2018	International Association of Arson Investigators CFITrainer.net (IAAI CFITrainer) - Investigating Natural Gas Systems	3 TH
12/12/2016	ATF-AOCCT - Fuel Air Explosions with Demo	1 TH
09/10/2015	ND-IAAI ATC - Residential Electrical and Gas Systems	1 TH
11/25/2021	IAAI CFITrainer - Charting Career Path in Fire Investigation	3 TH
12/09/2016	ATF-AOCCT - Mock Trial	4 TH
12/09/2016	ATF-AOCCT - Complex Scene Practical	2 TH
12/06/2016	ATF-AOCCT - Complex Scene Walk Through/Demo	2 TH
07/08/2016	IAAI CFITrainer - Effective Investigation & Testimony	3 TH
09/17/2014	ND-IAAI ATC - Complex Arson Investigation	3.5 TH
08/25/2014	FCA - NFPA 921 (2014) Changes	2 H
11/24/2013	IAAI CFITrainer - Ethics & Fire investigator	3 TH
12/24/2012	IAAI CFITrainer - 2011 921 Changes	4 TH

09/19/2012	ND-IAAI ATC - Documenting scene	4 TH
09/14/2011	ND-IAAI ATC - NFPA 921 and NFPA 1033 changes	4 TH
05/08/2011	IAAI CFITrainer - Sofa Super Store Fire	1 TH
04/21/2011	IAAI CFITrainer - First Responder & Investigation	2 TH
08/19/2009	ND-IAAI ATC - Appliance fires	4 TH
08/30/2008	IAAI CFITrainer - Ventilation & Fire Investigation	2 TH
08/20/2008	ND-IAAI ATC - Basic Fire Investigation	20 TH
02/12/2007	IAAI CFITrainer - Motor Vehicle Fires	4 TH
08/27/2003	ND-IAAI ATC - Fire investigation	8 TH
08/22/2001	ND-IAAI ATC - Fire investigation	8 TH
02/20/2000	Fire Academy Course - Arson Detection for the 1 <sup>st</sup> Responder	4 H