

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 began his fire career in 1996 and 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 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 300 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 400 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 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.

Professional Experience

•	Fire Investigator , Fire Cause Analysis Conducts fire and explosion investigations to determine the origin and cause.	2013 – Present
•	 Captain – Fire Investigation Training, Bismarck Fire Department, Bismarck, ND Prepares and conducts quarterly training for the department's investigation team. Conducts fire and explosion investigations. Moderates case studies within the department and provides administrative and technical review of reports. 	2008 – Present

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•	Captain, Bismarck Fire Department, Bismarck, ND 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.	2001 – Present
•	Investigation Team, Bismarck Fire Department, Bismarck, ND Fire investigator responsible for conducting fire and explosion investigations to determine origin and cause.	2000 – Present
•	Firefighter, Bismarck Fire Department, Bismarck, ND	1996 – 2001
E	lucation	
•	Bachelor of Arts – Communications University of Mary, Bismarck, ND	1989
P	ofessional Certifications & Licenses	
•	Certified Fire Investigator , International Association of Arson Investigators IAAI-CFI # 64-071602	July 2009
•	State of Minnesota Private Detective License # 1059	
•	State of Montana Private Detective License # PSP-PI-LIC-22506	
<u>P</u> 1	<u>cofessional Associations</u>	
•	International Association Arson Investigators – North Dakota Chapter, Member	
<u>Pı</u>	<u>iblications</u>	
•	International Association of Arson Investigators – North Dakota Chapter, <i>Incendia Make The Call, A Case Study,</i> "July 2011	ary News, "You
<u>P</u> 1	<u>ofessional Honors & Awards</u>	
•	2021 Investigator of the Year – North Dakota Chapter of IAAI	
Te	eaching Experience	
•	Responsible for setting up and conducting quarterly training for the Bismarck Fire Department investigation team. International Association of Arson Investigators – North Dakota Chapter – Quarterly Training, <i>Ventilation and Your Fire</i>	2008 to Present January 2025

 North Dakota State Claims Seminar, Spoliation & the Claims Adjuster North Dakota State Claims Seminar, Fire & Explosion Invest that Sizzle Upper Red River Valley Claim Association Monthly Training, Fireproofing 	g Your	May 2019 May 2019 March 2019
 <i>Case</i> International Association of Arson Investigators – North Dakota Chapter – Quarterly Training, <i>Testing your Hypothesis</i> 	-	January 2019
 International Association of Arson Investigators – North Dakota Chapter – Annual Training Conference, <i>Application and Use of NFPA 921</i>, 4 hours 	-	September 2017
 International Association of Arson Investigators – North Dakota Chapter, J. Dynamics, 8 hours 	Fire	September 2015
• Fire Cause Analysis & Western Dakota Claim Association, Live Training Workshop with live burn & discussion on fire development, fire pattern determining the cause		October 2014
<u>Professional Development</u> [H =	Hours; TH	= Tested Hours]
Bureau of Alcohol, Tobacco, Firearms and Explosives		
Advanced Origin & Cause/Courtroom Testimony	12/2016	76.00 TH
North Dakota Chapter – International Association of Arson Investigators		
 Quarterly Training – Expectations of the Fire Investigator 	01/2024	2.00 TH
• 2023 Annual Conference: Hands on Vehicle Fire Investigation	09/2023	20.00 TH
• Quarterly Training – Fire Photography – Julianna Andersson	07/2023	2.00 TH
• Quarterly Training – Fatal Fire Investigations – Derek Hill ATF	01/2023	2.00 TH
• Quarterly Training – NFPA 1321 – Randy Watson	10/2022	2.00 TH
• 2022 Annual Training Conference:	09/2022	
Scientific Protocols for Fire Investigation		16.00 TH
North Dakota State Crime Lab		2.00 H
Round Table	00/0000	2.00 H
Quarterly Training – Case Study – Maternal Filicide	09/2022	2.00 TH
• Quarterly Training – Lithium – Ion ESS by Fire Safety Research Institute	04/2022	1.00 TH
 Quarterly Training – Origin Fire Pattern Persistence – Chad Campanell, ATF 	07/2021	2.00 TH
• Quarterly Training – Clandestine Labs – Chris Holte Fargo PD	04/2021	2.00 TH
• Quarterly Training – Expert Report Writing, Bob Toth, Iris Investigations	01/2021	2.00 TH
• Quarterly Training – Ignition Matrix, Jamie Garvey, Fargo Fire Dept	07/2020	1.00 TH
• QuarterlyTraining – Fire Safer Cigarettes, ND State Fire Marshal's office	10/2019	2.00 TH
• Quarterly Training – Scene Safety – ND – IAAI chapter training	07/2019	1.00 TH
• QuarterlyTraining – Curriculum Vitae – Importance, How To & Advice	01/2019	1.00 TH
• 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	2018	20.00 TH
 19th Annual Training Conference: 2017 921 Changes and Updates; Accelerant Detection Dog; Application and Use of NFPA 912; Explosion Dynamics 	2017	20.00 TH

•	Quarterly Training – UL Listing, Jon Roberts	07/2017	2.00 TH
•	17th Annual Training Conference: Fire Behavior & Dynamics; Residential	2015	20.00 TH
	Gas & Electrical Systems; Crude by Rail Working Around Rail Cars		
•	Quarterly Training – Fire Modeling	07/2016	2.00 TH
•	16th Annual Training Conference: Complex Arson Investigations; Effects	2014	20.00 TH
	of Multiple Ventilation Openings on Post – Flashover Compartment Fires;		
	Fire Dynamics for Fire Investigators	2012	20 00 TH
•	14th Annual Training Conference: Documenting the Fire Scene; Conducting Interviews; Building Construction; Investigative Report	2012	20.00 TH
	Writing; Safety/Hazmat		
•	13th Annual Training Conference: Progressive Burn Pattern Development	2011	20.00 TH
	in Post – Flashover Fires; Fire Dynamics above Floor Level; NFPA 921 &	2011	20.00 111
	1033; Forensic Evidence Labeling & Handling; Fire Debris Analysis		
•	11th Annual Training Conference: Documenting the Scene; Report Writing	;2009	20.00 TH
	Case Studies; Appliance Fires; Interviewing		
٠	10th Annual Training Conference: Basic Fire Investigation Techniques -	2008	20.00 TH
	Live – Burn & Fire Scene Scenario Investigations	2 00 -	2 0.00 T II
•	9th Annual Training Conference: Courtroom Testimony	2007	20.00 TH
•	8th Annual Training Conference: Vehicle Fire Investigative Techniques	2006	20.00 TH
	with Live Burns	2002	20 00 TH
•	5th Annual Training Conference: Legal Aspects of Fire Investigations; Determining Origin & Cause; Fatal Fire Investigations; Structure Fire	2003	20.00 TH
	Investigations; Live Burn Cells		
•	3rd Annual Training Conference: Fire Investigation Techniques	2001	20.00 TH
Int	ernational Association of Arson Investigators		
Int ●	ernational Association of Arson Investigators Expert Witness – Courtroom Testimony Course	09/2007	
•	Expert Witness – Courtroom Testimony Course	09/2007	
• CF	Expert Witness – Courtroom Testimony Course I Trainer.net		3 00 TH
• CF •	Expert Witness – Courtroom Testimony Course I Trainer.net Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems	05/2023	3.00 TH
• CF •	Expert Witness – Courtroom Testimony Course I Trainer.net Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems Motor Vehicles: the Engine and the Ignition, Electrical, and Fuel Systems	05/2023 05/2023	3.00 TH
• • •	Expert Witness – Courtroom Testimony Course I Trainer.net Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems Motor Vehicles: the Engine and the Ignition, Electrical, and Fuel Systems Fire Effects Part 1: Heat Effects on Fuels	05/2023 05/2023 04/2023	3.00 TH 3.00 TH
• • •	Expert Witness – Courtroom Testimony Course I Trainer.net Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems Motor Vehicles: the Engine and the Ignition, Electrical, and Fuel Systems Fire Effects Part 1: Heat Effects on Fuels Electric & Hybrid Vehicle Fires	05/2023 05/2023 04/2023 05/2022	3.00 TH 3.00 TH 3.00 TH
• • •	Expert Witness – Courtroom Testimony Course I Trainer.net Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems Motor Vehicles: the Engine and the Ignition, Electrical, and Fuel Systems Fire Effects Part 1: Heat Effects on Fuels Electric & Hybrid Vehicle Fires Electric & Hybrid Vehicle Design Basics	05/2023 05/2023 04/2023 05/2022 05/2022	3.00 TH 3.00 TH 3.00 TH 3.00 TH
• • •	Expert Witness – Courtroom Testimony Course I Trainer.net Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems Motor Vehicles: the Engine and the Ignition, Electrical, and Fuel Systems Fire Effects Part 1: Heat Effects on Fuels Electric & Hybrid Vehicle Fires Electric & Hybrid Vehicle Design Basics NFPA 1033 and Your Career	05/2023 05/2023 04/2023 05/2022 05/2022 05/2022	3.00 TH 3.00 TH 3.00 TH 3.00 TH 2.00 TH
• • • •	Expert Witness – Courtroom Testimony Course I Trainer.net Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems Motor Vehicles: the Engine and the Ignition, Electrical, and Fuel Systems Fire Effects Part 1: Heat Effects on Fuels Electric & Hybrid Vehicle Fires Electric & Hybrid Vehicle Design Basics NFPA 1033 and Your Career Fire Flow Analysis	05/2023 05/2023 04/2023 05/2022 05/2022 05/2022 11/2021	3.00 TH 3.00 TH 3.00 TH 3.00 TH 2.00 TH 3.00 TH
• • • • •	Expert Witness – Courtroom Testimony Course I Trainer.net Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems Motor Vehicles: the Engine and the Ignition, Electrical, and Fuel Systems Fire Effects Part 1: Heat Effects on Fuels Electric & Hybrid Vehicle Fires Electric & Hybrid Vehicle Design Basics NFPA 1033 and Your Career Fire Flow Analysis Fire Investigation for Fire Officers	05/2023 05/2023 04/2023 05/2022 05/2022 05/2022 11/2021 11/2021	3.00 TH 3.00 TH 3.00 TH 3.00 TH 2.00 TH 3.00 TH 3.00 TH
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CF • • • •	Expert Witness – Courtroom Testimony Course I Trainer.net Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems Motor Vehicles: the Engine and the Ignition, Electrical, and Fuel Systems Fire Effects Part 1: Heat Effects on Fuels Electric & Hybrid Vehicle Fires Electric & Hybrid Vehicle Design Basics NFPA 1033 and Your Career Fire Flow Analysis Fire Investigation for Fire Officers Fundamentals of Interviewing Charting Your Career Path in Fire Investigation What Happens with loss goes to court – Chris Konselmann Thermometry, Heat, and Heat Transfer Fire Chemistry Ethical Duties Beyond the Fire Scene Critical Evaluation and Testing of Commonly Reported Accidental Causes	05/2023 05/2023 04/2023 05/2022 05/2022 05/2022 11/2021 11/2021 11/2021 11/2021 11/2021 09/2021 12/2019 12/2019 12/2019 09/2019	3.00 TH 3.00 TH 3.00 TH 3.00 TH 2.00 TH 3.00 TH 3.00 TH 4.00 TH 3.00 TH 3.00 TH 3.00 TH 3.00 TH 3.00 TH

٠	Process of Elimination	02/2018	3.00 TH
•	Investigating Natural Gas Systems	02/2018	3.00 TH
•	Ethics & Social Media	02/2018	3.00 TH
•	DNA	10/2017	3.00 TH
٠	Evidence Examination: What Happens at the Lab?	09/2017	4.00 TH
٠	Effective Investigation & Testimony	06/2016	3.00 TH
٠	Writing the Initial Cause & Origin Report	06/2015	3.00 TH
٠	Residential Electrical Systems	06/2015	4.00 TH
•	Post Flashover Fires	05/2015	4.00 TH
•	Basic Electricity	03/2014	4.00 TH
•	Using Resources to Validate your Hypothesis	02/2013	2.00 TH
•	MagneTek: A Case Study in the Daubert Challenge	02/2013	2.00 TH
•	Insurance and the Fire Investigation	02/2012	4.00 TH
•	Charleston Sofa Super Store Fire	05/2011	4.00 TH
•	How First Responders Impact the Fire Investigation	02/2011	2.00 TH
•	Arc Mapping Basics	09/2010	4.00 TH
•	Explosion Dynamics	12/2010	4.00 TH
•	Electrical Safety	11/2010	3.00 TH
•	Digital Photography & the Fire Investigator	12/2009	4.00 TH
•	Documenting the Event	12/2009	4.00 TH
•	Fire & Explosion Investigations: Utilizing NFPA 1033 & 921	07/2009	4.00 TH
•	Managing Complex Fire Scene Investigations	09/2008	4.00 TH
•	The Impact of Ventilation in Building Structures on Fire Development	08/2008	4.00 TH
•	Introduction to Fatal Fires	07/2008	4.00 TH
•	Investigating Motor Vehicle Fires	02/2007	4.00 TH
•	Introduction to Evidence	11/2007	4.00 TH
•	Introduction to Fire Dynamics and Modeling	11/2006	4.00 TH
•	Analysis of Station Nightclub Fire	11/2006	4.00 TH
•	The Scientific Method for Fire & Explosion Investigation	07/2007	3.00 TH
Fiı	re Cause Analysis, Inc.		
•	Fire Pattern Analysis and the Claims Adjuster	03/2024	2.00 TH
•	Fire Science & Fire Dynamics – California Conference of Arson	07/2022	4.00 H
	Investigators – Carmen & Associates Fire Investigation, Inc	02/2021	0 75 II
•	Fire Cause Analysis – Evidence & Engineering	02/2021	2.75 H
•	FCA Training – NFPA updates; West Texas Explosion; Electric Field Notes		3.00 H
•	FCA – NFPA 921 2014 Changes	08/2014	2.00 H
•	Basic Electricity and the Fire Scene by Hal Lyson and John White / FCA	02/2014	1.00 H
Da	ne County (WI) Arson Initiative, Inc.		
•	Lithium Ion Battery Fires – ATF EE Michael Abraham	02/2023	1.50 TH
•	NFPA 1321 Fire Investigation Units – DCI State FM William Boswell	01/2023	1.00 TH
•	The Fire Origin Matrix – ATF/SA Andy Cox	05/2022	2.00 TH
•	Internet of 00 THings (IOT)	02/2022	1.50 TH
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 Arson Profiling/BAU – ATF Melissa Merola 	11/2021	1.50 TH
• Thomas Sweatt Case Study – ATF Fulkerson & Dep FM Luckett	11/2021	3.50 TH
 Forensic Anthropology & Fire Investigations 	10/2021	1.00 TH
Digital Evidence	03/2021	1.50 TH
Arson Profiling/Behavioral Analysis Unit	01/2021	1.50 TH
• Fire Patterns Post Flashover	12/2020	2.00 TH
Corrugated Stainless Steel Tubing	12/2020	1.50 TH
• Fire Dynamics	11/2020	1.50 TH
• Myths & Legends in Fire Service	10/2020	1.50 TH
Report Writing – Public Sector	09/2020	1.50 TH
Wildland Fire Investigations	08/2020	1.50 TH
Fire Investigation Report Writing	06/2020	1.00 TH
• Timeline Analysis	05/2020	1.00 TH
• Fire Alarm Control Panels	05/2020	1.00 TH
 Receptacle Fires 	05/2020	1.00 TH
 Identifying Damage to Electrical Connectors 	05/2020	1.00 TH
· Identifying Dunlage to Electrical Connectors	03/2020	1.00 111
Underwriters Laboratories		
• Lithium – Ion Battery Safety Symposium: Challenges for the fire service	03/2023	6.75 H
Impact of Ventilation on Fire Patterns	01/2021	1.25 TH
Safety Unlimited, Inc.		
 Lead Awareness Training for General Industry 	08/2022	2.00 TH
	08/2022	2.00 TH
-	08/2022	2.00 TH
Lead Awareness Training for General Industry		
Asbestos Awareness Training	08/2020	2.00 TH
Terracon		
Lead Awareness	08/2019	2.00 TH
Asbestos Awareness	08/2019	2.00 TH
Argus Pacific, Inc		
-	09/2016	2 00 H
Asbestos Awareness & Lead Awareness	09/2010	3.00 H
Armstrong Forensic Laboratories, Inc.		
• Identifying the Source & Fire Debris Analysis – From the Laboratory to the	e 09/2011	1.00 H
Final Report		
• Arson Detection for the First Responder – National Fire Academy Course	02/22/97	2.00 H
Bismarck Fire Department		
Hazardous Materials Responder at the Operations Level	07/2022	
• Hazardous Materials Responder at the Awareness Level	07/2022	

<u>NFPA 1033</u>

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

 Dane County Arson Initiative, Inc. (DCARI) – Corrugated Stainless – Stee Tubing 	1 12/20/2020	1.50 H
 DCARI – Fire Dynamics 	11/02/2020	1.50 H
• DCARI – Myths & Legends in Fire Service	10/08/2020	1.50 H
• CFI – Investigating Natural Gas Systems	02/01/2018	3.00 H
• Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) – Advanced	12/08/2016	1.00 H
Origin and Cause Courtroom Testimony (AOCCT) – Fire Chemistry/Fire Scene Forensics		
• ATF – AOCCT – Fire Dynamics	12/05/2016	1.00 H
• Armstrong Forensic Laboratories, Inc. (AFL) – Fire Debris Analysis	09/16/2011	1.00 H
• North Dakota Chapter – International Association of Arson Investigators Annual Training Conference (ND IAAI – ATC) – Post flashover fires	09/14/2011	8.00 H
Fire Chemistry		
• Lithium – Ion Battery Safety Symposium: Challenges for the fire service	03/30/2023	6.75H
• 2022 Annual Training Conference:	09/12/2022	
Scientific Protocols for Fire Investigation		16.00 TH
North Dakota State Crime Lab		2.00 H
Round Table		2.00 H
 California Conference of Arson Investigators – Fire Science & Fire Dynamics – Carmen & Associates 	07/18/2022	4.00 H
 DCARI – Myths & Legends in Fire Service 	10/08/2020	1.50 H
• International Association of Arson Investigators CFITrainer.net (IAAI	12/31/2019	3.00 H
CFITrainer) – Fire Chemistry		
 IAAI CFITrainer – Investigating Natural Gas Systems 	02/01/2018	3.00 TH
• ND – IAAI Quarterly Training – Butane Hash Oil Investigations	04/19/2017	1.00 H
• ATF – AOCCT – Fatal Fire Investigations	12/12/2016	1.00 H
• ATF – AOCCT – Fire Chemistry/Fire Scene Forensics	12/08/2016	2.00 H
• ATF – AOCCT – Fire Dynamics	12/05/2016	1.00 H
• ND – IAAI ATC – Fire Behavior & Fire Dynamics	09/09/2015	2.00 H
IAAI CFITrainer – Post Flashover Fires	05/07/2015	1.00 TH
• IAAI CFITrainer – Physical Evidence	05/24/2010	1.00 TH
• IAAI CFITrainer – Understanding Fire Through the Candle Experiments	01/23/2009	2.00 TH

• IAAI CFITrainer – Station Nightclub Fire	11/23/2006	1.00 TH
Thermodynamics		
2022 Annual Training Conference:	09/12/2022	
Scientific Protocols for Fire Investigation		16.00 TH
North Dakota State Crime Lab		2.00 H
Round Table		2.00 H
• DCARI – Fire Dynamics	11/02/2020	1.50 H
• ATF – AOCCT – Fire Dynamics	12/05/2016	1.00 H
• ND – IAAI ATC – Fire Behavior and Fire Dynamics	09/09/2015	1.00 H
• IAAI CFITrainer – Post flashover fires	05/07/2015	2.00 TH
 IAAI CFITrainer – Sofa Super Store Fire 	05/08/2011	1.00 TH
 IAAI CFITrainer – Explosion Dynamics 	12/08/2010	1.00 TH
 IAAI CFITrainer – Ventilation and Fire Investigation 	08/30/2008	2.00 TH
 IAAI CFITrainer – Station Nightclub Fire 	11/23/2006	1.00 TH
Fire Dynamics		
 Fire Pattern Analysis and the Claims Adjuster – Castellon/Nesler 	03/17/2024	2.00 TH
 Lithium Ion Battery Fires – ATF EE Michael Abraham 	02/11/2023	1.50 TH
 2022 Annual Training Conference: Scientific Protocols for Fire 	09/12/2022	20.00 TH
Investigation	0)/12/2022	20.00 111
 California Conference of Arson Investigators – Fire Science & Fire Dynamics 	07/18/2022	4.00 H
 The Fire Origin Matrix – ATF/SA Andy Cox 	05/15/2022	2.00 TH
 ND – IAAI Quarterly Training – Lithium – Ion ESS – FSI 	04/24/2022	1.00 TH
 Fire Flow Analysis 	11/14/2021	3.00 TH
 NDIAAI Quarterly Training – Origin Fire Pattern Persistence 	08/03/2021	2.00 TH
 UL – Impact of Ventilation on Fire Patterns 	01/31/2021	1.25 TH
 UL – Impact of Ventilation on Fire Patterns 	01/31/2021	1.25 H
 DCARI – Fire Patterns Post Flashover 	12/28/2020	2.00 H
 DCARI – Corrugated Stainless Steel Tubing 	12/20/2020	1.50 H
 DCARI – Fire Dynamics 	11/02/2020	1.50 H
 ND – IAAI ATC – Fire Origin Pattern Persistence 	09/21/2018	8.00 H
 IAAI CFITrainer – Investigating Natural Gas Systems 	02/01/2018	3.00 TH
 ATF – AOCCT – Fire Dynamics 	12/05/2016	7.00 H
 Fire & Arson Mag; Fire origin pattern persistence 	10/15/2016	1.00 H
 ND – IAAI ATC – Fire Behavior & Fire Dynamics 	09/09/2015	8.00 H
 IAAI C – File Benavior & File Dynamics IAAI CFITrainer – Post flashover fires 	05/07/2015	8.00 H 1.00 TH
 Fire Cause Analysis (FCA) – Live Fire Training 	10/07/2014	5.00 H
	09/18/2014	
 ND – IAAI ATC – Fire Dynamics for Fire Investigators ND – IAAI ATC – Above floor level fires 		4.00 H
	09/14/2011	4.00 H
IAAI CFITrainer – Sofa Super Store Fire	05/08/2011	2.00 TH
IAAI CFITrainer – Explosion Dynamics	02/08/2010	1.00 TH
• IAAI CFITrainer – Physical Evidence	05/24/2010	2.00 TH

 IAAI CFITrainer – Fire Thru Candle Experiments IAAI CFITrainer – Intro to Fire Dynamics & Modeling IAAI CFITrainer – Station Nightclub fire 	01/23/2009 11/23/2006 11/23/2006	2.00 TH 2.00 TH 1.00 TH
• ND – IAAI ATC – Vehicle Fires	08/23/2006	20.00 H
Explosion Dynamics		
DCARI – Corrugated Stainless Steel Tubing	12/20/2020	1.50 H
 IAAI CFITrainer – Investigating Natural Gas Systems 	02/01/2018	3.00 TH
 ND – IAAI ATC – Explosion Dynamics Scott Davis 	09/21/2017	8.00 H
• ND – IAAI Quarterly training – Butane Hash Oil Investigations	04/19/2017	1.00 H
• FCA – West Texas Explosion	04/04/2017	1.00 H
• ATF – AOCCT – Fuel Air Explosions with Demo	12/12/2016	3.00 H
IAAI CFITrainer – Explosion Dynamics	02/08/2010	2.00 TH
• IAAI CFITrainer – Fire and Explosion; utilizing NFPA 921 and NFPA	103307/05/2009	2.00 TH
Computer Fire Modeling		
 DCARI – Fire Dynamics 	11/02/2020	1.50 H
 ND – IAAI ATC – Fire Origin Pattern Persistence 	09/20/2018	8.00 H
 ATF – AOCCT – Fuel Air Explosions with Demo 	12/12/2016	1.00 H
 ND – IAAI Quarterly Training – Fire Modeling 2016 	07/20/2016	2.00 H
• IAAI CFITrainer – Intro to Fire Dynamics & Modeling	11/23/2006	2.00 TH
• IAAI CFITrainer – Station Nightclub Fire	11/23/2006	1.00 TH
e		
Fire Investigation	12/28/2020	2 00 11
• DCARI – Fire Patterns Post Flashover	12/28/2020	2.00 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing 	12/20/2020	1.50 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations 	12/20/2020 08/27/2020	1.50 H 1.50 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence 	12/20/2020 08/27/2020 09/20/2018	1.50 H 1.50 H 8.00 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems 	12/20/2020 08/27/2020 09/20/2018 02/01/2018	1.50 H 1.50 H 8.00 H 3.00 TH
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018 09/20/2017	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018 09/20/2017 12/09/2016	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 4.00 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 4.00 H 2.00 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical ATF – AOCCT – Complex Scene Walk Through/Demo 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016 12/06/2016	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 2.00 H 2.00 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical ATF – AOCCT – Complex Scene Walk Through/Demo IAAI CFITrainer – Effective Investigation & Testimony 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016 12/06/2016 07/08/2016	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 4.00 H 2.00 H 2.00 H 3.00 TH
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical ATF – AOCCT – Complex Scene Walk Through/Demo IAAI CFITrainer – Effective Investigation & Testimony ND – IAAI ATC – Complex Arson Investigation 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016 12/06/2016 07/08/2016 09/17/2014	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 2.00 H 2.00 H 3.00 TH 3.50 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical ATF – AOCCT – Complex Scene Walk Through/Demo IAAI CFITrainer – Effective Investigation & Testimony ND – IAAI ATC – Complex Arson Investigation FCA – NFPA 921 (2014) Changes 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016 12/06/2016 07/08/2016 09/17/2014 08/25/2014	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 2.00 H 2.00 H 3.00 TH 3.50 H 2.00 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical ATF – AOCCT – Complex Scene Walk Through/Demo IAAI CFITrainer – Effective Investigation & Testimony ND – IAAI ATC – Complex Arson Investigation FCA – NFPA 921 (2014) Changes IAAI CFITrainer – Ethics & Fire investigator 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016 12/06/2016 07/08/2016 09/17/2014 08/25/2014 11/24/2013	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 2.00 H 2.00 H 3.00 TH 3.50 H 2.00 H 3.00 TH
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical ATF – AOCCT – Complex Scene Walk Through/Demo IAAI CFITrainer – Effective Investigation & Testimony ND – IAAI ATC – Complex Arson Investigation FCA – NFPA 921 (2014) Changes IAAI CFITrainer – Ethics & Fire investigator IAAI CFITrainer – 2011 921 Changes 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016 12/06/2016 07/08/2016 09/17/2014 08/25/2014 11/24/2013 12/24/2012	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 2.00 H 2.00 H 3.00 TH 3.50 H 2.00 H 3.00 TH 4.00 TH
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical ATF – AOCCT – Complex Scene Walk Through/Demo IAAI CFITrainer – Effective Investigation & Testimony ND – IAAI ATC – Complex Arson Investigation FCA – NFPA 921 (2014) Changes IAAI CFITrainer – Ethics & Fire investigator IAAI CFITrainer – Ethics & Fire investigator IAAI CFITrainer – Documenting scene 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016 12/06/2016 07/08/2016 09/17/2014 08/25/2014 11/24/2013 12/24/2012 09/19/2012	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 2.00 H 2.00 H 3.00 TH 3.50 H 2.00 H 3.00 TH 4.00 TH 4.00 H
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical ATF – AOCCT – Complex Scene Walk Through/Demo IAAI CFITrainer – Effective Investigation & Testimony ND – IAAI ATC – Complex Arson Investigation FCA – NFPA 921 (2014) Changes IAAI CFITrainer – Ethics & Fire investigator IAAI CFITrainer – Ethics & Fire investigator IAAI CFITrainer – 2011 921 Changes ND – IAAI ATC – NFPA 921 and NFPA 1033 changes 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016 12/06/2016 07/08/2016 09/17/2014 08/25/2014 11/24/2013 12/24/2012 09/19/2012 09/19/2012	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 2.00 H 2.00 H 3.00 TH 3.50 H 2.00 H 3.00 TH 4.00 TH 4.00 H 4.00 TH
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical ATF – AOCCT – Complex Scene Walk Through/Demo IAAI CFITrainer – Effective Investigation & Testimony ND – IAAI ATC – Complex Arson Investigation FCA – NFPA 921 (2014) Changes IAAI CFITrainer – Ethics & Fire investigator IAAI CFITrainer – 2011 921 Changes ND – IAAI ATC – NFPA 921 and NFPA 1033 changes IAAI CFITrainer – Sofa Super Store Fire 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016 12/06/2016 07/08/2016 09/17/2014 08/25/2014 11/24/2013 12/24/2012 09/19/2012 09/14/2011 05/08/2011	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 2.00 H 2.00 H 3.00 TH 3.50 H 2.00 H 3.00 TH 4.00 TH 4.00 TH 4.00 TH 1.00 TH
 DCARI – Fire Patterns Post Flashover DCARI – Corrugated Stainless Steel Tubing DCARI – Wildland Fire Investigations ND – IAAI ATC – Fire Origin Pattern Persistence IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media ND – IAAI ATC – NFPA 921 Application & Use ATF – AOCCT – Mock Trial ATF – AOCCT – Complex Scene Practical ATF – AOCCT – Complex Scene Walk Through/Demo IAAI CFITrainer – Effective Investigation & Testimony ND – IAAI ATC – Complex Arson Investigation FCA – NFPA 921 (2014) Changes IAAI CFITrainer – Ethics & Fire investigator IAAI CFITrainer – Ethics & Fire investigator IAAI CFITrainer – 2011 921 Changes ND – IAAI ATC – NFPA 921 and NFPA 1033 changes 	12/20/2020 08/27/2020 09/20/2018 02/01/2018 02/01/2018 09/20/2017 12/09/2016 12/09/2016 12/06/2016 07/08/2016 09/17/2014 08/25/2014 11/24/2013 12/24/2012 09/19/2012 09/19/2012	1.50 H 1.50 H 8.00 H 3.00 TH 1.00 TH 4.00 H 2.00 H 2.00 H 3.00 TH 3.50 H 2.00 H 3.00 TH 4.00 TH 4.00 H 4.00 H

A ALCEIT	00/20/2000	2 00 TH
IAAI CFITrainer – Ventilation & Fire Investigation	08/30/2008	2.00 TH
ND – IAAI ATC – Basic Fire Investigation	08/20/2008	20.00 H
IAAI CFITrainer – Motor Vehicle Fires	02/12/2007	4.00 TH
• ND – IAAI ATC – Fire investigation	08/27/2003	8.00 H
• ND – IAAI ATC – Fire investigation	08/22/2001	8.00 H
• Fire Academy Course – Arson Detection for the 1st Responder	02/20/2000	4.00 H
Fire Analysis		
• Fire Pattern Analysis and the Claims Adjuster – Castellon/Nesler	03/17/2024	2.00 TH
• Quarterly Training – Expectations of the Fire Investigator	01/18/2024	2.00 TH
• 2023 Annual Conference: Hands on Vehicle Fire Investigation	09/13/2023	20.00 TH
• Quarterly Training – Fire Photography – Julianna Andersson	07/19/2023	2.00 TH
• Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems	05/10/2023	3.00 TH
• Motor Vehicles: the Engine & the Ignition, Electrical and Fuel Systems	05/10/2023	3.00 TH
• Fire Effects Part 1: Heat Effects on Fuels	04/20/2023	3.00 TH
• Lithium Ion Battery Fires – ATF EE Michael Abraham	02/11/2023	1.50 TH
 Quarterly Training – Fatal Fire Investigations – Derek Hill ATF 	01/18/2023	2.00 TH
 2022 Annual Training Conference: Scientific Protocols for Fire 	09/13/2022	20.00 TH
Investigation	09/19/2022	20.00 111
• DCARI – Forensic Anthropology & Fire Investigations Dr. Cristina	10/06/2021	1.00 TH
Figueroa Soto		
 NDIAAI Quarterly Training – Origin Fire Pattern Persistence 	08/03/2021	2.00 TH
• UL – Impact of Ventilation on Fire Patterns	01/31/2021	1.25 H
 DCARI – Myths & Legends in Fire Service 	10/08/2020	1.50 H
 ND – IAAI QuarterlyTraining – Ignition Matrix 	07/15/2020	1.00 H
 ND – IAAI ATC – Fire Origin Pattern Persistence 	09/20/2018	8.00 H
• ATF – AOCCT – Review of Burns	12/09/2016	1.50 H
• ATF – AOCCT – Prosecutor Relations	12/09/2016	3.00 H
• ATF – AOCCT – Surviving the Defense Expert Challenge	12/14/2016	1.00 H
• ATF – AOCCT – Facing the Defense Expert Challenge	12/13/2016	4.00 H
• ATF – AOCCT – Current Case Law & NFPA 1033 and NFPA 921	12/13/2016	4.00 H
• ATF – AOCCT – Complex Scene Practical	12/09/2016	7.00 H
• IAAI CFITrainer – Effective Investigation & Testimony	06/08/2016	3.00 TH
• ND – IAAI ATC – Effects of Multiple Ventilation Openings	09/17/2014	4.00 H
IAAI CFITrainer – Critical Thinking Solves Cases	02/18/2013	2.00 TH
• IAAI CFITrainer – Fatal Fires	07/08/2008	4.00 TH
Fire Investigation Methodology		
 Fire Investigation Methodology Quarterly Training – Expectations of the Fire Investigator 	01/18/2024	2.00 TH
 Quarterly framing – Expectations of the Fire Investigator 2023 Annual Conference: Hands on Vehicle Fire Investigation 	01/18/2024	2.00 TH 20.00 TH
	09/13/2023	20.00 TH 3.00 TH
• •		
 Motor Vehicles: the Engine & the Ignition, Electrical and Fuel Systems Fire Effects Part 1: Heat Effects on Eucla 	05/10/2023	3.00 TH
• Fire Effects Part 1: Heat Effects on Fuels	04/20/2023	3.00 TH
• Lithium Ion Battery Fires – ATF EE Michael Abraham	02/11/2023	1.50 TH

• Quarterly Training – Fatal Fire Investigations – Derek Hill ATF	01/18/2023	2.00 TH
 NFPA 1321 Fire Investigation Units – DCI State FM William Boswell 	01/18/2023	1.00 TH
 Quarterly Training – NFPA 1321 – Randy Watson 	10/27/2022	2.00 TH
 2022 Annual Training Conference: 	09/13/2022	2.00 111
Scientific Protocols for Fire Investigation	0,10,2022	16.00 TH
North Dakota State Crime Lab		2.00 TH
Round Table		2.00 TH
 Quarterly Training – Case Study – Maternal Filicide 	09/08/2022	2.00 TH
 IAAI CFITrainer – NFPA 1033 and Your Career 	05/24/2022	2.00 TH
• The Fire Origin Matrix – ATF/SA Andy Cox	05/15/2022	2.00 TH
 Arson Profiling/BAU – ATF Melissa Merola 	11/18/2021	1.50 TH
 IAAI CFITrainer – Fundamentals Of Interviewing 	11/16/2021	4.00 TH
 IAAI CFITrainer – Fire Investigation for Fire Officers 	11/16/2021	3.00 TH
 DCARI – Thomas Sweatt Case Study – ATF Fulkerson & Deputy FM Luckett 	11/14/2021	3.50 TH
NDIAAI Quarterly Training – Origin Fire Pattern Persistence	08/03/2021	2.00 TH
• DCARI – Fire Patterns Post Flashover	12/28/2020	2.00 H
Dane County Arson Response Initiative – Timeline Analysis	05/31/2020	1.00 H
• IAAI CFITrainer – Understanding Undetermined	12/22/2018	3.00 TH
• ND – IAAI ATC – Fire Origin Pattern Persistence	09/20/2018	8.00 H
• IAAI CFITrainer – Ethics & Social Media	02/01/2018	1.00 TH
• ND – IAAI ATC – NFPA 921 Changes	09/19/2017	8.00 H
• ATF – AOCCT – Complex Scene Practical	12/09/2016	1.00 H
IAAI CFITrainer – Magnetek/Daubert	02/18/2013	2.00 TH
IAAI CFITrainer – Validating Hypothesis	01/18/2013	2.00 TH
• IAAI CFITrainer – Fire & Explosion Investigations Utilizing NFPA 921 and NFPA 1033	07/05/2009	2.00 TH
IAAI CFITrainer – Complex Fire Scene	09/01/2008	4.00 TH
IAAI CFITrainer – Scientific Method	07/20/2007	3.00 TH
• ND – IAAI ATC – Fire investigation	08/27/2003	8.00 H
• ND – IAAI ATC – Fire investigation	08/22/2001	8.00 H
Fire Investigation Technology		
• Quarterly Training – Fire Photography – Julianna Andersson	07/19/2023	2.00 TH
• Internet of Things (IOT)	02/21/2022	1.50 TH
• DCARI – Digital Evidence	03/18/2021	1.50 H
• Fire Cause Analysis – Evidence & Engineering	02/23/2021	2.75 H
• ND – IAAI Quarterly Training – Fire Safer Cigarettes	10/21/2019	2.00 H
• ND – IAAI ATC – Strategic Social Media for Fire Invest	04/19/2018	4.00 H
IAAI CFITrainer – Investigating Natural Gas Systems	02/01/2018	3.00 TH
• IAAI CFITrainer – DNA	10/16/2017	3.00 TH
• ND – IAAI ATC – Accelerant Detection Dog presentation	09/20/2017	4.00 H
• ND – IAAI Quarterly Training – UL Class	07/19/2017	2.00 H
• ND – IAAI Quarterly Training – Accelerant K – 9 course	10/19/2016	2.00 H

• ND – IAAI ATC – Complex Arson Investigation	09/17/2014	2.00 TH
• IAAI CFITrainer – Insurance & the Fire Investigator	02/20/2012	4.00 TH
• ND – IAAI ATC – Forensic Evaluation of Lubricants	09/14/2011	4.00 H
• IAAI CFITrainer – Digital photography	12/13/2009	4.00 TH
 Failure Analysis and Analytical Tools Fire Effects Part 1: Heat Effects on Fuels 	04/20/2023	3.00 TH
	04/20/2023	2.00 TH
 The Fire Origin Matrix – ATF/SA Andy Cox DCARI – Arson Profiling/Behavioral Analysis Unit 	03/13/2022	
e ;	01/20/2021	1.50 H 1.00 H
 ND – IAAI Quarterly Training – Ignition Matrix IAAI CEITrainar – Ethical Duties Bound the Eiro Seena 	12/31/2019	3.00 TH
 IAAI CFITrainer – Ethical Duties Beyond the Fire Scene ND – IAAI ATC – Electrical Fire Investigation 		
ND – IAAI ATC – Electrical Fire Investigation	09/21/2018	4.00 H
ATF – AOCCT – Fatal Fire Investigations	12/12/2016	1.00 H
ATF – AOCCT – Complex Scene Practical	12/09/2016	1.00 H
IAAI CFITrainer – Basic Electricity	03/19/2014	1.00 TH
IAAI CFITrainer – Critical Thinking Solves Cases	02/18/2013	2.00 TH
Fire Protection Systems		
• Dane Co. Arson Response Initiative – Fire Alarm Control Panels	05/24/2020	1.00 H
• ATF – AOCCT – Building Construction	12/12/2016	2.00 H
• ATF – AOCCT – Fire Protection Systems	12/06/2016	4.00 H
IAAI CFITrainer – Residential Building Construction	12/21/2014	3.00 TH
• ND – IAAI ATC – Building Construction	09/19/2012	4.00 H
• International Fire Code transition from 1997 Uniform Fire Code	10/22/2004	0.50 H
Evidence Documentation, Collection and Preservation		
 2023 Annual Conference: Hands on Vehicle Fire Investigation 	09/13/2023	20.00 TH
 Quarterly Training – Fire Photography – Julianna Andersson 	07/19/2023	2.00 TH
 Fire Effects Part 1: Heat Effects on Fuels 	04/20/2023	3.00 TH
 Lithium Ion Battery Fires – ATF EE Michael Abraham 	02/11/2023	1.50 TH
 Quarterly Training – Fatal Fire Investigations – Derek Hill ATF 	01/18/2023	2.00 TH
 IAAI, Inc – What Happens with loss goes to court – Chris Konzelmann 	09/28/2021	1.00 TH
 IAAI, Inc – Giving Stronger Depo & Trial Testimony – Chris Konzelmann 		2.00 TH
 DCARI – Digital Evidence 	03/18/2021	1.50 H
 ND – IAAI Quarterly Training – Expert Report Writing 	01/20/2021	2.00 H
 DCARI – Fire Patterns Post Flashover 	12/28/2020	2.00 H
 DCARI – Report Writing – Public Sector 		2.00 11
bernd Report Writing Tuble Sector		1 50 H
 DCARI – Wildland Fire Investigations 	09/23/2020	1.50 H 1.00 H
 DCARI – Wildland Fire Investigations DCARI – Fire Investigation Report Writing 	09/23/2020 08/27/2020	1.00 H
DCARI – Fire Investigation Report Writing	09/23/2020 08/27/2020 06/08/2020	1.00 H 1.00 H
 DCARI – Fire Investigation Report Writing ND – IAAI ATC – Camera & Lighting Techniques for Fire Scenes 	09/23/2020 08/27/2020 06/08/2020 09/19/2018	1.00 H 1.00 H 4.00 H
 DCARI – Fire Investigation Report Writing ND – IAAI ATC – Camera & Lighting Techniques for Fire Scenes IAAI CFITrainer – Investigating Natural Gas Systems 	09/23/2020 08/27/2020 06/08/2020 09/19/2018 02/01/2018	1.00 H 1.00 H 4.00 H 3.00 TH
 DCARI – Fire Investigation Report Writing ND – IAAI ATC – Camera & Lighting Techniques for Fire Scenes IAAI CFITrainer – Investigating Natural Gas Systems IAAI CFITrainer – Ethics & Social Media 	09/23/2020 08/27/2020 06/08/2020 09/19/2018 02/01/2018 02/01/2018	1.00 H 1.00 H 4.00 H 3.00 TH 1.00 TH
 DCARI – Fire Investigation Report Writing ND – IAAI ATC – Camera & Lighting Techniques for Fire Scenes IAAI CFITrainer – Investigating Natural Gas Systems 	09/23/2020 08/27/2020 06/08/2020 09/19/2018 02/01/2018	1.00 H 1.00 H 4.00 H 3.00 TH

	10/00/0010	1 00 11
• ATF – AOCCT – Complex Scene Practical	12/09/2016	1.00 H
• ATF – AOCCT – Fire Chemistry/Fire Scene Forensics	12/08/2016	1.00 H
• ATF – AOCCT – Report Writing	12/06/2016	2.00 H
• ND – IAAI Chapter Training – Accelerant K – 9	10/19/2016	2.00 H
• ND – IAAI ATC – Residential Electrical & Gas Systems	09/10/2015	4.00 H
• ND – IAAI ATC – Interviewing	09/19/2012	4.00 H
• ND – IAAI ATC – Report Writing	09/19/2012	4.00 H
• IAAI CFITrainer – Search & Seizure	04/16/2012	4.00 TH
 Armstrong Forensic Laboratory, Inc – Identifying the source 	09/16/2011	1.50 H
IAAI CFITrainer – Physical Evidence	05/24/2010	1.00 TH
• IAAI CFITrainer – Documenting the Event	12/13/2009	4.00 TH
• ND – IAAI ATC – Documenting the Scene	08/19/2009	4.00 H
• ND – IAAI ATC – Report Writing	08/19/2009	4.00 H
• ND – IAAI ATC – Evidence Collection	08/19/2009	4.00 H
• ND – IAAI ATC – Interviewing	08/19/2009	4.00 H
• IAAI CFITrainer – Introduction to Evidence	11/09/2007	4.00 TH
• ND – IAAI & ATF – IAAI Courtroom Testimony	08/22/2007	20.00 H
Hazardous Materials		
• ND – IAAI Quarterly Training – Lithium – Ion ESS – FSI	04/24/2022	1.00 TH
 NDIAAI Chapter Training – Clandestine Labs – Chris Holte FPD 	04/21/2021	2.00 TH
 Safety Unlimited – Asbestos Awareness Training 	08/27/2020	1.00 H
• Safety Unlimited – Lead Awareness Training for General Industry	08/11/2020	1.00 H
 Argus Pacific – Asbestos Awareness & Lead Awareness 	09/26/2016	1.00 H
 ND – IAAI ATC – Complex Arson Investigation 	09/17/2014	1.00 H
• ND – IAAI ATC – Safety/Hazmat	09/19/2012	4.00 H
 IAAI CFITrainer – Vacant/Abandoned Buildings 	06/15/2009	4.00 TH
IAAI CFITrainer – Scene Safety	07/07/2006	3.00 TH
• (c) Safety Regulations		
• ND Firemen's Assoc – Hazmat Operation & Awareness Certificate	03/31/2022	2.00 TH
IAAI CFITrainer – Electrical Safety	11/22/2010	3.00 TH
Building systems		
(a) Types of Construction	12/12/2016	2 00 TH
• ATF – AOCCT – Building Construction	12/12/2016	2.00 TH
IAAI CFITrainer – Residential Building Construction	12/21/2014	3.00 TH
ND – IAAI ATC – Building Construction	09/19/2012	4.00 TH
(b) Fire Protection Systems		
• Dane Co. Arson Response Initiative – Fire Alarm Control Panels	05/24/2020	1.00 TH
• ATF – AOCCT – Building Construction	12/12/2016	2.00 TH
• ATF – AOCCT – Fire Protection Systems	12/06/2016	4.00 TH
• IAAI CFITrainer – Residential Building Construction	12/21/2014	3.00 TH
• ND – IAAI ATC – Building Construction	09/19/2012	4.00 TH

 International Fire Code transition from 1997 Uniform Fire Code (c) Electricity and Electrical Systems 	10/22/2004	0.50 H
 2023 Annual Conference: Hands on Vehicle Fire Investigation 	09/13/2023	20.00 TH
 Electric & Hybrid Vehicle Design Basics 	05/26/2022	3.00 TH
 Electric & Hybrid Vehicle Fires 	05/26/2022	3.00 TH
 Dane County Arson Response Initiative – Receptacle Fires 	05/14/2020	1.00 H
 DCARI – Identifying Damage to Electrical Connectors 	05/12/2020	1.00 H
 ND – IAAI ATC – Electrical Fire Investigation 	09/21/2018	4.00 H
 ATF – AOCCT – Appliance Fires with Demo 	12/08/2016	4.00 H
• ATF – AOCCT – Electrical Aspects of Fire Scenes with Lab	12/07/2016	4.00 H
 ND – IAAI ATC – Residential Electrical & Gas Systems 	09/10/2015	4.00 H
• IAAI CFITrainer – Residential Electrical	06/14/2015	4.00 TH
• ND – IAAI ATC – Complex Arson Investigation	09/17/2014	4.00 H
• IAAI CFITrainer – Basic Electricity	03/19/2014	1.00 TH
• NFPA – Responding to Electrical Vehicle Battery Fires Webinar	02/11/2014	2.00 H
• IAAI CFITrainer – Electrical Safety	11/22/2010	3.00 TH
• IAAI CFITrainer – Arc Mapping	09/29/2010	4.00 TH
(d) Fuel Gas Systems		
 Dane County Arson Initiative, Inc. (DCARI) – Corrugated Stainless – St Tubing 	eel 12/20/2020	1.50 TH
 International Association of Arson Investigators CFITrainer.net (IAAI CFITrainer) – Investigating Natural Gas Systems 	02/01/2018	3.00 TH
• ATF – AOCCT – Fuel Air Explosions with Demo	12/12/2016	1.00 TH
• ND – IAAI ATC – Residential Electrical and Gas Systems	09/10/2015	1.00 TH
• IAAI CFITrainer – Charting Career Path in Fire Investigation	11/25/2021	3.00 TH
• ATF – AOCCT – Mock Trial	12/09/2016	4.00 TH
• ATF – AOCCT – Complex Scene Practical	12/09/2016	2.00 TH
• ATF – AOCCT – Complex Scene Walk Through/Demo	12/06/2016	2.00 TH
• IAAI CFITrainer – Effective Investigation & Testimony	07/08/2016	3.00 TH
• ND – IAAI ATC – Complex Arson Investigation	09/17/2014	3.50 TH
• FCA – NFPA 921 (2014) Changes	08/25/2014	2.00 H
• IAAI CFITrainer – Ethics & Fire investigator	11/24/2013	3.00 TH
 IAAI CFITrainer – 2011 921 Changes 	12/24/2012	4.00 TH
• ND – IAAI ATC – Documenting scene	09/19/2012	4.00 TH
 ND – IAAI ATC – NFPA 921 and NFPA 1033 changes 	09/14/2011	4.00 TH
• IAAI CFITrainer – Sofa Super Store Fire	05/08/2011	1.00 TH
• IAAI CFITrainer – First Responder & Investigation	04/21/2011	2.00 TH
• ND – IAAI ATC – Appliance fires	08/19/2009	4.00 TH
• IAAI CFITrainer – Ventilation & Fire Investigation	08/30/2008	2.00 TH
• ND – IAAI ATC – Basic Fire Investigation	08/20/2008	20.00 TH
IAAI CFITrainer – Motor Vehicle Fires	02/12/2007	4.00 TH
ND – IAAI ATC – Fire investigation	08/27/2003	8.00 TH
• ND – IAAI ATC – Fire investigation	08/22/2001	8.00 TH

• Fire Academy Course – Arson Detection for the 1st Responder	02/20/2000 4.00 H
Deposition & 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 Sentry Select Insurance Company vs Norcold, Inc. – Deposition 08-2020-CV-1921 	June 30, 2021 July 12, 2021
 State of North Dakota vs Josh Schmidt Morton County District Court 30-2019-CR-854 	Filed August 22, 2019 Testified June 22, 2021
 USA vs Anthony DeGroot ND US Federal Court 1:14-cr-00191 Testified as a fire origin and cause forensic expert 	February 15, 2015