

# BRET DESH

IAAI-CFI, NAFI-CFEI

Independent Forensic Investigations Corporation (IFIC)

Papillion Fire Department

Cell Phone: (402) 429-3620

Email: Bdesch@independentforensics.com

## WORK EXPERIENCE

---

**Independent Forensic Investigations Corporation (IFIC)** 2/2022 to Current

Fire Investigator

- Conduct origin and cause investigations for residential, commercial, and vehicle fires
- Provide litigation support including scene documentation, evidence preservation, and report preparation
- Coordinate joint scene examinations with attorneys, engineers, and insurance representatives

**Papillion Fire Department** 3/2014 to Current

Fire Investigator – Fire Apparatus Engineer – Firefighter – Paramedic

- Lead Fire Investigator overseeing the department's fire investigation team and origin and cause determinations.
- Direct scene examinations, evidence collection, and investigative report preparation in accordance with NFPA 921 and NFPA 1033.
- Coordinate investigations with law enforcement, prosecutors, and external agencies in complex incidents.

## EDUCATION

---

**Associate of Science** Hutchinson Community College – Fire Science 2009

## CERTIFICATIONS

---

Certified Fire Investigator – International Association of Arson Investigators

Certified Fire and Explosion Investigator – National Association of Fire Investigators

Fire Investigation Technician – International Association of Arson Investigators

Licensed Private Investigator – State of Iowa

Remote Pilot Certificate (Part 107) – Federal Aviation Administration

Paramedic – National Registry of Emergency Medical Technicians

Nebraska State Fire Training:

Firefighter I

Firefighter II

Fire Instructor 1

Hazardous Materials - Operations Level

National Incident Management System

Incident Command System (ICS) Courses: IS100, IS200, IS300, IS700, IS800

## MEMBERSHIPS

---

International Association of Arson Investigators – IAAI  
International Association of Arson Investigators, Nebraska Chapter  
National Association of Fire Investigators – NAFI  
International Association of Fire Fighters – IAFF  
Papillion Professional Firefighters – IAFF AFL-CIO Local 3767

## SPECIALIZED TRAINING

---

### **CFITrainer.net – 398 Hours of Tested Training** (as of March 2026)

Full transcript available upon request. Training includes:

- Fire Dynamics and Fire Chemistry
- Electrical Fire Analysis
- Lithium-Ion Battery Fires
- Motor Vehicle Fire Investigation
- Explosion Dynamics
- Fire Effects and Pattern Analysis
- NFPA 921 and NFPA 1033 Application
- Legal Aspects of Fire Investigation
- Deposition and Courtroom Testimony Preparation
- Evidence Documentation and Scene Safety

<b>Seminars, Conferences, and Live Events</b>	<b>Hours</b>	<b>Date</b>
<hr/> <b>IAAI Nebraska 2025 Conference – Norfolk, NE</b> <hr/> <b>Fire Pattern and Fire Effect Analysis</b> <p>Training on identifying, interpreting, and documenting fire patterns and fire effects to support accurate origin and cause determinations. Instructor: Jason Mardirosian</p> <b>Fire Alarm Systems, Fire Sprinkler Systems, and Commercial Kitchen Restaurant Suppression Systems</b> <p>Design, function, and investigative considerations of active fire protection systems in residential and commercial occupancies. Instructor: Phil Keena</p> <b>Report Writing and Documentation</b> <p>Guidance on producing clear, defensible investigative reports and maintaining proper documentation practices in compliance with NFPA standards. Instructor: Brian Whitmore</p> <hr/> <b>IAAI Expert Witness Testimony Class – Sevierville, TN</b> <hr/> <p>Intensive 3-day course on expert witness preparation, courtroom procedures, direct/cross examination techniques, and presentation of technical fire investigation evidence in trial settings. Instructor: J.P. Ray – Tennessee Chapter IAAI</p>	20	9/16/2025- 9/18/2025
	40	8/8/2025- 8/10/2025

<b>IAAI Certifications and Endorsements Update</b>	3	5/19/2025
Comprehensive review of current standards for fire and explosion investigations and investigator qualifications. Instructor: Trace Lawless – IAAI		
<b>IAAI Nebraska 2024 Conference – Hastings, NE</b>		
<b>Forensic Fire Death Investigation</b>	20	9/17/2024- 9/19/2024
Investigation of fire-related fatalities, including burn pattern interpretation on human remains, differentiation between postmortem and antemortem injuries, scene documentation, and integration of forensic pathology with fire investigation methodology. Instructor: Dr. Elayne Pope		
<b>Forensic Electronic Data Recovery</b>		
Recovery and preservation of electronic evidence, with emphasis on digital video recorder (DVR) data extraction. Included instruction on identifying, securing, and interpreting data from various electronic devices relevant to fire and criminal investigations. Instructor: Tully Kessler		
<b>Lithium-Ion Battery Fire Basics</b>	1	5/7/2024
Hazards, ignition mechanisms, and fire behavior of lithium-ion batteries. Covered identification of battery types, failure modes, suppression considerations, and post-incident evidence preservation techniques. Sponsor: National Association of Subrogation Professionals		
<b>National Fire Academy R0772 – Emmitsburg, MD</b>	72	4/14/2024- 4/26/2024
Two-week advanced course in fire investigation. Provided in-depth instruction on systematic scene examination, fire pattern recognition, fire dynamics, documentation, evidence collection, and analysis in accordance with NFPA 921. Included practical exercises, case study evaluations, and team-based investigations to develop proficiency in origin and cause investigations.		
<b>IAAI Nebraska 2023 Conference – Kearney, NE</b>	28	9/19/2023- 9/22/2023
Fire dynamics and ignition sources, including analysis of smoking materials, fire behavior principles, and a detailed case study of the Boyd Street Fire. Emphasis on fire cause determination, scene documentation, and application of scientific fire investigation techniques. Instructor: Johnathan Butta, ATF		

---

**Lithium-Ion Battery Symposium – Live Stream Webinar**

---

Full-day webinar featuring multiple expert presenters covering lithium-ion battery hazards, failure modes, fire dynamics, suppression considerations, and investigative best practices.  
Sponsor: Fire Safety Research Institute

6.5 3/30/2023

---

**Challenges to Expert Qualifications, Methodology, & Opinions – Gretna, NE**

---

Examination of common challenges to expert witness qualifications, methodologies, and opinions in fire investigation and related litigation. Focus on preparing for Daubert hearings, cross-examination strategies, and strengthening expert testimony credibility.  
Instructors: David Bridges & Trace Lawless – IAAI

6 3/22/2023

---

**IAAI Nebraska 2018 Conference – Omaha, NE**

---

**Explosion Dynamics and Dust Explosions**

Investigation and analysis of explosion incidents with emphasis on dust explosion phenomena, ignition source characterization, and blast effect evaluation.  
Instructor: Dr. Scott Davis, PE

28 9/18/2018-  
9/21/2018

**Washington D.C. Arson Case Study**

Investigation of a high-profile arson case handled by the ATF, highlighting federal investigative techniques, evidence management, and fire cause determination. Detailed review of the Thomas Anthony Swett case, including coordination with law enforcement and interview techniques.

Instructor: Tom Daley, ATF

---

**Papillion Fire Department**

---

Complete over 100 hours of Fire/EMS training per year through the Papillion Fire Department. Examples of training include live fire operations, incident command, EMS continuing education, technical rescue, and hazardous materials response.

---

**LIVE FIRE TRAINING**

---

Omaha, NE – Metropolitan Community College

6/21/2024

A scene investigation was performed on a single room burn cell. This class was put on for the Papillion Fire Department Fire Investigation Team. The burn cell included several lithium-ion batteries within the debris, and the electrical system was energized at the time of the fire, so my team was able to practice an Arc Survey in a controlled environment. Instructor: David Sobotka – Omaha Fire Department

- Emmitsburg, MD – Fire Investigation Essentials 4/23/2024  
Appliances Lab – Various household appliances were examined, taken apart, and intentionally put in situations that may cause a fire. Internal safety components, such as thermostats and thermal cut outs were discussed. We then bypassed the redundant safety mechanisms in the appliances and intentionally caused them to fail in a controlled environment. Devices were taken apart and examined post fire.  
Instructor: David Cusatis – National Fire Academy
- Emmitsburg, MD – Fire Investigation Essentials 4/17/2024  
Electrical Lab – Household electrical systems were discussed. The lab building contained example components that would be found in a house. A main panel, branch circuits, various receptacles, switches, and components. We manipulated and changed wiring to simulate incorrect installation, as well as see live examples of failure in electrical components and overcurrent situations causing failure in extension cords.  
Instructor: David Cusatis – National Fire Academy
- Emmitsburg, MD – Fire Investigation Essentials 4/16/2024  
Live controlled burn of a flashover cell. 2 similar fires were burned with different ventilation conditions to demonstrate the differences in fire patterns, fire effects, and ventilation patterns. A total of 11 scene examinations were performed at the National Fire Academy during this class. Instructor: Kevin Oliver – National Fire Academy
- Kearney, NE – IAAI Nebraska 2023 Conference 9/21/2023  
Live controlled burn of a complex ventilation situation at the Kearney Fire Training Center. Fire dynamics and the effects of ventilation on the fire were observed in real time, bringing together all the classroom elements we had learned in a practical demonstration. 2 Scene Examinations were performed at this training.  
Instructor: Johnathan Butta – ATF
- Kearney, NE – IAAI Nebraska 2023 Conference 9/20/2023  
Smoking materials as ignition sources lab. A series of hands-on tests were conducted using smoking materials as the ignition source for our test fires. Many different configurations of both the source smoking materials and the fuels ignited were tested to gain a better understanding of conditions needed for flaming and smoldering combustion to take place. Instructor: Johnathan Butta – ATF
- David City, NE – IFIC Training Investigation Seminar 7/28/2023  
Setup, scenario development, and burning of 12 total burn rooms between 2 donated houses. These burns were in preparation for an all-day seminar aimed at insurance claims agents to help them better understand fire investigation, and some of the possible causes and scenarios we encounter in the field.

Fairbury, NE – Fairbury Vol. Fire Department Investigation Class 6/21/2019  
Controlled environment training burn where real-world fire causes were simulated by intentionally setting fires in different ways, demonstrating how unique burn patterns can present to investigators. 4 separate scene examinations were run throughout the day in different rooms of the donated house.

Papillion, NE – Papillion Fire Department Burn Demonstration 10/18/2018  
I took part in a fire safety week demonstration for school-aged children. 2 identical rooms were burned in a trailer-style burn box showing the difference between a sprinklered room and a non-sprinklered room, as well as the importance of crawling low in smoke. I assisted with the setting up of the rooms, as well as being on the fire suppression team.

Bellevue, NE – Papillion Fire Department Live Burn 9/28/2018  
Participated in a full-scale training exercise at the Bellevue Fire Training Center. Papillion, Bellevue, Gretna, Omaha, and Springfield Fire Departments were all in attendance. Live burning, standpipe operations, search and rescue drills, and hose line operations were all practiced in different evolutions throughout the day, with a real-time exercise at the end putting all of the skills together into one event.

#### **HONORS AND AWARDS**

---

<b>Life Saving Citation</b> – Papillion Fire Department	2025
<b>Code Save Award</b> – Papillion Fire Department	2025, 2024
<b>EMS Life Saving Medal</b> – Papillion Fire Department	2023, 2015, 2015
<b>City Life Saving Award</b> – La Vista Police Department	2023
<b>10 Year Service Award</b> – Gretna Volunteer Fire Department	2022

Multiple commendations for sound judgment and life-saving performance in high-pressure emergency situations.