



textbook National Fire Protection Association—NFPA 921 Guide to Fire and Explosion Investigation appropriate edition.

- a. NFPA 1033 Standard for Fire Investigations;
- b. NFPA 472 Standard for Profession Competence of Responders to Hazardous Materials;
- c. NFPA 704 Standard for Identification of Fire Hazards of Materials;
- d. Department of Transportation D.O.T. Placarding;
- e. Introduction to Material Safety Data Sheets MSDS;
- f. Legal Considerations;
- g. Building Systems;
  - i. Fuels—Natural and Propane Systems; and
  - ii. Electrical Systems—Single Phase
- h. Fundamental Electrical Theory;
  - i. Ohm's Laws;
  - ii. Power Laws; and
  - iii. System Electrical Heat Development and Measurement;
- i. Fire Scene Investigation;
- j. Compartment Fire Development; and
- k. Heat Transfer—Conduction—Convection—Radiation.

April 1982 to July 2006 Senne, Kelsey & Associates, Inc.

*Fire Cause Consultant*

Investigate fires and fire/explosions for causation relating to electrical and mechanical failures, pyrotechnics, blasting incidents and carbon monoxide investigations, including cause of fire related injuries and fatalities, and smoke detector issues.

January 1986 to March 23, 1999 City of St. Louis Fire Department

*Chief Investigator*

Commanded supervised and trained the fire investigation unit of the St. Louis Fire Department; supervision of all fire origin and cause investigations; site investigator on all fires involving fatal and/or critical injuries; site investigation supervisor on all fires three alarm and greater; Department Instructor relative to the origin and cause of fires/explosions. Coordinated large loss multi agency investigations; continued large loss multi-agency investigations; assisted in promotion examinations-San Francisco Fire Department.

October 1984 to January 1986 City of St. Louis Fire Department

*Fire Captain*

Inspected high rise buildings; commanded Snorkel #6 which is utilized in fire fighting operations for downtown high rise buildings and large multi-alarm fires; coordinated and instructed fire fighters in all aspects of fire prevention and suppression.

April 1980 to October 1984 City of St. Louis Fire Department

*Line Position—Fire Fighter*

Acting captain Engine Company 2; Supervised activities of Engine Company 2 under normal and emergency situations.

1980 to 1982 Self-Employed

*Fire Cause Investigator (Private Sector)*

Concurrent full time employment with the St. Louis Fire Department as a firefighter.

August 1972 to April 1980 City of St. Louis Fire Department

*Fire Cause Investigator*

Inspected fire scenes; Interviewed fire fighters; Gathered pertinent information relative to fires, explosions and their causes; Gathered physical evidence, photographed scenes, correlated facts and formulated reports; Provided expert testimony in depositions, grand juries, civil and criminal courts.

1967 to 1970 William Mauller Heating & Air Conditioning

*Installation and Repair (part time)*

Installed and repaired gas-fired boilers and furnaces; Installed and repaired gas-fired conversion boilers, forced air furnaces and water heaters; Concurrent employment with the St. Louis Fire Department.

May 1966 to August 1972 City of St. Louis Fire Department

*Line Position—Fire Fighter*

Performed emergency firefighting duties, inspections and lectured at schools on fire safety and prevention.

July 1959 to May 1966 McCabe Powers Body Company

*Hydraulic Systems Mechanic*

Assembled heavy systems used on elevating platforms, telescopic booms and augers; Work included mechanics of hydraulic fluid systems, power take off, motors, pumps, valves and pistons. Paint shop—worked with volatile liquids.

## CERTIFICATIONS

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Fire Investigation:

*Missouri State Certified Fire Investigator*

*Illinois Licensed Permanent Employee Registration Card (P.E.R.C.)*

*Private Detective Registration Number 0129-187146*

*Colorado State Certified Fire Investigator*

*Number 052200001*

*Nationally Certified Fire Explosion Investigator (CFEI)*

*Number 3122-0197*

*National Association of Fire Investigators*

Private Detective:

*Kansas License Number D-4463*

*Arkansas License Number D04-096*

*Nebraska License Number 626*

Formerly Certified as Construction Electrical Inspector, 1& 2 family dwellings, 1980s

*International Institute of Electrical Inspectors*

#### PROFESSIONAL MEMBERSHIPS

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National Association of Fire Investigators

National Fire Sprinkler Association, Inc. (Former)

International Association of Arson Investigators

National Fire Protection Association

St. Louis Community College at Forest Park

· *Advisory committee/Municipal Services Department for Fire Protection Technology and Building Inspection and Code Enforcement*

· *International Association of Electrical Inspectors (Former)*

· *Adjunct professor for Fire Protection Technology curriculum*

#### ADDITIONAL TECHNICAL TRAINING

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September 28 to October 2, 2013: Professional Fire & Fraud Investigators: "Fire Investigation Training" –12 hours Fire Investigation Training

IAAI –Tested—Training Programs:

· *March 1, 2015: NFPA 1033 and Your Career –Tested/Passed*

· *March 1, 2015: Introduction to Fire Dynamics and Modeling –Tested/Passed*

· *February 28, 2015: The Deposition Part 2: Questioning Tactics and Effective Responses –Tested/Passed*

· *February 24, 2015: The Deposition Part 1: Format, Content, and Preparation –Tested/Passed*

· *January 5, 2015: Fire Investigator Scene Safety –Tested/Passed*

- *August 25, 2014: Process of Elimination –Tested/Passed*
- *February 5, 2014: The Scientific Method for Fire and Explosion Investigation –Tested/Passed*
- *February 5, 2014: Fundamentals of Residential Building Construction – Tested/Passed*
- *February 5, 2014: Effective Investigation and Testimony –Tested/Passed*
- *February 3, 2014: Documenting the Event–Tested/Passed*
- *January 23, 2014: Investigating Fatal Fires –Tested/Passed*
- *January 22, 2014: Insurance and the Fire Investigation –Tested/Passed*
- *January 16, 2014: Digital Photography and the Fire Investigator – Tested/Passed*
- *January 15, 2014: A Ventilation-Focused Approach to the Impact of Building Structures and Systems of Fire Development –Tested/Passed*
- *March 14, 2013: International Association of Arson Investigators, Inc: “Fire Protection Systems” –Tested/Passed*
- *November 5, 2012: International Association of Arson Investigators, Inc: “Explosion Dynamics” –Tested/Passed*
- *November 2, 2012: International Association of Arson Investigators, Inc: “Electrical Safety” –Tested/Passed*
- *November 2, 2012: International Association of Arson Investigators, Inc: “Arc Mapping Basics” –Tested/Passed*
- *November 22, 2010: International Association of Arson Investigators, Inc: “Utilizing NFPA 1033 and 921” –Tested/Passed*
- *November 4, 2010: International Association of Arson Investigators, Inc: “Certificate of Participation: Evidence Examination” –Tested/Passed*
- *November 4, 2010: International Association of Arson Investigators, Inc: “Certificate of Participation: Fundamentals of Interviewing” –Tested/Passed*

February 13 to 15, 2007: “Forensic Fire Scene Reconstruction” given by David Icove and John DeHaan in Topeka, Kansas

April 1 to 3, 2003: “National Technology Transfer - National Fire Alarm Code” in St. Louis, Missouri

April 1997: University of Missouri, Columbia “Study of Clandestine Drug Lab Operations—16 Contract Hours

August 11 to 15, 1997: Attended National Institute of Standards and Technology (NIST) Second International conference on “Fire Research and Engineering” in Gaithersburg, Maryland.

Fire Modeling:

- *November 14 to 15, 1997: Applications of FPETool—Society of Fire Protection Engineers: “Theory and Application of Fireform, Computer Compartment Fire Modeling and Post Fire Analysis” in Nashville, TN – Tested/Passed*
- *July 1995: National Association of Fire Investigators—Mathematical Computer Fire Modeling Seminar*

Electrical:

Spring, 1996: St. Louis Electrical Board “Systems Grounding”—Study of Electrical System with Emphasis on Grounding

Fall, 1995: St. Louis Electrical Board “Transformers”—1.0 CEU

Spring, 1995: St. Louis Electrical Board “Motors”—2 CEU’s

April 22, 1995: International Association of Electrical Inspectors—Electrical Inspector; One and Two Family Dwellings—Tested/Passed  
Written Examination Established by Board of Governors of the National Certification Program

Fall, 1994: St. Louis Electrical Board “Electrical Power Systems I”—Tested/ Passed

October 10, 1994: International Association of Electrical Inspectors (NEC) “One and Two Family Dwellings” Seminar—Study of 120/240 Volt Residual Systems—Tested/Passed

Spring, 1994: St. Louis Electrical Board “Fundamentals of Electrical Theory”

June 8, 1994: Missouri Association of Code Enforcement “Electrical Maintenance Inspections”

July 6 to July 17, 1992: National Fire Academy “Code Management—A Systems Approach” in Emmetsburg, Maryland

November 26 to December 7, 1990: National Fire Academy “Plan Review for Inspectors—Codes” in Emmetsburg, Maryland

Summer, 1990: St. Louis Community College at Florissant Valley “National Electric Code” and “NFPA-70 Standards & Calculations”—2.4 CEU’s

May 2 & 3, 1990: “Life Safety & Fire Suppression Systems” sponsored by Metro Fire Marshal’s Association, Association of Building Officials &

Inspectors and Society of Fire Protection Engineers

August 27 to September 1, 1989: Federal Bureau of Investigation "Arson Crime Scene School" in Quantico, VA (40 hour course)

August 23 to 25, 1989: National Association of Fire Investigators "Fire & Explosion Seminar. National Certification" (Certified Fire & Explosion Investigator)

August 22, 1989: Union Electric Company "Electrical Safety Seminar," in St. Louis, MO

July 20, 1989: Suburban Propane Company "Propane Systems" in St. Louis, MO

July 11 to 12, 1989: "Blasting for Inspectors Seminar" Explosives Management & Technical Service in Kansas City, MO

June 12, 1989: Laclede Gas Company "Operation of Gas Appliances Workshop" in St. Louis, MO

April 1988: Federal Bureau of Investigation "Bombing Crime Scene School" in Quantico, Virginia. (40 hour course)

February 1988: National Fire Academy "Chemistry of Hazardous Materials" in Emmetsburg, Maryland (80 hour course)

October 1987: Department of Treasury, Bureau of Alcohol, Tobacco & Firearms "Advanced Arson for Profit" in Glynco, Georgia (80 hour course)

February 1987: National Fire Academy "Fire and Arson Investigation" in Emmetsburg, Maryland (80 hour course)

December 1-5, 1986: Developed and supervised a training seminar with live structural burns utilizing gas fired appliance and incendiary devices as ignition sources with ignitable liquids and first fuels ignited.

1986: "Certificate in Teaching Fire and Arson Investigation" conducted by St. Louis Fire Department in conjunction with the National Fire Academy "Train the Trainer" program.

September 1986: Department of Treasury, Bureau of Alcohol, Tobacco & Firearms "Advanced Explosives Investigative Techniques Program" in Glynco, Georgia (80 hour course).

July 1986: Laclede Gas Company "Design & Function of Supply Systems & Appurtenances/Recognizing Explosions, Their Fuels & Results." in St. Louis, Missouri

July 1986: A.T.& F. and Department of Treasury "Explosives and Triggering Devices" St. Louis, Missouri

May 1986: Missouri State Certification "Fire Investigator" meeting requirements of the National Fire Protection Association Standard Number 1033

May 1985: National Fire Academy courses "Preparing for the Incident" and "Commanding the Initial Response" in St. Louis, Missouri

April 1985: Seminar by Bureau of Explosives and Railroad Association "Hazardous materials relative to transportation"

1977: Seminar by agents of F.B.I. and A.T.& F. "Bombs and explosives" attended through St. Louis Police Academy

1974: Seminar by National Association of Fire Investigators "Cause and origin of fires and explosions" in Chicago, Illinois

1972: Arson investigation seminar provided by the St. Louis Metropolitan Police Department; Studied legal aspects of fire and arson investigation (80 hours)

August 1972 to October 1972: Attended lectures coordinated by St. Louis Fire Department to correlate theory and learning with practical experience. Entire focus on origin and cause of fires and explosions. (480 hours of study)

#### PRESENTATIONS/PUBLICATIONS

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June 19, 2012: Sifting Through Ashes: A History of Fire Investigation at Missouri History Museum, a joint program of Academy of Science, St. Louis and the Missouri History Museum.

September 26, 2007: Lectured on fire site investigation to a Forensic Evidence Class at St. Louis University School of Law.

August 1990: NFPA—Fire Technology—Letter to the editor—Collapsed Spring Observations in Arson Investigations

#### PERSONAL INFORMATION

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Born March 23, 1941 in St. Louis, MO

Married with three children and eight grandchildren.