## Stuart W. Bayne

## **Curriculum Vitae**

**DOES BUSINESS AS:** Confidential Origin & Cause Investigations (TN PI/Co. Lic. - 0501/0328; NC PI, 5188)

1143 Oak Ridge Turnpike, Suite 107A-136, Oak Ridge, TN 37830

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#### PERFORMANCE SUMMARY

• 46 years associated with the fire service in a wide variety of functional areas.

- 38 years as an investigator of the origin and cause of fires and explosions. Investigated the origin and cause of
  more than 1000 fires or explosions (estimated).
- 36 years of interviewing witnesses and persons having varying interests in fire and explosion scenes.
- 35 years providing expert opinion testimony in and out of federal, state, and local court systems. Delivered over 65-70 Discovery Depositions and court appearances (list available upon request). Testified as an expert in the origins and causes of fires and explosions and in the assessments of fire department organizations.
- 28 years as a licensed Private Investigation company and as a licensed Private Investigator (TN).
- Licensed (#5188) as a Private Investigator in the State of North Carolina (2016).
- Member, State of Tennessee Private Investigation and Polygraph Commission (2017).
- Certified as a Private Investigation Trainer by the TN Private Investigation and Polygraph Commission (2013).
- Certified as a Fire and Explosion Investigator by the National Association of Fire Investigators (12/2002).
- Certified as a Fire Investigation Instructor by the National Association of Fire Investigators (03/19/03).
- Certified as a Fire Science Instructor by the State of Tennessee Fire Fighting Commission (4/80-5/88).
- Certified as a Vehicle Fire Investigator by the National Association of Fire Investigators (09/28/07).
- Certified to teach Fire Science, New Jersey Union County Tech. Institute & Voc. Center (1979-1984).
- Certified by Personality Insights, Inc. as a Human Behavior Consultant (2000).

### **EMPLOYMENT HISTORY**

- 01/2019 Present Part-time Emergency Management consultant, Navarro Research and Engineering, Inc. Provide part-time, Emergency Management, technical assistance to the U.S. DOE Oak Ridge Office of Environmental Management.
- **2017 Present** Member, State of Tennessee Private Investigation and Polygraph Commission. Serve as one of nine voting members of a Governor-appointed, State Regulatory Board within the Tennessee Department of Commerce and Insurance.
- **2009 2018** Emergency Management Specialist, AWD Management Services, Inc. A company providing technical support to the Emergency Management Team of the U. S. Department of Energy (DOE) Oak Ridge Office. Duties include evaluating technical planning documents, conducting program assessments, providing emergency response support, etc. Holder of a DOE Security Q-Clearance.
- **2003 2009 Project Emergency Management Program Lead,** Bechtel Jacobs Company, LLC (BJC). A prime environmental management contractor for the U. S. DOE. Principal duties include project emergency management program administration, emergency planning and preparedness, response, and readiness assurance activities. Holder of a DOE Security Q-Clearance.
- 1982 Present Independent Fire/Explosion Origin and Cause Analyst. Serve as independent contractor to insurance companies, private citizens and organizations, governmental agencies, law firms, etc. Services provided include: The origin and cause of fires and explosions and the analysis/evaluation of fire department organizations (including evaluations of emergency planning, preparedness, and response). Provided expert witness testimony over 65 times regarding civil and criminal matters for both Plaintiffs and Defendants (testimony list is available upon request).

10/2019

### 1989 - 2000 Program Manager/Senior Technical Specialist/Coordinator of the Technical Expert

**Program**, Emergency Management Laboratory, Oak Ridge Institute for Science and Education Principal author and instructor of the 4.5 day course titled, "Emergency Management in the DOE System" (1991-95). Technical Lead for Federal Fire Fighter Certification Programs (1989) and DOE Site Emergency Services Regulatory Information Management Systems projects (1990-91). DOE EMI SIG Coordinator (1991-92), emergency exercise instructor, designer, controller, and evaluator (1991-2000). Responsible for several projects and publications.

#### 1973 - 1987

Career, Volunteer, and Special Reserve Fire Fighter, City of Summit, New Jersey, Knox (Rural Metro Corporation), and Roane County, Tennessee. Volunteer with Engine 6 and Rescue 1 in Newark, New Jersey (1978-1979). Member, Board of Directors, Roane County Volunteer Fire Department, Training Committee Chairman; Secretary of the Board of Directors.

Career, Paid Fire Fighter. <u>06/1973 – 12/1979</u> with the City of Summit, New Jersey. Summit Fire Department: a one-station, combination paid/volunteer organization, containing approximately 35 paid fire fighters and 50-60 volunteer fire fighters, serving a six-plus square mile city with a population of approximately 30,000. Performed all functions within the department. Functions included the following:

- Inspections and codes enforcement.
- Fire prevention and safety education.
- Home and commercial fire safety analyses.
- Training evolutions.
- Dispatch operations.
- Inspection and maintenance of municipal fire alarm and water systems.
- Fire suppression and hazardous materials response.
- Rescue.

# Volunteer Fire Fighter and Special Reserve Fire Fighter. <u>01/1980 – 06/1987</u>

Volunteer fire fighter (Roane County, TN) with the Second District of Roane County (Blair Volunteer Fire Department) and special reserve fire fighter with the Tennessee Rural Metro Fire Department, Knox County, Tennessee. Secretary to the Roane County Volunteer Fire Department Board of Directors; Training Committee Chairman.

### 1986 - 1989

**Independent Fire Protection Management Consultant.** State-funded, University of Tennessee – Municipal Technical Advisory Service (1987-89). Responsible for fire management consulting, including the following:

- Municipal fire defense assessments.
- Station location and water system assessments.
- Generation of fire protection management news articles for Tennessee Town and City.
- Manual for the evaluation of municipal fire departments, and other projects as needed.

**Resident Instructor.** International Society of Fire Service Instructors (ISFSI), "Company Officer I" Certification Training Program. Seminars taught included: Records Management, Arson, and Advanced Fire Investigation (September and December 1988).

**Chairman.** Mayoral-appointed Knoxville, Tennessee Blue Ribbon Committee for the Investigation of the Fire Department (1986-1987).

**Chairman.** Knoxville Fire Department Fire Fighter Career Development System Committee (1987-1988).

Senior Technical Specialist and Technical Task Lead. Development of the Federal Fire Fighter Certification System for the United States Department of Defense (January 1989 – December 1989). Independent contract with Oak Ridge Associated Universities. Certification systems (in whole or in part) developed for Fire Fighter Levels I, II, and III, Fire Officer Levels I, II, and III, and Fire Inspector I.

01/1980 – 06/1988 Assistant Professor/Program Coordinator, Fire Science Technology Programs,
Department of Engineering Technology, Roane State Community College (RSCC), Harriman,
Tennessee. Associates Degree level, Fire Science Technology programs.

Served as principal faculty member (taught all courses) and served as Coordinator for an instructional cadre of 1-6 part-time instructors. Initiated Cumberland County Arson Task Force with a RSCC student. Co-authored and participated in developing and operating the East Tennessee Regional Fire Fighter Team Competition (1983-1986).

Quarterly (ten week), college-level, 30 hour courses taught that were relevant to fire/arson investigation and fire protection, prevention, and management:

Introduction to Fire Science	Fire Fighting Strategy
Industrial Hazards	Water Suppression Systems
Inspection Principles and Practices	Hazardous Materials
Blueprint Reading and Sketching	Fire Department Administration
Construction Codes and Fire Protection Standards	Fire Protection Equipment and Systems
• Fundamentals of Fire Prevention	Arson Detection and Investigation
Seminar	Emergency Services Organizations
Instructor Training	Water Distribution
Fire Protection Law	Fire Investigation Practicum
Principles of Hydraulics	Practicum

## Other training workshops or seminars in which training and leadership were provided:

- September December 1978: "Fire Science Instructor," Union County Technical Institute, Scotch Plains, New Jersey: "Management of Fire Department Operations." A semester-long, 45-hour, technical-school-level course.
- May 1980: Working with the Tennessee Fire Incident Reporting System. A seminar organized for the State
  of Tennessee Commission on Fire Fighting Personnel Standards and Education.
- August, 1980: "Management Tools and Techniques," United States National Fire Academy, Special Weekend Seminar for the International Association of Fire Chiefs.
- November 1981: Fall Conference of the ISFSI, Carlisle, Pennsylvania.
- March 28 April 1 1982, "Full Time/Part Time Instructional Coordination" for the 53<sup>rd</sup> Annual Fire Department Instructors Conference (FDIC), Memphis, Tennessee.
- October 27 30 1983 ISFSI Professional Improvement Seminar and Workshop, Camp Hill, Pennsylvania.
- March 18-22 1984: Fire Department Instructor's Conference, Cincinnati, Ohio.
- March 17-21 1985: Fire Department Instructor's Conference, Cincinnati, Ohio.
- September 1988: Company Officer Development I School, outside Boston, Massachusetts.
- December, 1988: Company Officer Development I School, outside Boston, Massachusetts.
- ~1989: East Tennessee Insurance Claims' Adjusters Association meeting.
- June 12, 2007: TN Professional Investigators Association (TPIA) meeting; guest speaker, "The Market for Fire Investigations."
- October 13, 2007: TN Association of Investigators (TAI) Three-Hour Seminar in Tunica, Mississippi

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- March 8, 2008: TN Professional Investigators Assoc. Annual Seminar, Gatlinburg, Tennessee.
- August 22-23, 2008: TN Association of Investigators Annual Seminar, Memphis, Tennessee.
- October 24, 2009: TN Association of Investigators Annual Seminar, Memphis, Tennessee.
- March 2010: TN Professional Investigators Assoc. Annual Seminar, Gatlinburg, Tennessee.
- October 2010: TN Association of Investigators Annual Seminar, Memphis, Tennessee.
- March 2011: TN Professional Investigators Assoc. Annual Seminar, Gatlinburg, Tennessee.
- October 2011: TN Association of Investigators Annual Seminar, Memphis, Tennessee.
- March 2012: TN Professional Investigators Assoc. Annual Seminar, Gatlinburg, Tennessee.
- October 2012: -TN Association of Investigators Annual Seminar, Memphis, Tennessee.
- October 2013: -TN Association of Investigators Annual Seminar, Memphis, Tennessee.
- October 2014: -TN Association of Investigators Annual Seminar, Memphis, Tennessee.
- October 2015, TN Association of Investigators, Annual Seminar, Memphis, Tennessee.
- March 2016: TN Professional Investigators Assoc. Annual Seminar, Knoxville, Tennessee.
- March 2019: TN Professional Investigators Assoc. Annual Seminar, Knoxville, Tennessee.
- April 2019: TN Association of Criminal Defense Lawyers, Forensic Seminar, Memphis, TN.

## FORMAL COLLEGIATE EDUCATION

- 09/1968 01/1973 Bachelor of Arts, Psychology (with a concentration in science courses) Lehigh University, Bethlehem, Pennsylvania. One year of Mathematics, Two years of Chemistry (Inorganic Chemistry and Organic Chemistry, with laboratory exercises).
- 01/1974 05/1977 Master of Arts, Human Development, Fairleigh Dickinson University, Rutherford, New Jersey. Human Development program was a specially designed educational program for professional teachers. Credit hours required for graduation: 39 hours.
- 01/1978 12/1978 Bachelor of Science, Criminal Justice, Fire, Safety, and Security Administration,

  Jersey City State College, Jersey City, New Jersey. Dean's List in Spring '78, Fall '78 semesters.

  This educational program consisted of a core set of Administration courses for all persons majoring in Criminal Justice, Fire, Safety, or Security specialties. Eight other courses taken were focused on fire science and fire protection and included the following:
  - Introduction to Fire Science.
  - Fire Prevention/Related Codes.
  - Transportation and Industrial Fire Hazards.
  - Hydraulic Technology.
  - Fire Department Management and Administration.
  - Fire Science Instructor Training.
  - Hazardous Materials.
  - Seminar in Fire Engineering.

### TRAINING/EDUCATION SEMINARS RELEVANT TO FIRE/ARSON INVESTIGATIONS

1978 and 1979, Permission provided to "ride" as a volunteer fire fighter with specified fire stations and shifts (permission provided in writing by City of Newark, New Jersey Fire Chief, Stanley Kossup).

February 1979, "Fire and Arson Investigation," New Jersey State Fire College.

April 1979, "Advanced Truck Operations Course," New Jersey State Fire College, Seaside Heights, New Jersey.

October 1979, "Supervising Fire Ground Operations," New Jersey Chapter of the International Society of Fire Service Instructors, Edison, New Jersey.

March 23, 1980, Building Construction Seminar, Memphis, Tennessee.

March 24-28 1980, Fire Department Instructors Conference, Memphis, Tennessee August 17, 1980, United States National Fire Academy Arson Seminar delivered by Thomas Minnich.

August 1980, Permission to visit and meet with representatives of the Newark New Jersey Arson Squad at Newark, New Jersey Arson Squad Headquarters.

March 1980 and March 1981, Fire Department Instructors Conference, Memphis, Tennessee.

October 22 – 25 1981, Fall Conference of the ISFSI, Louisville, Kentucky.

September 3, 1981, "Handling Aircraft Fires and Emergencies," Tennessee Rural Metro Fire Department Corporation, Knoxville, Tennessee.

March 28 – April 1, 1982, Fire Department Instructors Conference, Memphis, Tennessee.

October 27-31, 1982, Fall Conference of the ISFSI, Hartford, Connecticut.

March 13-17 1983, Fire Department Instructors Conference, Memphis, Tennessee.

October 27-30, 1983, Fall Conference of the ISFSI, Camp Hill, Pennsylvania.

March 18 – 22, 1984, Fire Department Instructors Conference, Cincinnati, Ohio.

March 17 – 21, 1985, Fire Department Instructors Conference, Cincinnati, Ohio.

March 17 – 21 1986, Fire Department Instructors Conference, Cincinnati, Ohio.

March 23 – 27 1987, Fire Department Instructors Conference, Cincinnati, Ohio.

March 1989, Fire Department Instructors Conference, Cincinnati, Ohio.

March 8, 1996, 6 hours of continuing professional education, Knoxville Chapter of the Tennessee Association of Investigators.

December 14, 1996, 6 hours of continuing professional education, Knoxville Chapter of the Tennessee Association of Investigators.

July 14 – 18 1997, United States Bureau of Alcohol, Tobacco, and Firearms Fire and Explosion Training Program, Division Response Team training.

December 4, 1999, Six Hour Continuing Education Seminar provided by SBI Seminars, "Fraud and the P.I. Seminar," Knoxville, Tennessee.

## TRAINING/EDUCATION SEMINARS RELEVANT TO FIRE/ARSON INVESTIGATIONS (Continued)

2000 Continuing Education Seminar for Private Investigators, provided by the Integrity International Security Services, Inc., Nashville, Tennessee.

August 5 – 9, 2002, Tennessee Chapter of the International Association of Arson Investigators "Specialized School in Modern Techniques of Fire and Arson Investigation."

March 18-19 2003, Instructor Training Certification, National Association of Fire Investigators, Lexington, KY.

August 2-6, 2004, Tennessee Chapter of the International Association of Arson Investigators "Specialized School in Modern Techniques of Fire and Arson Investigation" (portions of; not the entire week).

December 4, 2004, Six hour seminar provided by National Resource and Training Services, Inc. "Effective Report Writing and Using Computers and the Internet," Cleveland, Tennessee.

March 2005, Six Hour Continuing Education Seminar provided by Tennessee Professional Investigators Association, Gatlinburg, Tennessee.

August 1-5, 2005, Tennessee Chapter of the International Association of Arson Investigators "Specialized School in Modern Techniques of Fire and Arson Investigation."

July 31- August 4 2006, Tennessee Chapter of the International Association of Arson Investigators "Specialized School in Modern Techniques of Fire and Arson Investigation."

August 26, 2006, Three hours of Continuing Education provided by the Tennessee Association of Investigators, Memphis, Tennessee.

April 21, 2007, Three hours of Continuing Education provided by the Tennessee Association of Investigators, Nashville, Tennessee.

August 10, 2007, Attendance on the fifth day of the Tennessee Chapter of the International Association of Arson Investigators Conference, "Specialized School in Modern Techniques of Fire and Arson Investigation," Pigeon Forge, Tennessee.

September 24-27, 2007, 2007 Vehicle Fire, Arson and Explosion Investigation Science and Technology Seminar, Sponsored by the National Association of Fire Investigators and the National Fire Protection Association.

October 12, 2007, Three hours of Continuing Education provided by the Tennessee Association of Investigators, Tunica, Mississippi.

March 8, 2008, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Gatlinburg, Tennessee.

August 19 and 20, 2008, Attendance at the Tennessee Chapter of the International Association of Arson Investigators Conference, "Specialized School in Modern Techniques of Fire and Arson Investigation," Pigeon Forge, Tennessee.

August 23, 2008, Six hours of Continuing Education provided by the Tennessee Association of Investigators, Memphis, Tennessee (Served as the seminar organizer and Emcee).

October 27-28, 2008, 16 hours, Forensic Fire Scene Reconstruction by the West Virginia Chapter of the International Association of Arson Investigators; Instructors were two authors, Dr. David Icove and John DeHaan.

March 2009, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Gatlinburg, Tennessee (Delivered a two-hour fire investigation related session).

## TRAINING/EDUCATION SEMINARS RELEVANT TO FIRE/ARSON INVESTIGATIONS (Continued)

October 2009, Six hours of Continuing Education provided by the Tennessee Association of Investigators, Memphis, Tennessee (Delivered a one-hour Ethics session).

October 20, 2009, Eight hour course, Fire Behavior in a Single Family Residence (NFADD1), sponsored and delivered by the National Fire Academy.

March 2010, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Gatlinburg, Tennessee (Delivered a one-hour Ethics session).

October 2010, Six hours of Continuing Education provided by the Tennessee Association of Investigators, Memphis, Tennessee (Delivered a two-hour Ethics session).

March 2011, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Gatlinburg, Tennessee (Delivered a one-hour Ethics session).

October 2011, Six hours of Continuing Education provided by the Tennessee Association of Investigators, Memphis, Tennessee (Delivered a two-hour Ethics session).

March 2012, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Gatlinburg, Tennessee (Delivered a one-hour Ethics session).

October 2012, Six hours of Continuing Education provided by the Tennessee Association of Investigators, Memphis, Tennessee (Delivered two one-hour sessions, Ethics and Myths about Private Investigators).

October 15-17, 2012, three-day International Symposium on Fire Investigation Science and Technology, College Park, Maryland.

March 2013, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Knoxville, Tennessee.

October 2013, Six hours of Continuing Education provided by the Tennessee Association of Investigators, Memphis, Tennessee (Delivered a one-hour session, Investigator Joint Task Force Concept).

March 2014, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Knoxville, Tennessee.

October 2014, Six hours of Continuing Education provided by the Tennessee Association of Investigators, Memphis, Tennessee (Delivered two one-hour sessions, fire investigation and Ethics).

March 2015, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Knoxville, Tennessee.

March 2016, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Knoxville, Tennessee (Delivered a one-hour session on "Myths about Private Investigators").

October 2016, Six hours of Continuing Education provided by the Tennessee Association of Investigators, Memphis, Tennessee.

March 13-16, 2017, 2017 Fire, Arson and Explosion Investigation Training Program, Eastern Kentucky University, Richmond, Kentucky.

April 2017, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Pigeon Forge, Tennessee.

## TRAINING/EDUCATION SEMINARS RELEVANT TO FIRE/ARSON INVESTIGATIONS (Continued)

March 2018, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Pigeon Forge, Tennessee.

November 2018, North Carolina Association of Private Investigators Annual two-day Conference, Carolina Beach, North Carolina.

March 2019, Six hours of Continuing Education provided by the Tennessee Professional Investigators Association, Knoxville, Tennessee.

October 2019, Twelve hours of Continuing Education provided by the Tennessee Association of Licensed Professional Investigators, Nashville, Tennessee.

February 2020, Day-long Symposium, "Modern Forensic Science, Expert Testimony, and Exonerations as Applied to Fire Investigation, Lincoln Memorial University School of Law, Knoxville, Tennessee

## PROFESSIONAL AFFILIATIONS, LICENSES, CERTIFICATIONS, ETC.

Member, International Society of Fire Service Instructors (approx. 1979 – 1989).

Member, National Fire Protection Association (approx. 1980 – 1989; 2007 – Present).

Member, Fire Science and Technology Educators Association, NFPA (1980 – 1989).

Member, Tennessee Chapter of the Society of Fire Protection Engineers (approx. 1980 – 1985).

Member, Tennessee Association of Criminal Defense Lawyers (2007 – Present).

Member, International Association of Arson Investigators (1983 – Present).

Member, International Association of Emergency Managers (1991 – 2000, 2006 – Present).

Member, National Association of Fire Investigators (2002 – Present).

Member, Tennessee Professional Investigators' Association (2005 – Present); Vice-Chair (2015-2017).

Member, Tennessee Association of Investigators (2005 – Present); Vice-Chair (2012 – 2017).

Member, Tennessee Advisory Committee on Arson (1980's, 2006-2008).

Member, Tennessee Association of Licensed Professional Investigators (2010 – Present).

Member, State of Tennessee Private Investigation and Polygraph Commission (2017 – Present).

- Licensed as a Private Investigator (#0501) and Private Investigation Company (#0328), State of Tennessee, 1992 – Present.
- Licensed as a Private Investigator (#5188), State of North Carolina, 2016 Present.
- Certified as a "Fire Science Instructor" by the State of Tennessee Commission on Fire Fighting Personnel Standards and Education; April 11, 1980 May 1988.
- Certified to teach Fire Science by the State of New Jersey Union County Technical Institute & Vocational Center, 1979-1984.
- Certified as, "Fire and Explosion Investigator" by the National Association of Fire Investigators, December 13, 2002 Present. Certification was renewed in 2007, 2012, and 2017.
- Certified as, "Fire Investigation Instructor" by the National Association of Fire Investigators, March 19, 2003 Present.
- Certified as, "Vehicle Fire Investigator" by the National Association of Fire Investigators, September 27, 2007 Present.
- Certified as, "Human Behavior Consultant" by Insights Institute, August 7 9, 2000.
- Certified as a Private Investigation Trainer by the Tennessee Private Investigation and Polygraph Commission (2013 – Present).