



DALE R. WHEELER, P.E.

SPECIALTY AREAS

- Fire Protection System design, installation, maintenance, operation, failures:
 - Fire detection
 - Smoke detection
 - Carbon monoxide detection
 - Fire alarm
 - Central Station
 - Sprinkler systems – wet pipe, dry-pipe, pre-action, mist, antifreeze, fire pumps
 - Fire suppression systems
 - Smoke control
 - Sprinkler leakage, water damage, freeze damage, unwanted activation
 - Commercial kitchen cooking equipment, hood and vent, and associated fire suppression systems
- Fire and Smoke Barriers, including Underwriters Laboratories (UL) Standards and ASTM Standards
- Building Code, Life Safety Code, and Fire Code Compliance
- Fire Hazard, Building Materials, Fire Resistance Ratings
- Fire Cause and Origin; Fire Spread, Smoke Spread, Carbon Monoxide Poisoning
- Vehicle and Marine Fire Investigation
- Arson
- Human Behavior in Fire Conditions
- Means of egress, egress signage, emergency lighting
- Fire Modeling
- Building Codes, Fire Codes, National Fire Protection Association (NFPA) Standards

ACADEMIC BACKGROUND, MEMBERSHIPS, & AWARDS

- B.S., Fire Protection and Safety Engineering, Illinois Institute of Technology, 1974
- Basic Code Enforcement/Building Inspection, Building Officials and Code Administrators (BOCA)
- Member-National Fire Protection Association (NFPA), Member-Health Care Committee, NFPA
- Member-Society of Fire Protection Engineers (SFPE)
- Fire Science Advisory Committee, Northern Virginia Community College
- Instructor-Fire Detection and Suppression Systems, Northern Virginia Community College
- Past President Wisconsin Arson Insurance Council

CONTINUING EDUCATION COURSES

- BUILDING SYSTEMS
- FIRE EXTINGUISHERS
- INTERNATIONAL BUILDING CODE
- INTERNATIONAL FIRE CODE
- NFPA 101, THE LIFE SAFETY CODE
- FIRE AND SMOKE RESISTANT ASSEMBLIES
- INTERIOR FINISH AND FIRE
- FURNITURE AND FIRE
- ASBESTOS AWARENESS
- VOICE EVACUATION PRINCIPALS
- CONSTRUCTION TYPE
- OCCUPANCY CLASSIFICATION
- FALSE ALARM PREVENTION
- FIRE AND SMOKE DAMPERS
- CONSTRUCTION CLAIMS
- CONSTRUCTION DELAY ANALYSIS
- CARBON MONOXIDE DETECTORS

EXPERIENCE

Approximate number of careers cases: 220

Approximate number of career depositions: 65

Approximate number of career trial testimony: 32

CASE EXPERIENCE:

411 Chain Bridge Road, McLean, VA: Fire Protection expert services pertaining to unwanted fire sprinkler system activation in affluent executive residence. Technical topics included sprinkler system code requirements, freeze protection, sprinkler leakage, water damage, and installation provisions. (Analysis, report, 2007)

American Family Insurance, Eau Claire, WI: Investigation into vehicle fire cause and origin, with arson suspected. (Analysis, report, pre-2007)

Arango vs. Colonial Properties Trust, NC: Expert services with regard to an apartment fire in Carrboro, NC, involving a fatality. Analysis with respect to building and fire codes, building construction, fire spread, and smoke detector operation. (Analysis, report, deposition, 2010)

Arch Insurance v Triangle Fire, Miami FL: Expert services pertaining to analysis of a commercial kitchen hood and vent fire suppression system as involved in a fire. Assignment involved determination of adequacy of the suppression system installation and maintenance. (Analysis, report, deposition, 2008)

Al Plaza Oil Leak, San Juan, Puerto Rico: Investigation of significant damage in a high rise building owned by AI Group in San Juan, Puerto Rico. Damage was result of a fuel oil leak that was not detected by the oil sensor connected to the building fire alarm system. (Analysis, report, 2011)

Bailey vs Monitronics, Jackson, MS: Expert services pertaining to residential fire with one fatality. Identification of applicable code criteria, analysis of fire spread and growth, analysis of fire alarm system response, fire department response, effect on the elderly occupant of the building, create fire model. *U.S. District Court, Southern District of Mississippi, Case No. 3:09cv158HTW-LPA.* (analysis, report, deposition, 2014)

Bedford Residence, CT: Legal expert services for a fire cause and origin and construction defects involving analysis of construction and code compliance of a residential fireplace, effect of deficiencies on fire spread. (Analysis, report, deposition, pre-2007)

Body vs. Ancona, WI: Expert services to determine code requirements pertaining to smoke detectors, model fire and smoke development, and analysis of human behavior in a loss of life fire in Wisconsin. (Analysis, report, deposition, 2008)

Boyce v Central Security, Memphis, TN: Expert services to evaluate purpose and operation of a residential fire and security alarm system pertaining to a fire in a single-family residence. (Analysis, report, deposition, 2011)

BP Oil vs. City of Alexandria, VA: Expert witness for the petroleum facility regarding fire safety and code compliances regarding a petroleum facility. (analysis, report, pre-2007)

Brown v Fern Preservation and FJC Security, East Orange, NJ: Fire Protection and Fire Expert services regarding a high-rise apartment building fire with fatalities. Created computer model of fire addressing fire spread, smoke development, temperature rise, and toxic gases. Investigate fire scene. *Superior Court of New Jersey Law Division, Essex County, Case No. ESX-L-3138-14.* (Analysis, report, 2016)

Children's Hospital of Baltimore, MD: Legal expert services for a fire cause and origin including extent of damage. (Analysis, report, pre-2007)

Christian Day School vs. Fairfax City, VA: Expert witness for the school regarding building construction, occupancy classification, fire alarm, and sprinkler systems. (Analysis, report, deposition, pre-2007)

City Utilities, Springfield, MO: Investigation into vehicle fire cause and origin involving a public-passenger bus. (Analysis, report, pre-2007)

Coastal Fire Protection, Baton Rouge, LA: Fire protection expert services with regard to an unwanted sprinkler system activation in a high-rise building. Performed analysis of reason for sprinkler activation, lack of fire alarm reaction, and water damage. (Analysis, report, deposition, 2011)

Collier vs. Mountain State Inspection Services, WV: Expert services to determine code requirements and inspection responsibilities pertaining to smoke detectors in a loss of life fire. (Analysis, report, deposition, pre-2007)

Commonwealth of Virginia v Charles Kessler, Roanoke, VA: Arson Investigation, cause and origin determination for Attorney for Defendant in a case involving alleged arson. *Circuit Court for the City of Roanoke, Case No. CR14-1086.* (Analysis, report, 2014)

Commonwealth of Virginia v Sherry Lee Cruz, Winchester, VA: Arson investigation, analysis and expert witness services for Attorney for Defendant in a case involving alleged arson in a residence and the death of one occupant. Analyze scene, laboratory reports and existing documentation. *Winchester Circuit Court, Case No's CR13001070-00 and CR13001071-00.* (Analysis, report, 2014)

Commonwealth of Virginia v Tony Lawhorn, Roanoke, VA: Arson investigation, analysis and expert witness services for Attorney for Defendant in a case involving alleged vehicle arson. Analyze, laboratory reports and existing documentation, prepare report of findings. *Circuit Court City of Roanoke, Case No. CR15-1335.* (Analysis, report, 2016)

Corcoran Prison, CA: Legal expert services for design, construction, operation, maintenance, and testing of fire alarm systems. (Analysis, report, pre-2007)

Daffan Inc. v County of Arlington, VA, Arlington County, VA: Expert witness services to analyze accuracy, code compliance and thoroughness of construction drawings and specifications with regard to fire proofing and fire alarm systems. *Arlington County Circuit Court, Case No. 13-1915.* (Analysis, report, 2014)

Deanne A. Ellis v United States of America, Center for Disease Control, Atlanta, GA: Expert witness services to analyze code requirements pertaining to exit sign and exit sign mounting requirements. *U.S. District Court for Northern District of Georgia, Atlanta Division, Case No. 1:06-CV-00363-ECS.* (Analysis, report, deposition 2008)

Duah v Buzzoto, Fairfax, VA: Expert services with regard to unwanted activation of a sprinkler system in an apartment building, water damage assessment, effect of weather conditions, anti-freeze systems, sprinkler system maintenance and repair practices. *Circuit Court for Fairfax County, Case No. CL-2011-008827.* (Analysis, report, deposition, 2012)

Duffy/Schuda v PFB Center, Ottawa, IL: Expert services to analyze a fire with fatalities that occurred in a single-family residence. Determine cause and origin, effect of disabled smoke detectors, impact of carbon monoxide detectors in lieu of smoke detectors. *Case No, 18-cv-48, US District Court, Northern District of Illinois, Eastern Division.* (Analysis, report, 2020)

Eldridge, Almonte, and Benevides v KASL-Seabreeze Apartments and Subhash Agrawal, Dennis, MA: Expert services with regard to apartment building fire with injuries. Analysis of condition of older fire alarm system, operation of fire alarm system in the fire, fire alarm system maintenance and repairs, fire code requirements, failure rate of individual electronic components. *Barnstable Superior Court, Civil Action 14272CV00363, and 14272CV00535.* (Analysis, report, 2018)

Emgee Realty v A&B Security, Laru Brighton, and Verizon, Inc., Long Branch, NJ: Expert services addressing a fire in a building spreading to the adjacent building, destroying both. Issues analyzed include fire spread in archaic balloon-type construction, activation of fire alarm system, transmission to central station, fire department response, fire department operations. Created fire model. *Superior Court of New Jersey, Monmouth County Law Division, Case No. L-4219-07.* (Analysis, report, 2015)

Erie insurance Property and Casualty Company as subrogees of WVU Lofts, LLC v Spectrum Fire Protection, Inc., Morgantown, WV: Professional expert services pertaining to multiple freezes of fire sprinkler systems in 14 buildings used for housing of University students. Analysis addressed weather conditions, dry-sprinkler requirements, insulation requirements, cost estimates for water damage repair, thermostat capabilities, and general installation of sprinkler system subject to freezing conditions. *Circuit Court of Monongalia County, WV, Case No. 15-C-288.* (Analysis, report, 2018)

Fairfield Inn Sprinkler System, Chesterfield, VA: Investigation into failure of dry-pipe sprinkler system involving freezing and subsequent water damage as well as determination of installation and maintenance errors pertaining to the cause of the loss. (analysis, report, 2009)

Fireguard LLC v ATOTL, LLC, Fairfax County, VA: Expert services pertaining to fire sprinkler system design and installation of fire sprinkler system in high-rise multi-use building in Tysons Corner, VA. Determine duties of sprinkler system designer as compared to sprinkler system installer with regard to technical issues. (Analysis, report, mediation, 2017)

Fire Investigation, James Forrest, Richmond, VA: Expert witness services to determine the cause of a fire and damage to the roof and other areas of a residence. (Analysis, report, pre-2007)

Fire Watch Services, Manassas, VA: Provide professional fire protection engineering/expert witness services, pertaining to failure of dry-pipe and wet-pipe fire sprinkler systems, including site observation, review of applicable codes and criteria, presenting of findings and opinion, and preparation for depositions. (Analysis, report, deposition, 2007)

Florida State College at Jacksonville, Jacksonville, FL: Investigation into cause of sprinkler system leakage and pipe corrosion. Analysis of Microbiologically Influenced Corrosion (MIC) as cause. Supervise water sampling and laboratory testing for MIC. Development of remediation efforts to prevent future occurrences. (Analysis, report, 2008)

Graham v Stone, Stafford, VA: Investigation and expert witness services pertaining to destruction of residential wood deck by fire. Issues addressed include use of fireworks and ignition of wood decking. Investigate fire scene. *Circuit Court of Stafford County, Case No. CL15-210*. (Analysis, report, deposition, trial testimony 2017)

Grand Marquis Hotel, Wisconsin Dells, WI: Professional fire protection expert and expert witness services regarding technical assistance in evaluating fire protection and code issues in connection with a fire at the hotel. Issues include human behavior in fire conditions, fire and smoke development, construction, fire detection and alarm system, audibility of fire alarm system, and smoke compartmentation. (Analysis, report, deposition, trial testimony, pre-2007)

Greenbaum vs. Boardwalk Apartments, Lawrence, KS: Expert services regarding building and fire code analysis, arson evaluation, and fire spread analysis. (Analysis, report, deposition, 2010)

Hanlon v Premiere Marine Parts & Services LLC, Baltimore, MD: Professional expert services pertaining to fire and explosion aboard a boat, with property damage and injuries. Review case document including gas-sending equipment. *Circuit Court of Baltimore, Case No. 03C16009302*. (Analysis, report, 2017)

Hawkins, Harmon, Zamaria, and Guire v Emerald Point LLC and The Breeden Company, Virginia Beach, VA: Expert services with regard to long-term leakage of Carbon Monoxide in a multi-family apartment with injuries. Analysis of source of leakage, cause, migration, and responsibility. Analysis of proper methods for detection of leaks, training, repairs, maintenance, and failure of natural -gas heating systems. *Circuit Court of the City of Virginia Beach, VA, Case number CL14-5223.* (Analysis, report, deposition, 2018)

Holmes vs. Narver, New York, NY: Legal expert services regarding fire cause and origin, Central Station response. Performed analysis of Fire Department response. (Analysis, report, deposition, 2007)

Hurtado v Three Fountains One LLC, Houston, TX: Fire protection and expert witness services with respect to an apartment building fire involving arson and severe injury to an apartment resident. Issues investigated and analyzed include fire sprinkler systems, fire detection and alarm systems, fire safety and means of egress. *District Court of Houston, TX, Case No. 2011-40109.* (Analysis, report, deposition, 2012)

Ireland v Walsh, Westover, WV: Expert services pertaining to fire in apartment building involving injuries. Investigation and analysis with regard to spread of fire, means of egress, fire escapes, means of egress marking, exit signs, code compliance, smoke and heat detectors. *Circuit Court of Monongalia County, WV, Case No. 15-C-812.* (Analysis, report, deposition, 2017)

JC Corporation v Interstate Fire & Safety Equipment Company, Stamford, CT: Investigate fire based on documents, photographs and reports by others for a fire that occurred with the scene closed to prior to engagement. Fire was in a restaurant property. Issues involve commercial kitchen hood, duct, and fire suppression systems, use of plasma cutter in removal of the kitchen hood, fire cause and origin and licensing of workers. (Analysis, report, deposition, trial testimony, 2012)

King v Steward Towers, Laurel, MD: Expert services with regard to residential kitchen fire and explosion with injuries. Analyze appliance operation, gas leak, fire and explosion. *Circuit Court for Prince George's County, MD, Case No. CAL16-18490.* (Analysis, report, deposition, 2017)

Konz Estate v Raybuck Dwelling Trust, Clearfield County, PA: Expert services with respect to apartment fire involving a fatality. Issues include arson, means of egress deficiencies and lack of fire protection systems in building built in 1914. *Court of Common Pleas of Clearfield County, PA, Case No. 2011-676-CD.* (Analysis, report, 2013)

Lake Laura Fire Investigation, Bayse, VA: Fire investigation to determine cause and origin at a condominium. Issues involve two separate electrically heated saunas which appeared to have both caught fire on separate floors of the condominium. (Analysis, report, 2008)

Latimer v VIT, Norfolk, VA: Fire Protection Engineering and Expert Witness services with regard to fatal accident involving underground fire protection system piping. Analysis of shutdown and disconnect procedures, pipe and fitting connections and anchoring. (Analysis, report, deposition 2009)

Lexington Insurance Co. vs. Starflight Enterprises Inc., Columbia, MD: Expert witness services with respect to cause and origin of a fire at an apartment complex. (Analysis, report, deposition, trial testimony, pre-2007)

Longberger Company, Day Care Center, Columbus, OH: Legal expert services for a dry-pipe sprinkler system failure resulting in freeze damage to system and water damage to facility. (Analysis, report, pre-2007)

Longberger Company, Columbus, OH: Investigation into cause and origin of vehicle fire in a corporate-owned truck. (Analysis, report, pre-2007)

Louisiana State v Honeywell, New Orleans, LA: Expert Services with regard to sprinkler system activation with no fire event in a high-rise office building. Analysis of cause of fire sprinkler system activation and fire alarm system defects causing no alarm signal being reported to central station. Findings include temperatures in excess of acceptable ambient for sprinklers and multiple fire alarm system faults. *Civil District Court Parish of East Baton Rouge, Case No. 08-06697.* (Analysis, report, 2012)

Mackensie Union Place Fire, Colorado Springs, CO: Expert analysis of a fire in a commercial kitchen. Evaluate failure of Ansul hood suppression system. (Analysis, report, 2008)

Maegden v United States of America, GA: Expert witness services with regard to case involving personal injury due to slip/fall. Examine code requirements pertaining to exits, stairs, arrangement and materials, slip-resistance, coefficient of friction of floor materials. *U.S. District Court Northern District of Georgia Rome Division, Case No. 4:07-cv-00232-HLM.* (Analysis, report, deposition, 2009)

Marriott Hotels vs. Grinnell Sprinkler Company, MD: Expert witness services regarding sprinkler system installation, polybutylene sprinkler pipe material, material storage, and sprinkler system activation. (Analysis, report, deposition, pre-2007)

Martinez Fire, El Prado, NM: Allstate intra-company dispute. Expert services to investigate and conduct an analysis of a fire in a structure that included a commercial building attached to a residence. Determination if code violations pertaining to the construction of the commercial building resulted in fire damage to the residence. (Analysis, report, 2015)

McDavid v Reserve Square Apartments, Cleveland, OH: Fire Protection expert services in a case involving a fatality in a mixed-use retail and apartment building. Analysis of building and fire code requirements, smoke detector and fire alarm requirements, operations and adequacy of smoke detectors and fire alarm system, security guard services response, examination of smoke detectors involved in the fire. Development of a computerized fire model of the event indicating time of ignition, smoke development and progress, heat build-up, operation of installed and theoretical smoke detectors, threats to life of deceased person including carbon monoxide levels by time, oxygen depletion by time, descending smoke layer by time and temperature by time. (Analysis, report, deposition, 2010)

McFadden v Prism Hotels, Richmond, VA: Expert services with regard to false fire alarm system activation incident with injuries. Address fire alarm system maintenance, precautions during construction, stack effect, slip and fall, means of egress lighting. *Circuit Court for the City of Richmond, Case no. CL-12-5468.* (Analysis, report, deposition, trial testimony 2017)

McSteen v Dane Construction, Cleveland, OH: Fire Protection expert services in a case involving a fatality from a fire in an apartment building. Analysis of building and fire code requirements, smoke detector and fire alarm requirements, operations and adequacy of smoke detectors and fire alarm system, fire extinguisher requirements, fire doors, fire barriers and separations. (Analysis, report, 2009)

Miami Metropolitan Correctional Center, Cogefar-Impresit USA vs. U.S. Federal Bureau of Prisons, Miami, FL: Expert review and expert witness services for automatic sprinkler systems and fire detection and alarm systems. (Analysis, report, deposition, pre-2007)

Myrtle Beach Condominium & Hotel, Myrtle Beach, SC: Expert fire protection engineering services to investigate a possible sprinkler system deficiency related to sprinkler system piping damage and a possible improperly sealed or improperly fire stopped penetrations of fire rated construction assemblies. (Analysis, report, pre-2007)

New York City Homeless Shelter, NY: Expert witness for fire protection and life safety survey, report/documentation, and design recommendations for several homeless shelters including Fort Washington Housing, Franklin Armory Housing, Sumner Armory Housing, Flushing armory Housing, and Atlantic Armory Housing Facilities. (Analysis, report, trial testimony, pre-2007)

NSK Corporation v Oberle & Associates, IN: Fire cause and origin determination in a warehouse, woodworking, and metalworking facility. Determination developed based on documents and photographs due to scene not available at the time of engagement.

U.S. District Court Southern District of Indiana, Indianapolis Division, Case No. 1:09-cv-00052-SEB-JMS. (Analysis, report, 2011)

Pacific Insurance v Allied Barton Inc., Miami, FL: Fire Protection Engineering expert services with regard to water damage from a fire sprinkler system in a high-rise office building. Technical topics include reason for sprinkler activation, sprinkler head defects, water damage, water spread, and actions by contract security officer. (Analysis, report, 2008)

Pyle v Boone, Annapolis, MD: Investigation into large residential fire involving multiple fatalities. Determination of electrical fault cause of fire igniting 15 ft Christmas tree. (Analysis, report, 2016)

Quay Condominium v Simplex Grinnell, Ocean City, MD: Fire Protection Engineering and expert services with regard to multiple, repeated unwanted sprinkler system activation in luxury condominium high-rise building. Determination of installation defects causing unwanted sprinkler activation. Design and construction supervision of repairs to sprinkler system. Expert services in support of law suit. (Analysis, report, deposition, 2012)

Rajwant Dhillon, Lolita Tan, and the Estate of Remedios Reites v Oly-Ida Emerald Place: Expert services with regard to a fire with fatalities in an apartment building in Seattle, Washington. Analyze code compliance, fire detection systems and fire department response. (Analysis, report, 2012)

Residential Fire Hazard, Virginia Beach, VA: Expert services with regard to claim of Inadequate Shelter by the Department of Social Services alleging fire hazards in a single-family residence in Virginia Beach. Analyze site conditions compared to State of Virginia residential Building Code. Appear and testify before Department of Social Services Hearing. (Analysis, report, 2012)

Robertson v Chippenham Townhomes, Richmond, VA: Expert services pertaining to a natural gas explosion in a laundry room associated with a townhome complex in which a resident suffered severe injury. Analysis of source of gas leak, gas pipe condition and installation code violations, responsibility of facility Owner, Management Company, Laundry Equipment Service Vendor, and appliance manufacturer. *Circuit Court for the City of Richmond, Case No. CL14-4511-07.* (Analysis, report, deposition, 2015)

Ronald Reagan Building Fire, Washington, DC: Fire Protection Engineering expert services pertaining to fire in public areas of Federal Building. Analysis addressed fire cause and origin, kitchen hood and vent fire issues, hood and vent cleaning, fire spread, and code requirements. (Analysis, report, 2016)

Rubatex Corporation, Bedford, VA: Legal expert services regarding fire resistance and flame spread of building materials. Direct fire test in accordance with ASTM Standard E-119/UL 263. (analysis, report, pre-2007)

SC Diamond v Stanley Associates, Virginia Beach, VA: Expert services with regard to a fire in a large warehouse. Fire cause and origin, evaluation of sprinkler system operations, fire department operations, metal halide lighting fixtures, fire spread, and storage arrangement. (Analysis, report, deposition, 2010)

Slater vs. District of Columbia Housing Authority, Washington, DC: Expert Witness services pertaining to a fire with fatalities in a subsidized residential building. Issues investigated and opined upon include smoke detectors, smoke detector activation, testing and inspection of smoke detectors, means of egress, security bars on means of egress, fire cause and origin, fire and smoke spread, human behavior in a fire, cigarettes as a cause of fire, fire safety inspection requirements, fire safety inspector training and fire safety inspector supervision. *Superior Court of the District of Columbia, Civil Divisions, Case No. 2017CA00192B.* (Analysis, report, deposition, 2019)

Smithsonian vs. Northern Fire Protection, Washington, DC: Expert witness services to investigate the apparent unwanted activation of a sprinkler installed at the Smithsonian Institution. (Analysis, report, pre-2007)

Sommers vs. Infotech, New York, NY: Expert witness for the high-rise office building concerning fire alarm systems, smoke detection, smoke detectors, and central monitoring system. (Analysis, report, pre-2007)

SWA Construction Co. vs. K&E Sprinkler Co., Richmond, VA: Expert witness services regarding sprinkler system and CVPC pipe conformance with applicable Fire Protection and Life Safety codes and standards. (Analysis, report, deposition, pre-2007)

Trinh v India Grocers, Cleveland, OH: Expert services pertaining to a fire in a mercantile grocery situated in a strip-mall. Evaluate cause and origin of a fire, responsibility for maintenance of electrical lighting fixtures and storage practices. *Court of Common Pleas Cuyahoga County, OH, Case No. CV09684704.* (Analysis, report, 2010)

United States v Jeremiah Jones, Baltimore, MD: Expert witness services for the Federal Department of Public Defender. Examine fire alleged to be arson. Analyze previous investigations, previous conclusions, cause of fire, and spread of fire, electrical equipment involved, fire department operations, and damage estimates. (Analysis, report, deposition, 2010)

VisionOnline v Fairway Executive Office Condominiums, Fairfax, VA: Fire Protection Engineering expert services with regard to failure of fire sprinkler system resulting in water damage. Work included analysis of cause of failure including backflow preventer, code requirements pertaining to maintenance and inspections of fire sprinkler systems including NFPA 25. (Analysis, report, deposition, 2014)

VUE Condominiums, Inc. v H&S property Development Corporation and Armada Hoffler Construction Company v CML Fire Protection, Baltimore, MD: Investigation and professional expert services with regard to installation of fire sprinkler system in high rise residential building. Develop opinions as to applicable duties and standard of care for installation of sprinkler system and penetrations of fire and smoke rated barriers. *Circuit Court of Baltimore City, MD, Case No. 24C15-004949CN.* (Analysis, report, 2017)

Walker vs. Baker, Romney, WV: Expert witness services to investigate the cause of a fire at a residence. (Analysis, report, pre-2007)

West Virginia v Ronald Smith, Hinton, WV: Expert Services to investigate case involving accusation of arson in a residential building involving two fatalities. Review available evidence, cause and origin report by others, photographs, and witness statements. Prepare report of findings. *Circuit Court of Summers County, WV, Case No. 15-F-23.* (Analysis, report, 2017)

White (Kelli) v Watergate/Treehouse Associates t/a Linkhorn Bay Apartments, Virginia Beach, VA: Expert Services to investigate a fire in a 1970's-era multi-story apartment building causing injuries. Topics included Building and Fire Code requirements, obsolete BOCA Code, obsolete Southern Building Code, smoke detector placement and activation, means of egress, cigarette smoking regulations, and fire spread. *Virginia Beach Circuit Court, Virginia Beach, VA, Case No. CL14-5222.* (Analysis, report, deposition, 2018)

Whitnal Edge Condominium, Milwaukee, WI: Legal expert services for automatic sprinkler system. (analysis, report, pre-2007)

PROFESSIONAL EMPLOYMENT HISTORY

- Systech Fire Protection, LLC, Palos Park, IL and Ruther Glen, VA, Principal, 2007 to Present
- Systech Group Inc., Reston, Virginia, Principal, 1991 to 2007
- Rolf Jensen & Associates, Inc., Fairfax, Virginia, Engineering Manager, 1985-1991
- Wisconsin Insurance Plan, General Manager, 1982-1985
- Village of Westhaven, Illinois, Building Commissioner, Building Inspector, 1976-1984
- Insurance Services Office of IL and WI, Inspector, Engineer, Automatic Sprinkler System Customer Service Representative, Assistant Supervisor and Assistant Manager, 1974-1982

SELECTED PUBLICATIONS AND SPEAKING ENGAGEMENTS

- Fire Safety in Atrium Buildings
- Fire Safety in Exhibition Halls
- Adoption of the BOCA Code in Washington, D.C.
- Sacred Trusts-Protection of Historical Churches
- Retrofitting: Planning and Implementation of Security & Fire Systems, *Security Technology & Design*

PROFESSIONAL ENGINEERING REGISTRATIONS

State	Registration	State	Registration
California	FP1516	New Jersey	24GE04988400
Connecticut	23096	North Carolina	14784
Delaware (inactive)	7633	North Dakota (inactive)	PE-5217
District of Columbia	8926	Ohio	E-59915
Florida	PE 0044616	Pennsylvania	PE-037624-R
Georgia	PE 036402	South Carolina	12065
Illinois	062037418	Tennessee	121744
Louisiana	26436	Texas(inactive)	84969
Maryland	16211	Virginia	018501
Minnesota (inactive)	25806	Washington	35562
Mississippi	21117		
Missouri	PE-2013000183	West Virginia	10477
New Mexico (inactive)	14333		
New York	2621729	Wisconsin	E-20562