

## Donald Hopkins, Jr., P.E., FSFPE FORENSIC SERVICES & LITIGATION SUPPORT

Areas of Expertise: Forensic analysis; origin and cause analysis; fire protection and fire alarm system design; code compliance; code and standards development.

Professional Experience:

**Fire Protection and Fire Alarm System Design:** Prepared fire suppression and fire alarm system design packages ranging from conceptual designs to detailed shop drawing quality designs. Designs included wet pipe, dry pipe, pre-action and deluge sprinkler systems, gaseous suppression systems, water mist systems and standpipe systems. Provided shop drawing review and installation oversight for various fire suppression, fire alarm and fire pump systems.

**Code Compliance:** Performed fire protection code analyses for new and existing buildings. Prepared life safety and egress drawings to demonstrate compliance with applicable building and fire code provisions.

**Performance Based Code Equivalencies:** Performed performance-based alternative design work to demonstrate code equivalency. Analyses entailed fuel loading and hazard assessments, timed-egress studies, computational fire modeling, and bench- or full-scale fire testing to evaluate specific fire hazards. Assessments included evaluating the effectiveness of existing or proposed fire protection systems, increasing maximum allowable travel distances, effects of window breakage on emergency egress, omission of passive fire protection on structural steel, and the need for sprinklers beneath raised metal floors.

**Large Complex Forensic Studies:** Forensic analysis of numerous fire related issues for a large complex impacted by 9/11 in a multidisciplinary engineering team. Issues include fire development, fire spread, fire modeling, passive fire protection, fire department operations, fire suppression systems, and water supply systems.

**Forensic Analysis:** Performed fire and loss investigations for cases involving fires, fire protection system inadvertent discharges, fire protection system and fire alarm system malfunctions, improper building and fire protection system design, and improper building construction.

**Fire Modeling:** Performed computer-based mathematical fire models addressing fire growth, smoke and toxic gas generation, smoke movement and transport, heat transfer, and fire product deposition.

**Fire Testing:** Assisted in the development, installation, instrumentation, completion, and evaluation of small and large scale fire testing.

Senior Fire Protection Engineer, Jensen Hughes, Baltimore, MD, 2000–2024 Sprinkler Designer/Engineer, Automatic Fire Sprinkler Co., Augusta, NJ, 1995-2000 Fire Protection Engineer, S.A. Maglione Associates, Cedar Knolls, NJ, 1995–2000

*Instructor*, Sussex County Community College, Department of Fire Science and Technology, Newton, NJ, 1996–1997 Research Assistant, University of Maryland, Department of Fire Protection Engineering, College Park, MD, 1992–1994

Education/ Training: M.S., Fire Protection Engineering, University of Maryland, College Park, 1995

B.S., Fire Protection Engineering ~ Cum Laude, University of Maryland, College Park, 1993

Professional Qualifications:

Registered Professional Fire Protection Engineer: California, No. FP 1499 (1999); New Jersey, No. GE42286 (2000); Wyoming, No. 9395 (2001); New York, No. 080364 (2002); Maryland, No. 35666 (2008); District of Columbia, No. PE905545 (2009); Louisiana, No. 35921 (2010), Massachusetts, No.58444 (2023), Pennsylvania, No. 094549 (2023) and Texas, No. PE 153838 (2024)

Professional Affiliations:

Registered, National Council of Examiners for Engineering and Surveying (NCEES), No. 33467

Member, National Fire Protection Association (NFPA)

Former Member, NFPA 13, Technical Committee on Sprinkler System Discharge (SSD) Former Member, NFPA 909, Technical Committee on Protection of Cultural Resource Properties

Former Member, NFPA 914, Technical Committee on Protection of Historic Structures Former Member, NFPA 13, Technical Committee on Residential Sprinklers (RSS)

Former Member, NFPA 232 Technical Committee on Records Storage

Former Member, NFPA 25, Standard for the Inspection, Testing and Maintenance of Water-based Fire Protection Systems

Fellow, Society of Fire Protection Engineers (President-Student Chapter 1992–1993)

Member, Salamander, Fire Protection Engineering Honorary Fraternity (President 1994–1995; Vice President 1992–1993)

Member, Tau Beta Pi Association, National Engineering Society

Member, Phi Kappa National Honor Society

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