

## **EDUCATION**

- 2001                    **Master of Engineering**  
University of South Carolina, Columbia, South Carolina
- 1988                    **Bachelor of Science in Engineering**  
University of South Carolina, Columbia, South Carolina

## **EXPERIENCE**

- May 1991  
to Present            **Engineering Design & Testing Corp.**  
**Columbia, South Carolina**
- District Engineering Manager and Consulting Engineer*  
Specializing in the investigation and evaluation of industrial accidents, engineering analysis of commercial, industrial, and residential events that result in property damage, assessment of mechanical equipment damages and repair/replace cost estimates, engineering analysis and project estimating, project scheduling, piping and mechanical equipment evaluations, design, fabrication, and operation of specialized testing apparatus. Provide engineering analysis and investigation of fire protection systems, fire alarm systems, heating and air conditioning systems and boilers including design, installation, control and maintenance.
- April 1989  
to March 1991        **Bechtel Corporation**  
**Columbia, South Carolina**
- Project/Mechanical Engineer*  
Specializing in supervision of design on small capital projects, writing equipment specifications, requisitions, and evaluations of quoted products, performed pump sizing calculations and equipment studies, development of project piping and instrumentation diagrams, sizing process lines, creating line tables and tie-in lists, performed HVAC equipment sizing calculations and created the piping and instrumentation diagram for the application, preparing job estimates for client approval.
- August 1986  
to March 1989        **Maddux Supply Company**  
**Columbia, South Carolina**
- Outside Construction Sales*  
Specializing in comparison and selection of project equipment for compliance with engineering specifications, negotiate equipment pricing with manufacturers, monitor availability of project equipment to ensure delivery on schedule, service customers with daily business.

1979  
to August 1986

**Capital Lighting Company**  
**Columbia, South Carolina**

*Lighting Consultant*

Specializing in selection of new lighting products, inventory management, lighting consultant for commercial and residential construction.

**PROFESSIONAL ORGANIZATIONS**

American Society of Mechanical Engineers (ASME)

National Association of Fire Investigators (NAFI)

National Fire Protection Association (NFPA)

**REGISTRATIONS and CERTIFICATIONS**

Registered Professional Engineer in Alabama (#25594-PE)

Registered Professional Engineer in Commonwealth of Virginia (#0402045899)

Registered Professional Engineer in Florida (#59726)

Registered Professional Engineer in Georgia (#PE024959)

Registered Professional Engineer in North Carolina (#024278)

Registered Professional Engineer in Ohio (#PE.68923)

Registered Professional Engineer in South Carolina (#18217)

Certified Fire Protection Specialist by the National Fire Protection Association (NFPA) and accredited by the American National Standards Institute (ANSI) (CFPS #2676)

National Council of Examiners for Engineering and Surveying (#16651)

**CONTINUING EDUCATION**

2019     *"Fire Protection Engineering for Buildings"*, PDH Library  
          *"Pipe Flow – Friction Factor Calculations with Excel"*, PDH Library  
          *"Heating Ventilation and Air Conditioning Systems"*, PDH Library

2018     *"Metallurgy for the Non-Metallurgical and its Use in Root Cause/ Damage Assessments"*, EDT Seminar

2016     *"International Building Code Construction Techniques, Fire Protection and Special Systems"*, Halfmoon Education Inc.

2015     *"Designing Pumping and Piping Systems"*, Halfmoon Education Inc.

2012     *"Electrical Standards of Industrial Machinery"*, National Fire Protection Association

2010     *"Steam Plant Improvements Seminar"*, Boiler Efficiency Institute

2008     *"Fire Protection System Plan Review Seminar"*, National Fire Protection Association  
          *"Confined Space Compliance Training"*, Colleen Eubanks of the South Carolina National Safety Council

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- 2007     *“Certified Fire Protection Specialist primer course”*, National Fire Protection Association
- 2005     *“Fire Alarm Inspection, Testing and Maintenance Seminar”*, National Fire Protection Association  
*“Legal Issues for South Carolina Professional Engineers”*, Halfmoon LLC of Eau Clair, Wisconsin
- 2004     *“Confined Space Compliance Training”*, Safety and Health Council of North Carolina
- 2003     *“Automatic Fire Protection Sprinkler System Seminar, Application and Installation”*, National Fire Protection Association  
*“Fire Pumps Seminar, Application and Installation,”* National Fire Protection Association  
*“Inspection, Testing and Maintenance of Water Based Fire Protection Systems Seminar”*, National Fire Protection Association
- 2000     *“Origin & Cause Determination”*, Walker Fire Investigations of Spencerville, Indiana, Seminar sponsored by the South Carolina Chapter of the International Association of Arson Investigators
- 1997     *“Electrical Meter Tampering as Fire Cause Presented by South Carolina Electric & Gas Company. Properties of Natural Gas and Natural Gas Explosions”*, South Carolina Chapter of the International Association of Arson Investigators  
*“Fire & Arson Investigation Seminar”*, Georgia Fire Investigators Association
- 1994     *“The Investigation of Vehicle Fires”*, Lee S. Cole & Associates
- 1993     *“Ford Guide to Diagnostics”*, Mitchell International Technical Information Program  
*“Specialized School in Modern Techniques of Fire Investigation”*, Georgia Fire Investigators Association
- 1991     *“Traffic Institute Fire Investigation Seminar”*, Northwestern University