### ADAM JAMES ROGERS

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### **EDUCATION**

1999-2007 Worcester Polytechnic Institute

Worcester, MA

Bachelor of Science, Mechanical Engineering Masters of Science, Fire Protection Engineering

#### **EXPERIENCE**

2012-2013 **Bay State Inspectional Agency** 

Tisbury, MA

Vice President – Fire Protection Engineering

Managed and performed fire protection engineering for the firm. Client base is primarily fire investigation determination of cause and failure analysis. Additionally, spearheaded the initiative to expand the firm into the system commissioning field.

### 2007-2012 Smithsonian Institution

Washington, DC

Office of Safety, Health and Environmental Management Fire Protection Engineer

## Design and Project Review

- Authority Having Jurisdiction (Fire Marshal) of Smithsonian Institution facilities including Arts and Industries Building, Smithsonian Institution Building, National Museum of American History, National Museum of Natural History, Harvard-Smithsonian Astrophysical Observatory, Washington National Zoological Park, National Zoological Park Conservation Center, Arthur M. Sackler Gallery of Art, National Museum of African Art, and Freer Gallery of Art
- Worked with multiple types of occupancy within each facility including, business, collection storage, wet collection storage (specimens in alcohol), industrial, assembly, rack storage, restaurants, animal housing, residential housing and student dorms.
- Develop and implement fire protection and life safety codes and standards for Smithsonian museums and collections including the Smithsonian Design Manual for construction and exhibit fabrication and the Smithsonian Safety Manual. The Smithsonian fire protection group uses IBC, OSHA, NFPA and other codes as a minimum requirement and then develops codes and standards that go above those basic requirements to ensure a higher level of protection.
- Specify fire protection and life safety code requirements for new construction projects including building materials, water and clean agent fire protection systems and building automation system components. Typically involved with projects from the scope of work stage on through design, construction and commissioning.
- Review project and exhibit design submittals for compliance with the applicable fire protection and life safety codes.

- Evaluate and witness acceptance testing tests of all new and upgraded fire protection and life safety systems including but not limited to fire alarm systems, fire suppression, smoke control systems, fire pumps and emergency generators.
- Perform sprinkler system hydraulic calculations by hand and using design software to ensure quality control of new designs and also troubleshoot potential issues and design alternative solutions.
- Establish criteria for performance based design.
- Develop and implement facility fire protection and life safety master plans used to initiate capital projects to address systematic fire protection issues including fire protection system upgrades and installations, air sampling detection systems, fire barrier upgrades and clean agent fire suppression systems.

## Consultation and Inspection Services

- Develop and deliver fire safety training to staff and volunteers to include fire prevention, fire protection, fire protection design requirements, use of portable fire extinguishers and proper hot work procedures.
- Provide consulting services for fire protection and life safety issues to Smithsonian Institution staff including museum directors, exhibit design staff, research scientists, contracted architects, engineers, project managers, and construction representatives.
- Investigate incidents to identify and analyze causes and prevent reoccurrences including large loss fire investigation and root cause determination.
- Perform and lead annual comprehensive facility compliance audits and prepare detailed reports on deficiencies and findings. These audits are wall to wall investigations to ensure each facility is complying with NFPA, OSHA, EPA and Smithsonian requirements. Risk assessment classifications of issues are then provided to the facility director along with guidance on how to improve operations.
- Review and establish guidelines for special events and celebrations both within the museums and on the National Mall including Inauguration and the Smithsonian Folk Life Festival.

### Fire Prevention and Awareness

- Plan and oversee Fire Prevention Week activities including the design and launch of a fire prevention week website.
- Write and distribute fire safety public service announcements to all Smithsonian staff.
- Assist in disaster management planning including continuity of operation preparation.
- Design and launch fire safety and prevention websites and knowledge bank.
- Mentor University of Maryland fire protection students regarding fire protection class projects within the Smithsonian

#### Administrative Functions

- Authorized COTR for purchases under \$30,000 to oversee a contract to digitize historical fire protection records, correspondence and drawings.
- Plan and maintained annual fire protection division budget including purchases, travel and training.
- Purchase and maintain testing equipment and fire protection library of codes, standards and publications.

## 1999-2007 Worchester Polytechnic Institute

Worcester, MA

**Student Projects** 

## Major-Qualifying Project

- Designed and fabricated test systems for a series of spray quenching test rings experimentally developed to quench steel at high temperatures.
- Test system constructed allowed rings of various sizes to be tested at varying flow rates.

# Interdisciplinary-Qualifying Project

- Developed plan to help disparate fire departments located on Martha's Vineyard island consolidate personnel and resources to provide full time support to the community
- Researched environmental and logistical conditions within Martha's Vineyard and other similar communities

### **CERTIFICATIONS**

- National Association of Fire Investigators Certified Fire and Explosion Investigator
  (CFEI)
- International Association of Arson Investigators Expert Witness and Courtroom Testimony
- US Federal Office of Personnel Management Federal Contracting Officer's Technical Representative (COTR)
- Virginia Department of Professional and Occupational Regulation Fundamentals of Engineering (FE)
- AABC Commissioning Group Certified Commissioning Authority (CxA)

### **COMPUTER SOFTWARE**

- Fire Modeling (CFAST, FSD, etc.)
- Sprinkler hydraulic design (SprinkCalc, simple hydraulic calculator, etc.)
- CAD Packages (AutoCAD, MathCAD, DeltaCAT, ProE)
- Microsoft Office (MS Word, PowerPoint, Excel, etc.)