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**CURRICULUM VITAE**8328 Ridge Crossing Lane  
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Email: [Adam.Rogers.Fire@gmail.com](mailto:Adam.Rogers.Fire@gmail.com)**Profile**

As a Fire Protection Engineer (FPE) I analyze how buildings are used, how fires start, how fires grow, and how fire and smoke affect people, buildings and property. I work with architects and other engineers, state and local building officials, local fire departments, product testing agencies, insurance loss professionals and many others to strive to build and maintain fire safe communities. I make recommendations for cost effective fire protection solutions to ensure that the structure, and the property and occupants contained within are adequately protected. My current focus is on fire and explosion investigation. The compilation and analysis of fire loss evidence is a complex endeavor involving skill, technology, knowledge, and science which is ideally suited to my proficiency as an FPE.

**Practical Experience**

For the past 5 years I have worked as an Authority Having Jurisdiction (AHJ) for the Smithsonian Institution. As a federal AHJ for one of the most diverse institutions in the world, I gained experience in nearly every variety of building type, special condition and fire protection system. The Smithsonian Institution is comprised of nineteen museums and galleries, nine research centers and the National Zoological Park. The Smithsonian facilities include large capacity public spaces, high value storage areas, high volume alcohol storage facilities, laboratories and conservation centers, residential and dormitory buildings, animal care facilities, warehouses, aircraft hangers and maintenance buildings, facilities in extreme environmental locations, IT data centers and the facilities and industrial equipment necessary to support all Smithsonian operations and buildings. As an independent federal agency, the Smithsonian maintains and enforces codes and standards specific to the Smithsonian facilities and mission. I collaborated with other Smithsonian FPE's to compose and revise these codes, standards and specifications which provide levels of protection beyond the basic requirements of the national and international fire codes. Given the unique and irreplaceable nature of the Smithsonian's buildings and collections I am adept at the use of state, national and international fire codes combined with performance based design to obtain the highest level of protection. I have been involved in the design, management, review and construction of projects ranging in scope and complexity from small exhibits, to entire building construction projects with budgets over 30 million dollars and special large scale outdoor events on the National Mall. During my tenure at the Smithsonian I investigated all of the fires that occurred to identify and analyze causes and prevent reoccurrences. This ranged from small losses such as a stall in an animal barn to the large scale industrial loss of the cooling tower serving the National Museum of Natural History. More recently I have been involved in numerous fire investigations as a special consultant for Bay State Inspectional Agency.

**Key Skills**Fire Protection:

- Fire alarm and fire suppression system design, review and testing.
- Fire rated building design and construction.
- Life safety considerations, calculations and occupancy requirements.
- Protection of cultural resource properties and collections.
- Facility code compliance auditing and evaluation.
- Smoke control system design, review and testing.
- System commissioning and acceptance testing.
- Organization and facility fire protection budgeting and master planning.

### Fire Investigation

- Origin and cause determination.
- Failure analysis.
- Computer aided fire scene reconstruction
- Forensic fire and smoke computer modeling.

### Fire Science Education

- Basic fire dynamics.
- Fire protection portions of the OSHA 10-hour and 30-hour courses.
- Fire protection considerations with building design and construction.
- Hot work and fire watch procedures and safety measures.
- General employee fire safety training.
- Fire extinguisher operation and maintenance.

### Computer Software:

- Fire Modeling (CFAST, FSD, etc.)
- Sprinkler hydraulic design (SprinkCalc, simple hydraulic calculator, etc.)
- CAD Packages (AutoCAD, MathCAD, DeltaCAT, ProE)

### Code and standards expertise

- NFPA Codes
  - 3 – Commissioning
  - 13 – Automatic Sprinkler Systems
  - 14 – Standpipe Systems
  - 25 – Inspection, Testing and Maintenance
  - 30 Flammable and Combustible Liquids
  - 72 - Fire Alarm
  - 92 – Smoke Control Systems
  - 101 - Life Safety
  - 150 – Animal Housing Facilities
  - 909 – Cultural Resource Properties
  - 921- Fire Investigation
- International Code Council
  - International Fire Code
  - International Building Code
- Miscellaneous
  - DISCUS - Guidelines for Alcohol Storage
  - UL Directories
  - SMACNA – Principles of Smoke Management

### **Education**

|                  |   |                                 |
|------------------|---|---------------------------------|
| <b>2005-2007</b> | Masters of Science, Fire Protection Engineering | Worcester Polytechnic Institute |
| <b>1999-2005</b> | Bachelor of Science, Mechanical Engineering     | Worcester Polytechnic Institute |

### **Certifications**

Certified Fire and Explosion Investigator (CFEI)  
Federal Contracting Officer's Technical Representative (COTR)  
Fundamentals of Engineering (FE)

### **Research Papers**

#### Development of Ring Spray Quenching System

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

### Model Consolidation of Martha's Vineyard Fire Departments

A plan developed to help disparate fire departments located on Martha's Vineyard Island to consolidate personnel and resources to provide full time support to the community. The paper included researched environmental and logistical conditions within Martha's Vineyard and other similar isolated small communities.

#### **Prior Employment**

**2012-Pres** Fire Protection Engineer and Investigator, Bay State Inspectional Agency  
**2007-2012** Fire Protection Engineer, Smithsonian Institution

#### **Professional Organization Memberships**

- National Fire Protection Association ([NFPA](#))
- Society of Fire Protection Engineers ([SFPE](#))
- National Association of Fire Investigators ([NAFI](#))

**References Available on request.**