# MICHAEL J. SLIFKA, P.E. Fire Investigation/Fire Engineering Design

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#### **EXECUTIVE PROFILE**

A dedicated and skilled expert with a highly successful record of accomplishments in litigation, fire investigation, fire testing and fire engineering design

Michael J. Slifka, P.E. is currently consulting on a house explosion in Montello, WI., sober houses in West Palm Beach & Ft. Lauderdale, FL, a modular building fire wall design in Rye, NY, a modular fire rated floor/ceiling assembly in Destin, FL, VA Hospital fire protection designs for West Haven, CT & San Diego, CA, a wrongful death fire in Stamford, CT He recently consulted on a gas explosion that destroyed a Pizza Hut in Columbus, OH. And, previously consulted on a gas explosion involving a pipe replacement project on Broad Street in downtown Columbus, OH.

He assisted in winning two high-profile lawsuits concerning fire and life safety. Working for the defendants on a \$4M generator building fire at the St. Louis Airport, the defendant was found not liable. Working for the Plaintiff on a carbon monoxide poisoning case with severe brain trauma, the Plaintiff was awarded a \$3M judgment plus \$25.5M in punitive damages, the largest civil judgment in Wyoming history.

Mr. Slifka has spent his professional career working to protect others by promoting fire safety. He has served as president/CEO of a leading fire protection engineering company. Mr. Slifka was Chief of Safety, Fire Protection and Occupational Health for the Veterans Administration responsible for, among other duties, the compliance of 172 hospitals and 225 outpatient clinics to JCAHO criteria. Mr. Slifka served on the National Conference of States on Building Codes and Standards (NCSBCS); the National Bureau of Standards; the National Fire Protection Association; the US. General Services Administration; Rolf-Jensen & Associates; Republic Steel Corporation; and the Ohio Inspection Bureau. Mr. Slifka has published several articles on fire protection in several editions of the Fire Protection Handbook. He has appeared on the McNeil-Lehrer News program and as a NFPA spokesman on a PBS-developed program on highrise safety. Mr. Slifka holds a Bachelor of Science in Fire Protection and Safety Engineering from the Illinois Institute of Technology. He is a Registered Professional Fire Protection Engineer (FP 479) in California; He is a member of the Society of Fire Protection Engineers. He is also a Fellow in Fire Forensics/Fire Investigations for both the American College of Forensic Examiners (ACFE); and American Board of Forensic Examiners (ABFE).

- Multi-million-dollar awardwinning expert witness in highprofile fire safety lawsuits.
- Former head of Fire Safety & Occupational Health, U.S. Veterans Administration.
- Leading Fire Safety Consultant
- Nearly 50 years of Fire Safety Experience
- Manufactured Housing Fire Safety
- High-Rise Building Fire Safety
- Health-Care Facility Fire Safety
- Explosion consultant/expert

**MULTI-FACETED LEADER** with expertise in research, building/fire code development, fire protection engineering, training, health care facility design, maintenance and operation and litigation support in complex and multicultural institutions.

**EXCELS AT TESTIFYING AS AN EXPERT WITNESS** in Federal and State Courts (including U.S. Territory Courts) as an Expert in Fire Protection Engineering.

**A PROVEN PRINCIPAL RESOURCE** to the health care industry on JCAHO and Life Safety Code issues, the manufactured housing/building industry concerning litigation involving fire cause and origin, alleged defective construction practices, and wrongful injury and death cases.

SOLID UNDERSTANDING OF BUSINESS OPERATIONS, FIRE SAFETY, FIRE PROTECTION, ELECTRICAL/SAFETY ISSUES, PRODUCT SAFETY TESTING, AND LITIGATION with extensive experience in each.

#### **CORE EXECUTIVE QUALIFICATIONS**

Fire Safety Testing

- Fire Protection Engineering
- Stair Design & Safety Issues

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- Inspection/Design Review
- Electrical Testing
- Structural Testing
- Expert Witness

- Fire Engineering Consulting
- Fire Protection Research
- Building Codes/Standards
- Fire Safety Training
- High-Rise Safety
- Health Care Institutional Safety
- Industrial Safety
- Manufactured Housing Safety

#### **EDUCATION & REGISTRATIONS**

Bachelor of Science, Fire Protection and Safety Engineering. Illinois Institute of Technology, Chicago, IL

Registered Professional Fire Protection Engineer (FP 479) -- California

Fellow, Fire Forensics/Fire Investigations, American College of Forensic Examiners (ACFE)

Diplomate, Fire Forensics/Fire Investigations, American Board of Forensic Examiners (ABFE)

Member, Society of Fire Protection Engineers {SFPE}

Life Time Member of The National Fire Protection Association (NFPA)

#### **PROFESSIONAL EXPERIENCE**

### **CONSULTING FIRE PROTECTION ENGINEER, 2010-PRESENT**

Private Practice Expert Witness/Consultant/Fire Safety Instructor

Qualified in Federal and State Courts (including U.S. Territory Courts) as an Expert in Fire Protection Engineering.

Principal resource of fire and explosion cases. Often involved in manufactured housing/building industry fire rated designs, litigation for fire cause and origin, alleged defective construction practices, wrongful injury and death cases, and industrial accidents and equipment issues.

#### **EXPERT WITNESS**

An expert involved in prominent and legally sensitive, large death fires:

- Las Vegas Hilton & MGM Grand fires in Las Vegas, NV
- Happy Land Social Club in New York City
- DuPont Plaza Hotel & Casino in San Juan Puerto Rico
- The Station Fire in Rhode Island

# Expert Consultant to over 50 hospitals using the Fire Safety Evaluation System (FSES) to develop solutions to correct building deficiencies threatening JCAHO Accreditation. **CONSULTANT** Expert consultant to over 50 hospitals on pre-JCAHO physical plant safety assessments. Principal instructor for 33 years (1977-2010) to the Veterans Administration Engineering Training Center in North Little Rock, AR, on Life Safety Code hospital design FIRE SAFETY INSTRUCTOR and JCAHO Physical Plant Safety issues Presentations have been recorded on video and are used throughout the VA system Expert on the Life Safety Code (NFPA 101.) Expert on building codes and fire codes used throughout the United States. FIRE SAFETY One of the developers at the National Bureau of Standards (NIST) of the Fire Safety **S**TANDARDS Evaluation System (FSES) for Health Care facilities (now known as NFPA 101 A). Fire Test Witness and Consultant on ASTM E84 and E119 fire test protocols.

Expert on the testing. listing & certification of gas fired and wood burning fireplaces and appliances and their chimney systems

Expert of good practices in both the construction and manufacturing industry.

#### PFS CORPORATION, COTTAGE GROVE, WI, 1987-2010

#### President/Chief Executive Officer

- Managed the day to day operations of the largest modular home third-party quality assurance provider in the U.S, Serving more than 85% of modular home production. The company employs more than 100 people in five offices and operates internationally.
- Provided third-party testing, listing and certification programs focused on building components, products, and transportable structures (mobile, modular, and commercial coach buildings).
- Instrumental in third-party inspection (IPIA) and design review (DAPIA) program for mobile (manufactured) homes built to the HUD Federal Manufactured Home Construction and Safety Standards.
- Ran a nationally accredited test laboratory for fire safety, electrical testing, gas fired and wood burning fireplaces and heating appliances, and structural testing.
- Consulted as a forensic expert on fire safety, fire protection, electrical/fire safety issues throughout the U.S.
- Provided fire protection engineering consultation for three new V.A. hospitals, the U.S. Air Force Guided Missile Assembly Facility in Newark, Ohio, and U.S. Navy Weapons Facility in Crane, Indiana.

#### RADCO/AVALON ASSOCIATES, GARDENA, CA, 1986-1987

#### Executive Vice President

As Executive Vice President of RADCO, was second in command of a staff of 45 technical, administrative, and support personnel.

#### Oversaw:

- Third party testing, listing and certification programs focused on building components, products, and transportable structures, (mobile, modular, and commercial coach buildings).
- Ran a nationally accredited test laboratory for fire safety, electrical testing, gas fired and wood burning fireplaces and heating appliances, and structural testing
- Third party inspection (IPIA) and design review (DAPIA) program for mobile (manufactured) homes built to the HUD Federal Manufactured Home construction and Safety Standards (RADCO was the largest IPIA and DAPIA under the 12 year old HUD program).
- All personnel, fiscal and program management activities.

#### AVALON ASSOCIATES, GARDENA, CA, 1986-1987

#### President

Directed a full-time staff of four design professionals and coordinated their projects with RADCO on an "as needed" basis. Avalon Associates provided multi-discipline consulting to the building design field in the areas of:

- Civil Engineering
- Mechanical Engineering

- Structural Engineering
- Electrical Engineering
- Fire Protection Engineering

Key consultant on forensic engineering for civil liability suits related to fires or building design vs. code compliance.

#### U.S. VETERANS ADMINISTRATION, WASHINGTON, DC, 1977-1979 & 1984-1986

#### Chief, Safety, Occupational Health, and Fire Protection Division

Mr. Slifka, oversaw the employee, patient and facility safety and fire protection for the world's largest health-care organization, protecting more than 228,000 employees and more than 1.287 million patients each year in 100 million sq ft of office space, including:

- 172 hospital complexes
- 215 outpatient clinics
- Seven regional office buildings
- 25 centralized, high-piled rack storage warehouses
- 85 national cemeteries
- Department of Veterans Benefits computer centers

Saved an estimated \$275 million through correcting design errors at 52 VA hospitals.

# NATIONAL CONFERENCE OF STATES ON BUILDING CODES AND STANDARDS, HERNDON, VA, 1979-1984

#### Director for Codes and Standards

Administered the \$5 million/year Mobile Home Program under a contract with the U.S. Department of Housing and Urban Development (HUD). The program which provided 1,700 monitoring visits to manufacturing facilities and primary inspection agencies (IPIA and DAPIA) on fire and life safety code issues. Other responsibilities included:

- Accountable for collection and disbursement of fees (approximately \$9 million/year), issuance of labels, and collection of accurate industry wide data
- Supervised technical staff's review of design packages (drawings and specifications) of every corporation's model line manufactured in the country
- Provided oversight for all NCSBCS annual certifications and review of all design approval and in-plant inspection agencies.
- Managed eight in-house engineers, eight field supervisory engineers, 120 field inspectors, and 20 fiscal and clerical personnel
- Under the general supervision of the Executive Director, coordinated the planning, development and
  administration of NCSBCS programs involving the creation of a model building code and related standards,
  observing contractual agreements among the agency, government entities, code groups and other parties.
- Acted as liaison with state and federal officials, model code groups, and the National Academy of Code Administration.

- Developed national reciprocity programs for Recreational Vehicles (RV) and Manufactured (Modular) Housing.
- Formed a liaison with the Recreational Vehicle Industries of America (RVIA) and the 14 states that provide state inspections of RV manufacturing plants.
- Developed the technical guidelines based on the NFPA/ANSI RV Standard for review of RV manufacturer designs and specifications and for the in-plant inspection procedures.
- Member of the correlating committee for the NFPA/ANSI RV Standard in 1979.
- Worked in conjunction with the other NCSBCS program directors to develop programs and coordinate the training of necessary personnel.
- Advised the program's executive director.

# NATIONAL BUREAU OF STANDARDS CENTER FOR FIRE RESEARCH, GAITHERSBURG, MD, 1975-1977 Assistant Chief for Fire Protection Technology Transfer/Research Fire Protection Engineer

Worked on the development of mathematical models and assessments of existing building fire safety codes as well as practical applications for technical outcomes of fire protection research projects. Other responsibilities and achievements included:

- Instrumental in developing and implementing the Fire Safety Evaluation Systems (FSES) for Hospitals, for Board and Care Facilities, and for Residential Occupancies used nationwide. goal oriented fire safety systems, and to provide and apply these systems to building design problems.
- Managed a \$375,000 research project on the means of egress design sponsored by the U.S. Occupational Safety and Health Administration (OSHA).
- Contributing member of Research Team Investigating Stair Design factors and Causes of Stair Missteps/trips & falls

## NATIONAL FIRE PROTECTION ASSOCIATION, QUINCY, MA, 1974-1975 Chief Staff Engineer, Life Safety Code

#### Member of:

- Committee on Safety to Life (Also non-voting Secretary on Committee on Safety to Life)
- Committees on Building Construction
- Committees on Fire Tests

Oversaw the technical development and correlation, plus technical editing of 17 key National Fire Codes. Also:

- Acted as high-rise expert and spokesman on high-rise fire problems.
- Coordinated publication and dissemination of emerging fire test data on the large series of full scale fire testing of the risk associated with high piled rack storage warehouses (published and updated in the NFPA 231 series standards.)

#### U. S. GENERAL SERVICES ADMINISTRATION, WASHINGTON, D.C. 1972-1974

#### Assistant Chief, Fire Protection Engineering

Consulting Engineer on fire prevention to the GSA Central Office, all GSA regional branches, and all GSA services. Also:

- Provided expert analysis on high-rise building and fire safety systems.
- Performed as fire safety design review engineer for the U.S. Postal Service.

- Responsible for the fire safety of the U.S. White House, Capitol Hill and the U.S. Post Offices.
- Supervised fire safety engineering design content of all federal buildings under construction or renovation, including the 10 Critical Supply Depots located throughout the US. Each depot consisted of at least 20 highpiled warehouses.
- Provided engineering design review and guidance to the Central Office and regional GSA design and construction staffs, and to GSA lease acquisition and repair/improvement.
- Managed a staff of six in-house engineers and oversaw a staff of 40 regional engineers.
- Supervised emergency salvage and safety activities at the St. Louis, Missouri, Military Personnel Record Center after its severe fire loss (July 12-October 12, 1973).

#### ROLF JENSEN AND ASSOCIATES, INC., NORTHFIELD, IL, 1970-1972

#### **Consulting Fire Protection Engineer**

Designed building and manufacturing process fire protection systems, equipment and related hardware. Other responsibilities and achievements included:

- Performed fire safety analysis of ten Midwest post offices, including fire safety retrofit designs for each.
- Designed and analyzed fire safety systems and related systems for high-rise buildings, government structures, institutional facilities, high piled rack storage warehouses and industrial facilities. Including detail probability analysis and cost/benefit studies of all design options).
- Conducted cause and origin investigations and research for legal clients and provided courtroom testimony.
- Helped develop the building code and fire code for the Dallas Fort Worth Airport, McCormick Place Exhibition Hall (the replacement for the building destroyed by fire) and the Indianapolis Convention Center.
- Investigated clients' product development and product liability.
- Wrote training manuals and conducted fire protection training sessions the U.S Army Corps of engineers, U.S. Air Force and various private sector facility organizations.

#### REPUBLIC STEEL CORPORATION, CLEVELAND, OH, 1969-1970

#### Corporate Liaison/Fire Prevention Engineer

Acted as corporate liaison with district safety and fire prevention offices. Other responsibilities and accomplishments included:

- Coordinated corporate safety programs with the district's needs.
- Instrumental in fire protection engineering design and writing the design specifications for:
  - \$80 million Cold Mill Warren, Ohio
  - \$100 million Cold Mill Cleveland, Ohio
  - \$110 million Hot Mill Cleveland, Ohio
- Conducted training sessions and wrote manuals for corporate fire brigades and facility protection organizations.
- Chief of the fire brigades/departments at Youngstown, Warren, Cleveland, and Canton, OH; Buffalo, NY; East Chicago, IL; and Gadsden, AL.

#### Special Hazards Fire Protection Engineer

Developed insurance rates for a mix of industrial, warehouse, commercial, business and mercantile facilities. Other responsibilities included:

- Tested and analyzed underground water systems, pumps, fire protection systems and alarm systems.
- Classified occupancy hazards in industrial, warehouse, commercial, business and mercantile facilities.
- Reviewed architectural designs, construction materials and methods.
- Advised insured property owners on recommended protection practices.
- Investigated causes and origins of fires on damaged properties.

#### **TEACHING**

### NATIONAL FIRE PROTECTION ASSOCIATION & OTHER ORGANIZATIONS/INSTITUTIONS Instructor, Life Safety Code

- Taught four-day seminars for the NFPA 1977 1985 at various locations in the U.S. and internationally.
- Created and taught first master's degree program (1985) in Fire Department Management at George Mason University, Fairfax, VA
- Taught various fire safety courses (1977-1984) at Northern Virginia Community College, Sterling & Leesburg,
   VA
- With the NFPA created the first course on building codes and standards in 1982 for the National Fire Academy, Emmitsburg, MD
- With the NFPA created the first national colloquium of the emerging fire safety/life safety hazard of Board and Care Facilities. (1984)
- For the Veterans Administration taught a 5-day engineering course (3 times a year) of the Life Safety Code and Health Care Facility Designs for 33 years (1977-2010) at the VA North Little Rock facility. The course was then video taped and used throughout the VA system.

#### **AFFILIATIONS**

#### **MEMBER OR PREVIOUS MEMBER:**

National Fire Protection Association (NFPA)

• NFPA Committees: Safety to Life, Health Care Occupancies, Building Construction, Manufactured Housing, Recreational Vehicles;, National Electric Code and the National 1-2 Family Electrical Code.

Manufactured Housing Institute (MHI)

 MHI Committees: Consensus Committee for the Manufactured Housing Standard, MHI-IPIA Technical Advisory Committee, MHI-DAPAIA Technical Advisory Committee, MHI/HUD Technical Exchange Group, MHI-Technical Activities Committee.

American Society for Testing and Materials (ASTM) and various committees

American National Standards Institute (ANSI) and various committees

Institute of Electrical and Electronics Engineers (IEEE)

#### **PUBLICATIONS**

Slifka, Michael J. et al, "A Study of the Fire Problem in Residential High-Rise Buildings", Chicago: Rolf Jensen and Associates/Greater North Michigan Avenue Association. (1972).

Slifka, Michael J. (author and assistant technical editor, First Edition; author, selected chapters, second and third editions), *Life Safety Code Handbook*, National Fire Protection Association. (1977, 1980, 1983).

Slifka, Michael J. "For Architects and Builders" column, Fire Journal (magazine of the NFPA) (1974-1975).

Slifka, Michael J. et al., Building Inspectors Handbook, National Fire Protection Association (NFPA) (author or co-author of six technical chapters). (1975).

Slifka, Michael J. et al., *Life Safety CodeHandbook – 1st Edition*, NFPA, (author or co-author of six technical chapters) (1977).

Slifka, Michael J. et al., *Fire Protection Handbook – 14th Edition*, NFPA, (author or co-author of four technical chapters) (1975).

Slifka, Michael J. et al., *Fire Protection Handbook – 15th Edition*, NFPA, (author or co-author of four technical chapters) (1978).

Slifka, Michael J. et al., *Fire Protection Handbook – 16th Edition*, NFPA, (author or co-author of two technical chapters) (1981).

Slifka, Michael J., "Building/Fire Code for Health Care Design" U.S. Army Corps of Engineers (1985).

Slifka, Michael J., "Fire Protection Engineering Considerations for Engineered Wood Products," PFS Research Foundation (1999).

#### **MEDIA**

Appeared on the award-winning McNeil-Lehrer News program as a recognized expert in fire safety, on shows dealing with the Las Vegas hotel fires, and on high-rise safety.

Appeared as principal spokesman for the National Fire Protection Association (NFPA) on a PBS-developed special on high-rise safety (produced by WGBH-TV in Boston).