

WILLIAM F. SCHULTHEIS

Forensic Engineering Consultant/Fire Analyst - 30 Years

Analyzed in excess of 3,500 fire related incidents.

Performed research and conducted full-scale test in fire behavior and the behavior of materials under fire conditions at the Factory Mutual Research Center, Southwest Research Institute, Ohio State University, Garrett Air Research, Western Fire Center, Costa Mesa & Long Beach Fire Departments, A.P. Jasich and WFS Facilities.

Expert Testimony - Testified in the States of California, Colorado, Nevada, Texas, Louisiana, Hawaii, Wisconsin, Utah, Kentucky, Washington, New Jersey & Indiana.

EDUCATION & CERTIFICATES

B.S. in Mechanical Engineering California State University, Long Beach (1972)
National Board of Boiler & Pressure Vessel Inspectors (1972)
Safety Engineer - Licensed in California & City of Los Angeles (1972)
Fire Protection Engineering (Post Graduate) UCLA (1988)
Certified Fire Investigator, International Association of Arson Investigators (1999)

POST GRADUATE EXPERIENCE

Explosions & Hazardous Materials (UCLA)	Life Safety Factors/Interior Finish (UCLA)
Fire Analysis & Fire Behavior (UCLA)	Fire Suppression Systems Design (UCLA)
Smoke Management & Control (UCLA)	Fire Protection Engineering (UCLA)
Fire & Arson Investigation (UCLA)	Fire Protection in Building Construction (UCLA)

Large Loss Investigations - Factory Mutual Research Center (1976)
Fire Protection Engineering - Factory Mutual Research Center (1975)
Failure Analysis of Electrical & Mechanical Systems - Factory Mutual Research Center (1973)

Fabrication & Design of Reinforced Plastic Composites - Swedlow, Inc. (1974)
Liquefied Petroleum Gas Systems - California Division of Industrial Safety/Petrolane (1973)
ASME Design Codes - California Division of Industrial Safety (1972)
Non-Destructive Testing –ASTM (1973)

Vehicle Fire Analysis - CCAI (1992 & 97)	Analysis of Electrical Fires - CCAI (1993)
Computer Fire Modeling - UCI (1995)	National Conference - IAAI (1995)
Appliance Fires - CCAI (1996)	NFPA 921 & Evidence Code - CCAI (1997)
Explosions – CCAI (1999)	Fire Dynamics – CCAI (2000) & – IAAI (2000)
Advanced Vehicle Fire Analysis – IAAI (2002)	Uniform Building Code/ Fire & Life Safety CCC (2001)
Forensic Evidence – IAAI (2004)	Aircraft Fire Analysis – Emery Riddle University (2002)

(CCAI) California Conference of Arson Investigators
(IAAI) International Association of Arson Investigators

(UCI) University of California at Irvine
(CCC) Coastline Community College

INSTRUCTOR & LECTURER

Metallurgy & Material Science - Factory Mutual Engineering (1974)
Behavior of Reflective Foil Insulation in a Fire Environment - South Coast Plaza Hotel (1978)
Anatomy of an Electrical Fire - McGraw Hill Publications, New York (1980)
Anatomy of an Electrical Fire - National Electrical Manufacturers Assoc., Las Vegas (1981)

High Rise Fire Protection Systems - International Association of Arson Investigators – Las Vegas (1981)
Fire Protection in Semi-Conductor Facilities -C.S.U.L.A. (1988)
Smoke Movement Control in high-rise Buildings - UCLA, UCI & WVCA (1990)

MAJOR FIRE PROJECTS

Hamakura Sugar, Hawaii (1992)	Redondo Beach Pier, CA (1993)
MGM Grand, Las Vegas, NV (1980)	Hilton Hotel, Las Vegas, NV (1981)
Dorothy Maie Hotel, Los Angeles (1977)	Bunker Hill Towers, Los Angeles (1978)
Equitable Building, Los Angeles (1985)	Ramada Inn, Fort Worth, Texas (1979)
Cathedral Hill Hotel, San Francisco (1978)	Nugget Casino, Lake Tahoe (1979)
Rancho Casino, Wells, Nevada (1977)	Hub Hotel, Los Banos, CA (1980)
Minter Field Airport, Bakersfield, CA (1988)	Anaheim Conflagration (1984)
One Meridian Plaza, Philadelphia, PA (1991)	Φ K Σ Fraternity House, UC Berkley (1990)
Dole Foods, Yuma, AZ (1992)	Dunes Hotel, Las Vegas, NV (1993)
Jackson Hole Ski Lodge, WY (1993)	Bally's Grand, Las Vegas, NV (1992)
Golden West Labs, Anaheim, CA (1985)	American River College, Sacramento (1988)
Travelodge, Los Angeles, CA (1989)	So. Cal Edison, Rosemead, CA (1989)
Snow Valley Ski Lodge, CA (1989)	Merv Griffin Compound, Palm Springs (1989)
M.V. Blue Hawk, San Francisco (1978)	Stone Container, Showlow, AZ (1990)
Elk Hills Blowout, Elk Hills, CA (1978)	First Interstate Bank, Los Angeles (1988)
Wilshire/Devon Fire, Los Angeles (1989)	Winners Casino, Winnemucca, NV (1977)
M.V. Autumn Breeze, Benicia, CA (2000)	Happy Industrial Corp., Los Angeles (1999)

CONSULTANT - FIRE ANALYSIS

City of Orange Police Dept.	Long Beach Fire Dept.
Ford Motor Company	Holiday Rambler Motor Homes
Fleetwood Enterprises	Bendix Corp.
Fiat Motor Company	Sears
S.C. Johnson Company	Boeing Aircraft
SCE San Onofre Nuclear Plant	Whirlpool
Teknika Electric	Boise Cascade
Universal Studios	American Stores
Dometic Refrigerators	Albertsons Food Stores
Georgie Boy Motor Homes	Lucky Stores
Krystal Koach Limousines	Motorola Semi-Conductors
United States Navy	Manchester Tank
United States Marine Cops.	Placerville Energy

CONSULTANT - ELECTRICAL

Sunbeam Corporation	Advanced Micro Devices
Harley Davidson	Emerson Radio Corporation
Sanyo Electric	Watkins-Johnson
Motorola Semiconductors	Louisiana Power & Light
Rockwell International	Sony Corporation
Zenith Radio Corporation	Northern Tel-Comm.
Kodak DataTape Division	Teledyne MEC
Exide Battery	Stauffer Chemical
Trojan Battery	Logic Modeling Systems
Admiral Electric, Appliance Div.	Energy Development
Music Company of America (MCA)	Belmont Industries
Ball Systems	City of Banning
Red Lion Hotels	Smith Wind Energy Systems
Microwave Products	California Milling
Navaho Nation	O'Brien Energy
Martin Aviation	National Presto
Schultz Steel	Utility International

City of Pomona
Hewlett-Packard
Mitsubishi Electric

Occidental Petroleum
Thermo King
Campbell Hausfeld

CONSULTANT - PETRO CHEMICAL

Petrolane Corporation	Vangas
Calgas	Union Oil
Mobile Oil	Globe Oil
Amerigas	Suburban Propane
Williams Energy	Western Star Propane
KFX Fuels	World Oil
Oxnard Refinery	Brik Petroleum
Ferrellgas	Cornerstone Propane

PROFESSIONAL EXPERIENCE

Forensic Engineer/Fire Analyst - W.F. Schultheis – Engineering/Fire Analysis - (1984 - Present)
 Forensic Engineer/Fire Analyst –A.P. Jasich Fire Analysis, Inc. - (1976 - 1984)
 Large Loss Analyst - Factory Mutual Engineering - (1974 - 1978)
 Plastic Composites Design Engineer - Swedlow Research & Development - (1973 - 1974)
 Electro-Mechanical Forensic Engineer - Factory Mutual Engineering - (1972 - 1973)
 Boiler/Pressure Vessel Safety Engineer - Licensed in California & City of Los Angeles (1972 - 1978)
 Fabrication of Large Volume Pipe Fittings & Machinery - American Pipe & Const. (1967 - 1971)
 Fabrication of Ships & Cranes - Pacific Coast Engineering (1966 - 1967)
 Installation/Startup of Power Generation & Micro Wave Stations - Western Electric (1963 - 1966)
 Boiler Technician – United States Navy (1960 – 1963)
 Installation of Engine, Fuel & Electrical Systems – Sunset Marine Center (1956 - 1960)

PROFESSIONAL AFFILIATIONS PAST & PRESENT

Forensic Experts Association (FEA)
 American Society of Mechanical Engineers (ASME)
 American College of Forensic Examiners (ACFE), Fellow Status
 Institute for Forensic Experts (IFE)
 National Society of Professional Engineers (NSPE)
 Society of Fire Protection Engineers (SFPE)
 National Fire Protection Association (NFPA)
 American Society of Testing & Materials (ASTM)
 National Board of Boiler & Pressure Vessel Inspectors (NB)
 International Association of Arson Investigators (IAAI)
 International Association of Arson Investigators (Arizona Chapter)
 California Conference of Arson Investigators (CCAI)
 American Society of Plumbing Engineers (ASPE)
 National Propane Gas Association (NPGA)

05/05