

Michael B. Craddock CFI, CFII, CSHO

Senior Consultant



As a Senior Consultant in the Houston, Texas office of Engineering Systems Inc. (ESI) and the Disaster and Incident Response Team leader, Mr. Craddock specializes in fire and explosion investigations, safety and OSHA assessments, HAZMAT, large loss scene management, specialized testing, technical research, litigation support, and evidence documentation and recovery. Much of his work includes investigations of fires and explosions, OSHA and safety issues within oil and gas, petrochemical, pipeline, refinery, commercial, industrial, and manufacturing facilities. He has been involved with safety issues regarding the installation, testing, and cleaning of tanks, pipelines, flares, barges, rigs, and vessels. He frequently assists in structural documentation and damage assessment for issues involving natural disasters.

Mr. Craddock has practical experience as a former fire fighter and Fire Prevention Officer with training as a HAZMAT (First Responder) through the technician level.

Prior to his employment with ESI, Michael Craddock was as an Engineering/Fire Technician for CH&A Corporation (a former forensic engineering company in Houston, Texas). There, he was involved in specialized testing, scene investigation, and evidence documentation and recovery. He has also held certifications as a Texas Mold Assessment Consultant, Texas Mold Assessment Technician, and a Certified Microbial Remediation Supervisor. Along with his degrees, numerous safety courses, certifications, teaching, and experiences, he also has a strong background in many areas of public information, technical research, and investigations.

Education

BS, RPTS Texas A&M University, College Station, TX

BS, University of Maryland University College, College Park, MD

AAS, Occupational Safety, San Juan College School of Energy, San Juan, New Mexico

Licenses & Certifications

- San Juan College School of Energy, Certificate of Occupational Safety
- Texas A&M Engineering Extension Service (TEEX), Safety and Health Official (CSHO) in General Industry and Oil and Gas and

Contact Information

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ESi Houston

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Areas of Specialization

- Safety
- Fires and explosions
- Propane and natural gas
- Large loss investigations
- Specialized Testing Pre and
- Design/Technical Research
- Forklifts/Scissor Lifts/Boom Lifts

Petrochemical

- Authorized OSHA 10 and 30 Instructor and H2S Instructor
- Texas Railroad Commission, 80-hour Category E Manager's Certification in Propane
- The National Association of Fire Investigators (NAFI), State of Texas Certified Fire Investigator (CFI), International Association of Arson Investigators (IAAI), Certified Fire Investigator, Certified Fire and Explosion Investigator (CFEI), Certified Fire Investigator Instructor (CFII)
- HAZWOPER (40 HOUR) Certification
- Powered Industrial Truck (forklift) Certified Operator and Instructor
- Fall Protection Competent Person
- IAAI Certified Fire Investigator
- Certified HAZWOPER (40 hours)
- TEEX CSHO General Industry
- TEEX CSHO Oil & Gas and Petrochemical
- Confined Space Entry Qualified
- Hazmat – Awareness, Operations, Technician Levels
- Certified Trainer Basic Plus CPR, AED, and First Aid for Adults
- Certified Trainer Bloodborne Pathogens
- OTI- OSHA Authorized 10/30 Instructor
- TEEX Certified H2S Instructor
- Propane P80 Category E Management – 80-hour course
- Forklift/ Scissor Lift/ Self-Propelled Boom Lift Operator
- Forklift Trainer
- Notary
- FARO Focus Scanner User Certification

Languages

- English

Positions Held

Engineering Systems Inc., Conroe, Texas

- Senior Consultant, 2012-Present

- Staff Consultant, 1998-2012

Legal Research Associations, Humble, Texas

- Principal, 1997-1998

Copy-Right Documentation/Litigation Services, Houston, Texas

- Litigation Support Association, 1995-1997

CCA Corporation, Kingwood, Texas

- Manager, 1992-1996

CH&A Corporation

- Engineering/Fire Technician, 1987-1990

Continuing Education

- 122 Hr. Basic Fire & Arson Investigation- T.C.F.P. Approval No. 99021- Houston Community College
- 40 Hour Hazwoper Training 29CFR 1910.120(e)(3)(i)-Houston Area Contractor's Safety Council
- 7th Annual Chalk Bluff Vehicle Extrication School- (8hrs advanced) Waco, Texas
- Abbotville Training Simulator Command Officer Training- Command School Inc.- Lake Jackson, Texas
- Michael B. Craddock *January 2025*
- Advanced Hazardous Waste Operations and Emergency Response Awareness-Target Safety
- Aerial Apparatus Familiarization- American LaFrance
- Aerial Lift Safety- Houston Area Contractor's Safety Council
- AIAQC- Mold Remediation in Schools and Commercial Buildings (EPA 402-K-01-001)
- AIAQC- The New Texas Mold Rules Pre-Licensing Review
- AIAQC- Current Happenings in Austin-TIAQA, the Texas Legislature, TDH, and You
- AIAQC- The Role of Insulation in Moisture Control
- Animals in Disaster, Awareness and Preparation- Emergency Management Institute
- ANSI Z359- Fall Protection- ANSI Standard Updates- Miller Fall Protection- John Eckel
- Asbestos 29 CFR 1910.1001 - Houston Area Contractor's Safety Council
- Atascocita Volunteer Fire Department- Probationary Fire School
- **AVFD Basic First Aid and CPR**
- **Basic Concepts for WMD Incidents (Revised) - TEEX-Texas A&M University System/ DHS/SLGCP**

- **Basic Plus** - Hazard Communication (HazCom) and Chemical Safety Personal Protective Equipment (PPE), Respiratory Protection, Hearing Conservation, Electrical Safety Related Work Practices for Non-Qualified Workers, Elevated Work, Process Safety Management (PSM), Excavation, Trenching & Shoring, Confined Space, Job Hazard Analysis (JHA), General Rules & Emergency Response- Association of Reciprocal Safety Councils, Inc. 2006-2021
- **Basic Plus Refresher** - Association of Reciprocal Safety Councils, Inc., Houston Area Contractor's Safety Council 2006-2021
- **Blood-Borne Pathogens Safety** - 29 CFR 1910.1030- Target Safety
- **Certified Forklift Operator** - Forklift Tech
- **Certified Microbial Remediation Supervisor Training Course** - American IAQ Council
- **CFI Trainer Course- Evidence Examination: What Happens at the Lab** - IAAI
- **CFI Trainer Course- Introduction to Evidence** - IAAI
- **CFI Trainer Course- Understanding Fire Through Candle Experiments** - IAAI
- **CFI Trainer Course-Physical Evidence at the Fire Scene** - IAAI
- **CFI Trainer Course- Critical Thinking Solves Cases** - IAAI
- **CFI Trainer Course- Documenting the Event** - IAAI
- **CFI Trainer Course- Arc Mapping Basics** - IAAI
- **CFI Trainer Course-Fire and Explosion Investigations: Utilizing NFPA 1033 and 921**
- **CFI Trainer Course-Digital Photography and the Fire Investigator** - IAAI
- **CFI Trainer Course- Fundamentals of Building Construction** - IAAI
- **CFI Trainer Course- Charleston Sofa Super Store Fire** - IAAI
- **CFI Trainer Course- NFPA 1033 and Your Career** - IAAI
- **CFI Trainer Course- Writing the Initial Origin and Cause Report** - IAAI
- **CFI Trainer Course- Electrical Safety** - IAAI
- **CFI Trainer Course- Basic Electricity** - IAAI
- **Chemistry and Thermal Events** – ESi Technical Presentation
- **Circuit Board Potential Ignition** – ESi Technical Presentation
- **Combustible & Flammable Liquids** - 29 CFR 1910.106- Target Safety
- **Compressed Gas Safety** - 29 CFR 1910.101- Target Safety
- **Computational Analysis** – ESi Technical Presentation
- **Confined Space Entry** - 29 CFR 1910.146- Target Safety

- **Confined Space Ventilation, Entry, and Rescue 29CFR 1910.146** - Health and Safety Technology
- **Contacts and Terminal** – ESI Technical Presentation
- **Current States of OSAC and NFPA 921, 1033, 1321** – ESI Technical Presentation
- **DOT General Awareness of Hazardous Materials** - Eduwhere
- **DOT Hazardous Materials Shipping for Environmental Professionals** - Eduwhere
- **DOT Hazardous Materials Transportation** - Eduwhere
- **DOT Hazardous Waste Manifest** - Eduwhere
- **DRI Fire and Casualty Seminar** - Phoenix, AZ
- **Elevated Work**- Houston Area Contractor's Safety Council
- **Emergency Management Concerns for the First Responder in Terrorism and Disasters** - TEEX-Texas A&M University System / DHS /SLGCP
- **Excavation Awareness** - Houston Area Contractor's Safety Council
- **Fall Protection-Scaffold User-Confined Space-Lockout/Tagout**
- **Finite Element Analysis** - Engineering Systems Inc. John A. Wilkinson, P.E.
- **Fire Investigation Testing** - Engineering Systems Inc.
- **Fire Investigator** - Texas Commission on Fire Protection
- **Fire Scene Sketching** (3hrs.) - Engineering Systems Inc.
- **Hazard Communication (HazCom) Globally Harmonized System (GHS) Safety Data Sheets** - JJ Keller
- **Hazard Communication (HazCom): Globally Harmonized System (GHS) Container Labels** - JJ Keller
- **Hazardous Materials Awareness- 29CFR 1910.120(q)** - Harris County Fire & Emergency Services Department Hazardous Materials Response Team
- **Hazardous Materials First Responder Operations** - Harris County Fire & Emergency Services Department Hazardous Materials Response Team- Texas Emergency Services Training Institute – Texas Division of Emergency Management
- **Hazardous Materials Technician Upgrade** - Harris County Fire & Emergency Services Department Hazardous Materials Response Team- Texas Emergency Services Training Institute – Texas Division of Emergency Management
- **Hazardous Waste Management and Shipping for Environmental Professionals** - Eduwhere
- **HAZWOPER – Exposure and Monitoring** -JJ Keller
- **HAZWOPER – Chemical Fundamentals** - JJ Keller
- **HAZWOPER – Hazardous Substance Recognition & Identification** - JJ Keller

- **HAZWOPER – Respiratory Protection** - JJ Keller,
- **HAZWOPER – Electrical Safety & Lockout/Tagout** - JJ Keller
- **Hazmat – Placarding** - JJ Keller
- **Hazmat – Marking** - JJ Keller
- **Honeywell Safety Institute** - Miller Fall Protection Competent Person
- **IATA Dangerous Goods** - Eduwhere
- **Ethics, Stove Fires, Selection of other experts, Daubert Challenge** - ICAC Seminar 2004 - Insurance Council for Arson Control Classes
- **Investigative Interviewing, Precision Claim Handling, Legal Issues Affecting Fire Investigators, 921 for Insurance Personnel, Vehicle Fire Investigations** - ICAC Seminar 2003 Insurance Council for Arson Control Classes
- **IMDG – International Maritime Dangerous Goods Shipping** - Eduwhere
- **Industrial Loss Prevention** – ESi Technical Presentation
- **Internet-EMS I: Basic Concept for WMD Incidents** – (8hrs) TEEX-Texas A&M University System
- **Ladder Safety** - Houston Area Contractor's Safety Council
- **Landing Zone Coordinator for Life Flight** - Memorial Herman Hospital
- **Lead Awareness** - 29 CFR 1910.1025(L)(1) - Target Safety
- **Leadership Training** - Atascocita Volunteer Fire Department
- **Lightning 101**- Global Atmospherics Inc
- **LP Gas Sample Collection** – ESi Technical Presentation
- **MEWP Trainor and Evaluator Program**
- **Mold Assessment Consultant** - Texas Department of State Health Services
- **Mold Assessment Technician** - Texas Department of State Health Services
- **MSHA – Elements of Electrical Hazards**
- **MSHA – Chemical Hazards Overview**
- **MSHA – Administrative Line of Authority**
- **MSHA – Accident Prevention**
- **N.F.A. Instructional Techniques (16hrs.) -TEEX** - Harris County Fire Fighters Association 29th Annual Field Day- College Station, Texas- NFA- Certificate Awarded
- **NFPA CPR Academic** - Target Safety
- **NFPA Hazard Communications** -Target Safety

- **NFPA Haz-Mat Spill Prevention & Control** -Target Safety
- **NFPA Haz-mat Transportation - 29 CFR 1926.65(e) & DOT HM 181** - Target Safety
- **NFPA Materials Handling, Storage, Use, & Disposal** - Target Safety
- **NFPA Respiratory Protection** - Target Safety
- **Principles of Electric Fires** - Central Texas Fire Investigators (16hrs.)
- **Propane Technology Course-P80 Category E Management –Level Course- (80 hrs.)** - Railroad Commission of Texas
- **Public Works: WMD Basic Concepts – (4hrs) TEEX** -Texas A&M University System/ DHS/ODP
- **Pump Operations Basic Section D (16hrs)-TEEX** - Harris County Fire Fighters Association 27th Annual Field Day- College Station, Texas
- **RCRA and DOT Refresher** - Eduwhere
- **Residential Firefighting Section A (8hrs.), Industrial Fire Fighting Section B (8 hrs.)** - TEEX- Harris County Fire Fighters Association 26th Annual Field Day- College Station, Texas- April 2001
- **Residential Inspection** - Engineering Systems Inc. Dan Wojnowski, P.E. / Nar Sripadanna, P.E.
- **Respirator Training** - Houston Area Contractor's Safety Council 2000-2021
- **Scaffold User** - Houston Area Contractor's Safety Council
- **Section H, Managing Company Tactical Operations (16hrs.)** - TEEX - Harris County Fire Fighters Association 28th Annual Field Day- College Station, Texas NFA- Certificate Awarded
- **Sexual Harassment** - Target Safety
- **Smoke Divers** - Advanced SCBA School- SCBA donning and quality, maintenance and cleaning, air consumption, emergency breathing procedures, room orientation, restricted operations, bottle change in a hazardous atmosphere, rescue, training mazes and obstacle course.
- **Shipping Batteries (IATA and DOT)** - Eduwhere
- **Shipping Infectious Substances (IATA and DOT)** - Eduwhere
- **Special Events Contingency Planning for Public Safety Agencies** - Emergency Management Institute
- **Supplied Air Training** - Houston Area Contractor's Safety Council 2000-2021
- **TEEX Hydrogen Sulfide (H2S) Instructor Development**
- **TEEX Introduction to Accident Investigation 15 hours**
- **TEEX Environmental Regulations for Oil and Gas Exploration and Production 31hours**
- **TEEX Introduction to Oil and Gas 24 hours**
- **TEEX Hazardous Materials 31 hours**

- **TEEX OSHS for General Industry 31 hours**
- **TEEX Cranes and Material Handling 31 hours**
- **TEEX Permit Required Confined Space Entry 31 hours**
- **TEEX Trainer Course in OSHS for General Industry 31 hours**
- **TEEX OSHA Guide to Industrial Hygiene 31 hours**
- **TEEX Principles of Ergonomics 23 hours**
- **TEEX Machinery and Machine Guarding 31 hours**
- **TEEX Medic First Aid and CPR Instructor**
- **Terrorism Awareness for Emergency Responders Course** -Texas A&M University System National Emergency Response & Rescue Training Center/ U.S. Department of Justice
- **TracPipe Training Program** - Omega Flex
- **Trenching & Shoring - 29 CFR 1926.650-653** - Target Safety
- **Trenching Safety/Shoring** - Houston Area Contractor's Safety Council
- **Trying the Black Mold Case** - Texas Bar CLE
- **UTA-OSHA #3115** - Fall Protection 22 hours
- **UTA-OSHA #510 Occupational Safety and Health Standards for the Construction Industry** - 30 hours
- **Wind Loads** - Engineering Systems Inc.
- **WMD Terrorism Awareness for Emergency Responders (Internet) (8hrs)** - TEEX
- **Workplace Stress** - Target Safety
- **Workplace Violence** - Target Safety
- **Helicopter Accident Investigation** – USC Viterbi School of Engineering, 2015
- **Fundamentals of Glass Science and Technology** – American Ceramic Society, 2013
- **Rolls Royce M250 Series IV Maintenance Training** – Location, 2013
- **Lubrication Fundamentals** – Decatur Professional Development, LLC, 2013

Professional Affiliations/Honors

- Member, International Association of Arson Investigators (IAAI)
- Member, National Association of Fire Investigators (NAFI)
- Member, National Fire Protection Association (NFPA)
- Member, National Notary Association (NNA)
- Member, Texas State Fire Commission

- Member, International Code Council (ICC)
 - Member, American Society of Safety Engineers (ASSE)
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Presentations

"Basics From Falls of Heights" – presented at the Austin Claims Association Seminar, Austin, Texas, May 2023.

"Fall Protection for Buildings – Usage, Responsibilities, and Risk", presented at The Texas Association of Defense Counsel Conference, Memphis, TN, September 2021.

"Forensic Engineering as it Relates to Differing Expert Opinions and Accidental Falls", presented at Houston Claims Association (HCA) June CLE/CE Seminar, Houston, TX, June 2021.

"Negligence and Premise Liability: A Safety Perspective", presented at ESi/Houston Claims Association (HCA) CLE/CE Educational Afternoon, Conroe, TX, November 2019.

"New Technologies in Incident Investigation", co-presented at Natural Gas Claims and Litigation Association (NGCLA) Seminar, Houston, TX, April 2015.
