



**MARK A. LEWIS, M.E., P.E.**  
**SENIOR CONSULTANT**  
[malewis@engsys.com](mailto:malewis@engsys.com)

Mr. Lewis has spent more than 20 years providing technical analysis and litigation support to individuals, corporations, and governmental agencies on a wide variety of subjects, primarily in the areas of failure analysis, accident investigation, premises liability, and consumer product defects. Prior to becoming a consulting engineer, Mr. Lewis worked for several years in various fields in the construction industry, followed by more than a decade in the analysis and direction of product manufacturing.

As a registered Professional Engineer (P.E.), and the longest serving consultant in ESI's Dallas office, Mr. Lewis has provided testimony in state and federal courts, both by deposition and at trial, in matters ranging from accidents involving aircraft, construction equipment, and consumer product defects, to patent infringement and betrayal of trade secrets.

Often critical to the success of industrial analyses and litigation support, Mr. Lewis' skills include the ability to generate and analyze mathematical models of complex mechanical systems, computer models of components and assemblies using finite element analysis, statistical models related to consumer product defects, and three-dimensional models of accident sites and subject vehicles using laser scanning.

In addition, relating to issues involving construction equipment and premises liability, Mr. Lewis is both a certified scissor-and boom-lift operator, and the author of a presentation on such equipment approved in numerous states for Continuing Legal Education (CLE). He also served for four years on the municipal Building Standards Commission in his hometown of more than 250,000 residents.

## **Areas of Specialization**

Accident Investigation  
Failure Analysis  
Premises Liability  
Consumer Product Defects  
Patent Infringement

## **Education**

M.E., Mechanical Engineering, University of Texas-Arlington, TX, 2011  
B.S., Mechanical Engineering, University of Texas-Arlington, TX, 1994

## **Licensed Professional Engineer (P.E.)**

State of Texas.....License No. 92586 (2003)



## **Professional Affiliations/Honors**

### **ASTM International**

Member – Multiple Committees

## **Municipal Service**

### **Building Standards Commission, City of Plano, Texas**

Commissioner, 2016 – 2020

## **Positions Held**

### **Engineering Systems Inc., Dallas, Texas**

Senior Consultant, 2012 - Present

### **Materials Analysis, Inc., Dallas, Texas**

Staff Engineer, 2003 - 2011

Graduate Engineer, 1997 – 2003

### **Denison Industries, Inc., Denison, Texas**

Design Engineer, 1995 - 1997

### **Mil-Craft Manufacturing, Inc., Arlington, Texas**

Manufacturing Analyst, 1988 – 1992

Lead Researcher, 1986 – 1988

Research Assistant, 1985 - 1986

## **Continued Education**

Global Wind Organization - Basic Safety Training Certification (GWO-BST), Tech Safety Lines Academy, WINDA ID ML038704US; January 2023

OSHA 30 Hour General Industry Course, USF Health, November 2022

Powered Industrial Truck (PIT) Permit to Operate, Class 4 & Class S; Forklift Academy; July 22, 2022

Aerial Boom-Lift 3b & Scissor Lift 3a Operator Certification – Blended, United Academy;  
ID: 28537395, March 2022; ID: 1532953, June 2015

HAZWOPER 40-Hour Initial Training per 29 CFR 1910.120 (e) & Title 8CCR 5192(e) (3)(A);  
Compliance Solutions Occupational Training, May 2021



OSHA 30-Hour Outreach Training for the Construction Industry, USF Health, August 2019

Teledyne Continental Motors Aviation Technician Advanced Training Program

Lycoming Engine Service and Tear-Down Course

## Patents

U.S. Patent No. 10,428,480 B2, Issued October 1, 2019  
Snow Melter Machine

## Publications/Presentations

"Standards for Powered Work Lifts," **M.A. Lewis**, CE session presented at The Dallas Claims Association (DCA) Monthly Luncheon Meeting, Grapevine, TX; May 3, 2023

"The Little Plane that Could: Failure Analysis of a Robust Turbine Engine," D.E. Alexander, R. Baron, **M. Lewis**, C. Smith, P. Umberger, E. Wright, presented at the Materials Science & Technology Conference, Portland, OR; September 30, 2019

"Advanced Forensic Technologies: A Symphony of Sciences", **M.A. Lewis**, CE session presented at The Institutes CPCU Society 1-Day Symposium, Dallas, TX, August 29, 2017.

"Powered Work Lift Incidents: Defining the Exposure of the Potentially Liable Parties", **M.A. Lewis**, CE session presented at The Farmers Insurance, East Zone Loss Control Division, Business Insurance, Austin, TX, February 2017.

"Symposium on Failure Analysis", **M.A. Lewis**, presented at ASM International, North Texas Chapter, Dallas, TX, January 2013.