



PETER C. BOULDIN
SENIOR STAFF CONSULTANT
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Mr. Bouldin is an aerospace engineer and a licensed Engineer in Training, with over 30 years of tenure at ESI. He has worked extensively with other ESI consultants in support of accident analysis, accident reconstruction, product safety, and litigation support. Mr. Bouldin's responsibilities have included oversight of the Aurora, Illinois laboratory facilities, management of the artifact and evidence control and safeguarding systems, and in part, employee training. Mr. Bouldin managed and coordinated activities in the ESI metallurgical laboratory during his first 10 years at ESI.

Mr. Bouldin is the past President and Treasurer of the Great Lakes Region of The International Society for Air Safety Investigators. He is a member of Tau Beta Pi (National Engineering Honor Society).

Mr. Bouldin's areas of interest include product safety and accident investigation and analysis. He has worked extensively in the area of safety issues related to gas-fired appliances pertaining to accidental ignition of flammable vapors. His background in non-destructive testing, metallurgical laboratory methods, and aerospace engineering serve as the basis for undertaking a wide variety of assignments which involve consideration of materials, safety design, and performance issues.

Areas of Specialization

Appliance Performance and Safety
Metallurgical Failure Analysis
Product Safety Analysis

Education

B.S. Aerospace Engineering, Tri-State University, 1988
A.A.S. Non-Destructive Evaluation, Moraine Valley Community College, 1984

Licenses

Engineer in Training (EIT)
State of Indiana.....License No. ENT8700434

January 2022

Professional Affiliations/Honors

Tau Beta Pi (Engineering Honor Society)
Member

Positions Held

Engineering Systems Inc., Aurora, Illinois

Senior Staff Consultant, May 2013 – Present
Senior Staff Consultant and Manager of Administrative Operations, February 2011 – May 2013
Manager of Technical Systems, January 2000 - February 2011
Senior Staff Consultant, January 1996 – December 2001
Staff Engineer, March 1988 – December 1995

Publications/Presentations

“A Non-Hazardous Methodology for Examining Heavier Than Air, Flammable Vapors under Residential Conditions Exposed to Household Appliance Ignition Sources,” Charles R. Morin, R. Nelson Koopman, Ronald Pape, **Peter C. Bouldin**, Proceedings of the American Institute of Aeronautics and Astronautics, 1st International Energy Conversion Engineering Conference, Portsmouth, VA, August 20, 2003

“Metallurgical Analysis of Post-Crash Fire Evidence,” Fire and Materials, C.R. Morin, **P.C. Bouldin**, Volume 19, 1995

“In Service Failure of SAE Grade 8.1 Wheel Studs,” R.J. Shipley, **P.C. Bouldin**, E.W. Holmes, ASM Handbook of Case Histories in Failure Analysis, Volume 2, 1993

“Arcing Fault Burndown in Low Voltage Residential Service Entrance with Aluminum Conductors,” H.F. Prosser, R.J. Shipley, **P.C. Bouldin**, ASM Handbook of Case Histories in Failure Analysis, Volume 2, 1993

Technical Presentation

“A Flow Visualization Methodology for the Study of Ignition of Heavier than Air Flammable Vapors,” C.R. Morin, **P.C. Bouldin**, ASTM Committee E05 on Fire Standards, Research Review, Toronto, Canada, June 2000