

Credentials

Professional Engineer

Pennsylvania # PE-045457-E

Education

Bachelor of Science in Electrical Engineering

Lehigh University, 1966

Continuing & Professional Education

- SAE Motor Vehicle Accident Reconstruction, Brake Systems & Lighting courses
- Arkansas State University Commercial Vehicle Accident Investigation and Reconstruction
- Drexel University Graduate Course: Mechanics of Biological Tissues
- Maintenance Council seminars in Hydraulic Brake Failure and Tire Failure Analysis
- Illumination Engineering Society courses in Fundamentals of Building Lighting, Retail Lighting Design, Residential Lighting and Lighting Education
- National Safety Council course: Safety in Play
- National Fire Protection Association: Life Safety Code/Means of Egress
- ASME courses: Introduction to Elevators and Escalators, Inspection Techniques for Elevators & Escalators
- BOCA National Building Code Update
- National Association of Elevator Safety Authorities Regional Workshops
- University of Michigan course in Human Factors Engineering
- ASTM International Symposium on Slip Resistance: The Interaction of Man, Footwear and Walking Surfaces.

Public Service Positions

Zoning Hearing Board of East Allen, PA

Professional Service Positions

Society of Automotive Engineers, Truck & Bus Electrical Committee

Professional Associations

National Society of Professional Engineers - NSPE
Institute of Electrical and Electronics Engineers - IEEE
Society of Automotive Engineers - SAE
American Society for Testing and Materials - ASTM
National Safety Council
Truck Writers of North America

Areas of Concentration

Electrical engineering	Accident investigation & reconstruction
Mechanical engineering	Product liability
Code compliance	Motor vehicle design
Building systems & safety	Fire cause & origin
Biomechanics	Human factors
Safety	

Specific Experience & Interest

Trucks	Elevators & escalators
Automobiles	Slips, trips & falls
Buses	Lighting
FMVSS Federal Motor Vehicle Safety Standards	Building codes
Seatbelts	Stairs
Airbags	Scissor lifts
Vehicle accident reconstruction	Warning, guarding & labels
Antilock brakes	Shock & electrocution
Steering systems	Grounding
Tire failures	BOCA Codes
Consumer products	Life Safety Codes
Playground accidents	Pennsylvania Building Codes
	Vehicle electrical systems
	Tractor trailers

Professional Experience

Institute for Products, Engineering & Construction **2001 to Present**

Consulting and forensic engineering services for attorneys and insurance companies. Projects involve the disciplines of mechanical and electrical engineering. Issues include design, defects and safety of automobiles, trucks and other vehicles, product liability of mechanical and electrical equipment, and building systems and safety management including elevators, escalators and fall hazards.

Consulting Engineer **2000 to Present**

Automotive, product and safety consultation.

Smith, Stephens, Phillips & Deegan, Inc. **1991-2000**

Electro-Mechanical, Forensic and Safety Engineering consultation, fire investigation and accident reconstruction. Matters involved premises accidents, product liability and standard of care. Vehicles and products included automobiles, trucks, buses, elevators, escalators, scissor lifts and fire apparatus.

Mack Trucks, Inc. **1967-1991**

Served in various advancing capacities including Electro-Mechanical Test Engineer, Senior Electrical Project Engineer, Supervisor of Customer Special Electrical Engineering, Supervisor of Vehicle Electrical Engineering Design and Mechanical Cab Grooming and Corporate Electrical Engineer. Responsibilities included testing and analysis of major mechanical and structural systems, design and testing of vehicle electrical systems and components including comprehensive safety systems such as antilock brakes, exterior and interior illumination, backup alarms and seat belts, as well as functional and reliability systems such as emergency engine shutdown controls, low coolant sensors, instrumentation and air conditioning.

Ford Motor Company **1966-1967**

Test Engineer. Safety test engineering responsibilities relating to crashworthiness and occupant protection including seatbelts, breakaway levers and shock absorbing steering columns. Laboratory testing of mechanical components and road testing of vehicles.