



**DESIGN
RESEARCH
ENGINEERING**

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Edward M. Paddock, M.S.

Professional Specialization

Automotive engineering and mechanical design, evaluation and testing of motor vehicle products and components as related to crashworthiness, regulatory compliance, processes, standards and history. Failure and safety analysis of mechanical systems including automotive components for light trucks, buses, MPVs, passenger vehicles and medium/heavy trucks. Design, development, analysis, manufacturing and experimental evaluation of performance, reliability and failures of mechanical systems and components. Expertise in areas involving occupant restraints, seating, door latch and structural systems, chassis, powertrain components, frame, brake, suspension, steering, engine and exhaust systems.

Professional Background

Asc. Mechanical Engineering, University of Scranton
B.S. Mechanical Engineering, University of Detroit
M.S. Mechanical Engineering, University of Michigan
J.D. Law, Wayne State University
---- Accident Reconstruction, Northwestern University
---- Extensive Courses (Manufacturing, Reliability, DOE, Deming – SPC)

Senior Engineering Consultant,

Design Research Engineering
2004 – Present

Sr. Managing Engineer,

Exponent
1996 – 2004

Vehicle Design Expert/Consultant,

Oklahoma City Bombing Task Force
1996 - 1997

Design Analysis Engineer, Advanced Vehicle Technology,

Ford Motor Company
1986 – 1996

Vehicle Design Supervisor, Truck Product Engineering,

Ford Motor Company
1976 – 1986

Vehicle Design Supervisor, ACT - Peplemover,

Ford Motor Company
1970 – 1976

Product Design Engineer, 5-Ton Military Vehicle,

Ford Motor Company
1968 – 1970

Product Development Engineer, Heavy Truck Turbine Engines,

Ford Motor Company
1966 – 1968

Product Design Engineer (Co-op/Trainee), Truck Engineering.

Ford Motor Company
1962 – 1966

Member, Society of Automotive Engineers;
Peer Paper Reviewer (2008)

Publications

"Evaluation of Door Latch Response to Vertical Loading Conditions," SAE 2009-01-0379 (with M. Klima and K. Petroskey).

"Vehicle Chassis, Body, and Seat Belt Buckle Acceleration Responses in the Vehicle Crash Environment," *SAE Int. J. Passeng. Cars – Mech.Syst.* 2(1): 1151-1170, 2009. Paper No. 2009-01-1246 (with D. Toomey, E. Winkel, and R. Burnett). "Judged to be among the most outstanding SAE Technical Papers of 2009" by SAE International