

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

- Mechanical Engineering, University of Scranton Asc.
- 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 - 2004Vehicle 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 - Peoplemover, Ford Motor Company 1970 - 1976Product Design Engineer, 5-Ton Military Vehicle, Ford Motor Company 1968 - 1970Product Development Engineer, Heavy Truck Turbine Engines, Ford Motor Company 1966 - 1968Product 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