

GREGORY D. STEPHENS

CURRICULUM VITAE

POSITION

Research and Consulting Engineer specializing in transportation accident analysis and reconstruction. Consulting activities include the engineering analysis and reconstruction of automobile, auto-pedestrian, truck, bicycle and motorcycle collisions. Activities also include occupant kinematics analysis as it relates to accident reconstruction, development of specialized reconstruction techniques, vehicle crash and performance testing, as well as testing of vehicle components including seats, door latches, restraint systems and other vehicle safety systems.

EXPERIENCE

Research Engineer with the accident reconstruction firm, **Collision Research and Analysis, Inc.** from 1989 to present. Participated in the analysis (including computer analysis), reconstruction, and trial preparation of over fourteen hundred automobile, auto-pedestrian, truck, bicycle and motorcycle collisions.

Has conducted and analyzed numerous full scale automotive crash tests along with hundreds of laboratory experiments designed to evaluate the collision performance of safety related components. Components include fuel systems, door latch systems, seat systems (including child safety seats), bumpers and restraint systems.

Has conducted and analyzed numerous visibility studies in daytime as well as low-light and nighttime environments.

Design Engineer with **Pima County Department of Transportation and Flood Control** (1986 - 1987). Activities included the design and layout of numerous highway and structural projects.

RESEARCH ACTIVITIES

Currently involved with extensive research in the areas of door latch system and seat system collision performance, as well as crush characteristics of large versus small vehicle collisions. Published and presented a number of papers and articles relating to the areas of automotive door and seat systems collision performance, child restraint system collision performance and child behavioral studies, and night visibility analysis and reconstruction. Lectured in numerous seminars on topics concerned with the side and rear impact environments as well as the associated occupant kinematics and vehicle crash performance. Attended numerous conferences, seminars and meetings relating to the fields of accident reconstruction and automotive safety. Also involved with various SAE Standards Committees concerned with the research and drafting of standards that assist the scientific community and Federal Government in developing methods to test vehicles and associated subcomponents.

EDUCATION

Bachelor of Science - Aerospace Engineering, 1989
Boston University College of Engineering

PROFESSIONAL AFFILIATIONS

Member of Society of Automotive Engineers (SAE)
Member of SAE Accident Investigation and Reconstruction Practices Committee
Member of SAE Automotive Seat Standards Committee
Member of Vehicle Dynamics Standards Committee
Member of Association for the Advancement of Automotive Medicine
Member of American Society of Mechanical Engineers (ASME)

RECOGNITIONS/AWARDS

Recipient of the 1994 American Association for the Advancement of Automotive Medicine - Scientific Paper Award for the Child Safety and Behavioral work presented in Lyon, France.

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PUBLICATIONS & PRESENTATIONS

- A. Toglia, G.D. Stephens, D.J. Michalski, J.L. Rodriguez, "Applications of Photomodeler in Accident Reconstruction", American Society of Mechanical Engineers, November 2005, IMECE2005-79250
- G. Stephens, "Traffic Collision Types and Associated Injuries", Association for the Advancement of Automotive Medicine, September 2005, Faculty Member
- G. Stephens, "Accident Reconstruction – Vehicle and Occupant Dynamics", Washington Association of Independent Medical Examiners, August 2004, Faculty Member
- G. Stephens, "Accident Reconstruction: State of the Art TOPTEC – Specialized Use of Computer Simulations," Society of Automotive Engineers, May 2001, Phoenix, AZ.
- G.D. Stephens, T.J. Long, D.M. Blaisdell, "Energy Analysis of Automotive Seat Systems," Society of Automotive Engineers, March 2000, SP-1494 (SAE #2000-01-1380).
- G. Stephens, "Accident Reconstruction: State of the Art TOPTEC – Side Impact Collision Performance," Society of Automotive Engineers, December 1999, Costa Mesa, CA.
- G. Stephens, "Car Crashes and Occupant Injuries: A Team Approach to Crash Investigation – Side Impact Environment," Association for the Advancement of Automotive Medicine, April 1998-2004, Organizer and Faculty Member.
- G. Stephens, "Automotive Seat Design for Safety TOPTEC – Automotive Seat Collision and Test Performance," Society of Automotive Engineers, August 1995, Marina Del Rey, CA.
- U. Meissner, G. Stephens, L. Alfredson, "Children in Restraints," 38th Annual Proceedings, Association for the Advancement of Automotive Medicine, September 1994, pp. 93-106.
- D.M. Blaisdell, G. Stephens, U. Meissner, "Collision Performance of Automotive Door Systems," Society of Automotive Engineers, March 1994, pp. 53-64 (SAE #940562).
- E. Klein, G. Stephens, "Visibility Study – Methodologies and Reconstruction," Society of Automotive Engineers, September 1992, pp. 19-35 (SAE #921575).