



AUTOMOTIVE SAFETY ANALYSIS

David J. Biss – Principal

Areas of Expertise

- Automotive Design Assessments Related to Injury Causation Claims
- Seat Belts / Airbags / Occupant Restraint System Performance Reviews
- **United States DOT/NHTSA:** Federal Motor Vehicle Safety Standards (FMVSS) and Administrative Procedures Related to Rulemaking, Defects Investigations and Product Liability Claims
- Biomechanical, Occupant Kinematics and Dynamics Investigations Including the Use of Crash Victim Simulation Models
- Accident Investigation and Reconstructions – Utilizing all Accepted Scientific Techniques
- **EDCRASH / EDSMAC** Specialists
- Automotive Crashworthiness Assessments
- Forensic Engineering in Support of Automotive Injury Investigations
- Courtroom Exhibits, Diagrams and Videos to Effectively Communicate to the Jury the Scientific Principles Developed During the Case Investigation and Analysis

Education

- M. Eng., Civil Engineering; B.S., Mechanical Engineering; **Penn State University**

Experience

- **U.S. Department of Transportation / National Highway Traffic Safety Administration (NHTSA)** – Physical Scientist / Research and Development Technical Manager in Automotive Safety Analysis
- **Volvo Car Corporation – Sweden / Volvo of America** – Senior Consulting Engineer – Airbags / Seat Belts / Occupant Restraint Systems / Vehicle Crashworthiness
- **Cornell Aeronautical Laboratory (Calspan)** – Research into High-Speed Crashworthiness of Automobiles, Occupant Protection, Kinematics and Dynamics Research
- **Penn State University** – Research on Coefficients of Friction – Skid Resistance of Highway / Bridge Surfaces

Training

- *Failure Mode and Effects Analysis in Design and Development*, Society of Automotive Engineers
- *Computer Aided Design (CAD)*, Society of Automotive Engineers
- *Head/Neck Injury Criteria Workshop*, U.S. Department of Transportation, NHTSA
- *Statistics of Analysts*, U.S. Department of Transportation, NHTSA
- *Computer Graphics State-of-the-Art*, National Computer Graphics Association

Memberships

- Society of Automotive Engineers (SAE)
- Association for the Advancement of Automotive Medicine (AAAM)
- American Society of Mechanical Engineers (ASME)

American Welding Society (AWS)