BIODYNAMIC RESEARCH CORPORATION

JEFFREY L WIRTH, PE

CURRICULUM VITAE

EDUCATION

MS	Mechanical Engineering Arizona State University Tempe, Arizona	1981
BS	Physics Washington State University Pullman, Washington	1975

PROFESSIONAL EXPERIENCE

Biodynamic Research Corporation San Antonio, Texas Consultant (Crash Reconstruction)	2010 – Present
Driven Engineering, Inc. Peoria, Arizona President and Principal Engineer	2006 - 2010
Thomas Engineering, Inc. Phoenix, Arizona Managing Engineer	1995 – 2006
Failure Analysis Associates, Inc. Phoenix, Arizona Senior and Managing Engineer	1984 – 1995
Hewlett-Packard Company Vancouver, Washington Development and Production Engineer	1981 - 1984
Arizona State University Tempe, Arizona College of Engineering Research Assistant	1978 - 1981
Shell Oil Company Houston, Texas Geophysicist	1975 - 1978

PROFESSIONAL AFFILIATIONS

Member, American Society of Mechanical Engineers

Member, Society of Automotive Engineers International

Member, Phi Beta Kappa, Pi Tau Sigma Honorary Societies

PROFESSIONAL ACTIVITIES

Licensed Mechanical Engineer, Texas P.E. #107037

Licensed Mechanical Engineer, Arizona P.E. #23935

Accredited Traffic Accident Reconstructionist #2148
Accreditation Commission for Traffic Accident Reconstruction

CONTINUING EDUCATION

Collision Investigation with Photogrammetry using PhotoModeler, EOS Systems, Inc., Jacksonville, FL, June 2011

Crash Data Retrieval System Data Analyst Course, Bosch/CSI, Vancouver, Washington, 2010

Crash Data Retrieval System Technician Course, Bosch/CSI, Vancouver, Washington, 2010

PC-CRASH and PC-RECT Workshop, McGinnis Engineering, Las Vegas, Nevada 2003

Accident Reconstruction TOPTEC, Society of Automotive Engineers, Tempe, Arizona, 2001

Sensor Design for Automotive Air Bag Systems, Society of Automotive Engineers Seminar, Chandler, Arizona, 1999

Side Impact Design Consideration for Safer Vehicles, TOPTEC, Society of Automotive Engineers, Tempe, Arizona, 1998

Photogrammetry in Accident Reconstruction, Society of Automotive Engineers, San Francisco, CA, 1998
Advanced Accident Reconstruction, Texas Engineering Extension Service, Texas A&M University, 1997

Advanced Accident Reconstruction, Texas Engineering Extension Service, Texas A&M University, 1994

Vehicle Rollover TOPTEC, Society of Automotive Engineers, Dearborn, Michigan, 1993

Vehicle Rollover TOPTEC, Society of Automotive Engineers, Scottsdale, Arizona, 1992

Biomechanics & Human Tolerance, Society of Automotive Engineers Seminar, San Diego, California, 1986

Dynamics ME 231 A & B, Stanford Instructional Television Network, Stanford University 1982

PUBLICATIONS

"Dynamic Response of End-Release Buckles to Floor Anchor Impulses," Society of Automotive Engineers, Paper No. 2006-01-0915, April 2006 (with Eddie Cooper, Anne M. Curzon, Micky Marine and William W. Van Arsdell).

"Override/Underride Crush Energy: Results from Vertically Offset Barrier Impacts," Society of Automotive Engineers, Paper No. 2005-01-1202, April 2005 (with M.C. Marine, B.W. Peters and T.M. Thomas).

"Emergency–Locking Retractor Performance in Rollover Accidents," American Society of Mechanical Engineers Paper No. IMECE2002-34101, 2002 (with T. M. Thomas, M. C. Marine, and B. W. Peters).

"Crush Energy Considerations in Override/Underride Impacts," Society of Automotive Engineers Paper No. 2002-01-0556, March 2002 (with M. C. Marine and T. M. Thomas).

"An Analysis of a Staged Two-Vehicle Impact," Society of Automotive Engineers Paper No. 2000-01-0464, March 2000 (with M.C. Marine and T.M. Thomas).

"Characteristics of On-Road Rollovers," Society of Automotive Engineers Paper No. 1999-01-0122, March 1999 (with M.C. Marine and T.M. Thomas).

"Analysis of Concrete Median Barrier Impacts," Society of Automotive Engineers Paper No. 1999-01-1313, March 1999 (with M.C. Marine and T.M. Thomas).

"Accident Reconstruction in Rollover Accidents", Emerging Issues in Motor Vehicle Product Liability Litigation, The American Bar Association Meeting, Phoenix, AZ, March 1996 (with T.M. Thomas)

"Passive Restraint Collision Performance: An Evaluation of ELR Pawl Engagement", SAE/TOPTEC Meeting, San Francisco, California, May 1995 (with T.M. Thomas)

"Structural Test on the Safety Harness Anchorages," Failure Analysis Associates, Inc. Report, December 1992

"Crush Resistance Test on a Composite Rollcage," Failure Analysis Associates, Inc. Report, December 1992.
"FMVSS 207 Compliance Testing Seating Systems," Failure Analysis Associates, Inc. Report, January 1991.

"FMVSS 210 Vehicle Compliance Testing of Seat Belt Assembly Anchorages," Failure Analysis Associates, Inc. Report, January 1991.

"Characterization and Dynamic Testing of Utility Vehicles, Volume III - Vehicle Dynamic Tests," Failure Analysis Associates, Inc. Report, April 1989.

"Wheel Tread Profile as a Rail Vehicle Design Parameter," American Society of Mechanical Engineers Paper 82-WA/DSC-3, November 1982 (with N. K. Cooperrider).

"The Development and Application of Computer Models for Rail Vehicle Design," Master's Thesis, Arizona State University, 1981.

Presentations

Instructor: Continuing Legal Education Seminar, "The Science of Crash Reconstruction", Longview Texas, August 2011

Instructor: Continuing Legal Education Seminar, "The Science of Crash Reconstruction", Dallas, Texas, July 2011

Instructor: Continuing Legal Education Seminar, "The Science of Crash Reconstruction", San Antonio, Texas, May 2011

Instructor; 2009 Continuing Legal Education Seminar, Fennemore Craig, "Accident Reconstruction," Phoenix, AZ, September 21, 2009

Presentation; 2009 Summer Conference, Southwest Association of Technical Accident Investigators, "Restraints in Rollover Accidents," Glendale, AZ, July 11, 2009

Presentation; 2006 International Congress and Exposition, Society of Automotive Engineers, "Dynamic Response of End-Release Buckles to Floor Anchor Impulses," Detroit, MI, April 2006

Presentation; 1999 International Congress and Exposition, Society of Automotive Engineers, "Characteristics of On-Road Rollovers," Detroit, MI, March 1999