CARR ENGINEERING, INC.

12500 CASTLEBRIDGE DRIVE HOUSTON, TX 77065-4532 TELEPHONE: 281-894-8955

Michael C. Johnston

Specialized Professional Competence

- Crash Analysis and Reconstruction vehicle and scene inspection including three-dimensional mapping of vehicle and scene data; Total Station Laser Survey and Faro Laser Scanner digitization of scene and vehicles; FAA Licensed Drone (sUAS) Pilot; detailed collision and rollover reconstruction; vehicle component failure analysis; computer-aided crash analysis including use of HVE EDCRASH and EDSMAC; forensic scene and vehicle reconstruction using two-dimensional and three-dimensional photogrammetry, Bosch Crash Data Retrieval (CDR) download and analysis.
- Vehicle Dynamics Analysis application of physics, background knowledge and experience to the analysis and understanding of vehicle dynamics and the effect of driver, vehicle, and environment on vehicle performance.
- Vehicle Testing and Instrumentation planning, implementation, and analysis of testing programs
 including industry standard test procedures, test driving, data acquisition systems, and data analysis
 pertaining to vehicle dynamics, analysis of specific vehicle component failures, and analysis of trailer
 towing stability.

Professional Qualifications

- Bachelor of Science (Mechanical Engineering), Youngstown State University, 1997
- Graduate Engineer, Carr Engineering, Inc., 2002 present
 - Engineer responsible for crash reconstruction, vehicle design analysis and testing. Activities
 include scene inspections, vehicle inspections, crash analysis and reconstruction, vehicle dynamics
 analysis, vehicle dynamics testing, test procedures, test planning and logistics, vehicle
 instrumentation, tire analysis, and data analysis.
- Test Engineer, The Goodyear Tire and Rubber Company, 1997 2002
 - Test Engineer and Tire Evaluator responsible for tire evaluations including noise, ride, steering, handling, max dry handling, max wet handling, high speed dry handling, objective noise measurements, objective handling using the Pi Data Acquisition System, and off-road handling. Accounts included Goodyear, Dunlop and Kelly Springfield renewal market tires, Ford OEM tires, and Goodyear Police tires. Also responsible for test development and adaptation, test surface maintenance and track design, Management Representative for ISO 2001, QS9000, and TS16949.

Other

- Co-Author "Motor Vehicle Driver Characteristics Crash Avoidance Behavior" SAE 2007-01-0449
- Northwestern University Center for Public Safety Traffic Accident Reconstruction Course 5/2006
- Engineering Dynamics Reconstruction Training Course 11/2004
- Member, Society of Automotive Engineers
- Bondurant School of High Performance Driving 1998
- Bertil Roos Racing School 1999
- 2000 Lloyds Register Quality Assurance Lead Auditor/Assessor ISO 9001:2000