# **SETH J. BEHRENS, P.E., DFE**

## **EDUCATION:**

B.S. Engineering, Mechanical Engineering, Arizona State University, Summa Cum Laude

## **REGISTRATION:**

Registered Professional Engineer (P.E.) in the State of Arizona Registration No. 62687, Utah Registration No. 12753705-2202, Nevada Registration No. 029856, New Mexico Registration No. 27799, Colorado Registration No. 61694, California Registration No. 41137, Texas Registration No. 145080, and Georgia Registration No. PE050895

Accredited Traffic Accident Reconstructionist (ACTAR), Registration No. 3596

## **EXPERIENCE:**

Engineering Manager, Knott Laboratory, LLC, Phoenix, Arizona, January 2024 to present.

Project Engineer, Knott Laboratory, LLC, Phoenix, Arizona, November 2022 to December 2023.

Team Lead Vehicle Accident Reconstruction, EFI Global, Inc., Phoenix, AZ, April 2019 to November 2022

Forensic Engineer, Unified/EFI Global, Inc., October 2016 to April 2019

Mechanical Engineer, U-Haul International, Tempe, AZ, June 2010 to September 2016

Engineering Intern, Medtronic MicroElectronics Center, Tempe, AZ, Summer 2009

Engineering Intern, General Dynamics C4 Systems, Tempe, AZ, Summer 2008

Forensic Engineering Assistant, Behrens Engineering Investigations, Phoenix, AZ, Summer 2007

#### ACCIDENT RECONSTRUCTION:

Mr. Behrens has performed investigations and reconstructions of high and low-speed motor vehicle accidents involving passenger cars, motorcycles, pedestrians, bicycles, offroad vehicles, trailers, and commercial vehicles. His experience includes the use of conservation of energy and conservation of momentum analysis to determine the speed of vehicles involved in accidents, crashworthiness of vehicles, occupant compartment intrusion, driver reaction, and time/space relationships and analysis. Mr. Behrens' investigations often involve analysis of vehicle dynamics, vehicle safety, human factors and visibility studies. Frequent aspects of these investigations also involve the evaluation of the performance of steering, suspension, brakes, tires, seat belts, and airbags. Mr. Behrens has also employed reconstruction techniques to analyze injury incidents and industrial accidents.

## **ACCIDENT RECONSTRUCTION TECHNOLOGIES:**

Mr. Behrens frequently utilizes the latest technologies available in accident reconstruction throughout all analysis stages, from gathering evidence through accident reconstruction and accident simulation. As a technician certified in Bosch crash data retrieval, Mr. Behrens has retrieved and/or analyzed crash data from electronic data recorders in hundreds of passenger vehicles. Mr. Behrens also has experience in the retrieval and analysis of vehicle infotainment and telemetry data utilizing the Berla iVe toolkit. In addition, Mr. Behrens has experience and training in the retrieval and analysis of heavy vehicle event data recorders. Mr. Behrens frequently surveys accident sites and vehicles using high definition 3-D laser scanning, total stations, and/or photogrammetry. Additionally, Mr. Behrens is a FAA-licensed remote pilot and performs aerial surveys of sites using unmanned aerial systems (drones). During the reconstruction process, Mr. Behrens frequently develops and utilizes advanced computer scripts to solve complex and/or iterative calculations. After reconstructing an accident, Mr. Behrens often simulates the accident using advanced crash simulation software.

## **EXPERT TESTIMONY:**

As a result of Mr. Behrens' investigations and analysis, he has provided expert witness testimony.

#### **ENGINEERING:**

Mr. Behrens has working experience in the manufacture, design, testing and analysis of vehicles and mechanical components in the transportation industry. Mr. Behrens has been involved in full-scale vehicle and trailer performance testing for product development and litigation. In addition, Mr. Behrens has performed product liability investigations and failure analysis for mechanical components and systems. Mr. Behrens is familiar with the Federal Motor Vehicle Safety Standards (FMVSS), Federal Motor Carrier Safety Regulations (FMCSR), Society of Automotive Engineers (SAE) Standards, and Industry Practices within the transportation industry. Mr. Behrens has presented on accident reconstruction and vehicle technologies for various trade organizations and has co-authored a peer-reviewed publication for the Accident Reconstruction Journal ("ARJ"). Mr. Behrens is a certified XL tribometrist through Excel Tribometers, LLC.

## PROFESSIONAL AFFILIATIONS: Mr. Behrens is a current member of the following societies:

SAE Society of Automotive Engineers
NAFE National Association of Forensic Engineers
TBP National Society of Professional Engineers
Tau Beta Pi Engineering Honor Society

SATAI Southwest Association of Technical Accident Investigators

