

ATA ASSOCIATES, INC. 1301 GEMINI HOUSTON, TX 77058

EXPERTS IN LITIGATION SUPPORT

ATA ON THE ROAD

2/7-2/9	DRI Product Liability Conference, Denver, CO - R. Swint, R. Cook, A. Carr
2/16	HCSP Luncheon Presentation - A. Vaughan
2/22	CVSA Webinar "North American Fatigue Management Program Solutions" - R. Cook
3/17-3/19	Tri-State Safety Summit, Sioux City, NB - R. Cook, C. Pate
3/23-3/26	TCA Annual Convention, Nashville, TX - R. Swint. R. Cook. M. Ludeke
3/27-3/29	TXTA Safety Management Council, Waco, TX – M. Ludeke
4/10-4/12	DRI Trucking Law Seminar, St. Louis, MO - R. Swint, R. Cook, A. Carr
6/2-6/4	TCA Safety & Security Meeting, Indianapolis, IN - M. Ludeke
6/12-6/14	TTLA Midyear Conference, Austin, TX – R. Swint, R. Cook, A. Carr
6/16-6/19	ATA Litigation Center's Trucking Legal Forum, Minneapolis, MN - R. Swint
6/25-6/28	DPS Texas Challenge Cornus Christi TX - A Vaughan M Ludeke

SERVICES OFFERED

- Litigation Support
- Expert Consulting
- ♦ Accident
- Reconstruction
- ◆ Engineering Analysis
- ◆ Technical Support

- ♦ Quick Response
- Laboratory Testing
- ♦ Vehicle Inspection
- ◆ Case/Project Management
- ♦ Standards Research
- ♦ Demonstrative Aids

- Computer Aided Design/Drafting
- Graphics/ Animation
- Photography
- ♦ Video Production

Visit our website at www.ataassociates.com or scan here:



(281) 480-9847 Toll Free: (877) 480-9846



March 2024

www.ataassociates.com



Medium and Heavy-Duty Trucks and Trailers

By April Yergin

15xRx(F±

In the majority of instances, medium and heavy-duty trucks are considered commercial vehicles, setting them apart from automobiles and light trucks by numerous factors. These vehicles can be up to five times longer, one and a half times wider, 15-30 times heavier, and typically utilize air-brake systems, among other distinctions. These differences collectively contribute to a vehicle that poses challenges in terms of acceleration, braking, and overall maneuverability.

When conducting post-accident examinations of large trucking crashes, a thorough reconstruction process begins with meticulous documentation, including high-resolution photography, precise dimensional measurements, and the retrieval of mechanical and electronic data. This task is entrusted to knowledgeable professionals in the field of forensic engineering, who are well-versed in the legal implications of the matter at hand. ATA Associates possesses both the equipment and expertise necessary to gather crucial information vital to the litigation process in such cases.

The initial phase of a crash investigation entails capturing high-resolution photography from multiple angles and elevations. Utilizing drones, LiDAR scanners, or advanced cameras,

ATA's technical specialists employ their expertise to photograph vehicles, the site, and potential evidence. These images are used in various sophisticated photogrammetry programs, which can generate precise 3-dimensional representations. This process preserves critical details like paint transfer evidence, damaged components, and debris patterns at the accident scene. (Continued on Page 2)

IN THIS ISSUE

Trucks & Trailers1-2
Welcome S. Palacios3
Coming Soon

TRUCKS AND TRAILERS (Cont'd)



3D model based on photogrammetry produced by ATA Associates technical experts.

ATA's experts routinely complete the digitization of tractor trailers using 3D scanners and LiDAR imaging cameras. There are many advantages of obtaining evidence as a 3D object including:

- Enhanced Visualization: Objects can be rotated and viewed from any angle.
- Digital Preservation: 3D models are accessible even after the physical object is no longer available.
- Animation and Analysis: Individual components can be measured virtually and combined with Google Earth imagery, surveillance video or other resources to create an animation of the sequence of events leading up to, during and after an accident.

In modern medium-duty trucks and 18-wheelers, pivotal evidence can be unearthed from the potential data stored in engine electronic modules, antilock braking system (ABS) controllers, telematic devices, and safety sensing systems. These devices play a crucial role in providing essential information for a case, including speed, braking details, geo-location, and occasionally forward-facing camera footage up to eight seconds before an incident occurs. ATA Associates is dedicated to maintaining an extensive range of hardware and software not only to gather electronic data but also to analyze this information comprehensively within the context of the entire crash event.

Professionals at ATA regularly conduct forensic brake component inspections in commercial vehicles. The company possesses specialized equipment designed specifically for quality testing of trailer air brake and lighting systems. Recognizing the importance of knowledge and skill in handling such equipment, ATA personnel are adept at providing a thorough braking evaluation of commercial airbrake systems.



Mobile Universal Trailer Tester used by ATA's technical experts.

www.ataassociates.com

TEXAS-SIZED WELCOME TO NEW PARTNER SARGE PALACIOS



ATA has partnered with Mr. Rick "Sarge" Palacios and his company, Palacios Accident Reconstruction. Located in the heart of vibrant San Antonio, Mr. Palacios is strategically positioned to respond quickly to inspection and crash investigation requests in the central Texas area. His geographical advantage, coupled with his keen insights into the local landscape, positions him as a valuable asset to our growing team.

Bringing over 35 years of experience in law enforcement and having completed over 1,000 hours of crash investigation and reconstruction courses, Mr. Palacios specializes in the application of traffic law to crashes. His expertise extends to human factors, crash data retrieval and analysis, as well as nighttime visibility testing.

Mr. Palacios is a licensed drone pilot, certified to conduct FMCSR Inspections of Commercial Motor Vehicles, and is distinguished amongst his peers for completing the highly competitive Texas Department of Public Safety Advanced Crash Investigation School Levels I - VI.

Earning the rank of sergeant with the Texas Department of Public Safety, Mr. Palacios progressed from a team member to leading the Region 3A-Corpus Christi Crash Reconstruction Team. His diverse experience includes serving as the administrator of the Jim Wells County Sheriff's Office, a police officer at The University of Texas at San Antonio, and an adjunct instructor at the Del Mar Regional Police Academy.

Additionally, Mr. Palacios retired as a Major from the Texas Army National Guard, where he served as the Division Transportation Officer for the 49th Armored Division. He played a crucial role as the senior transportation officer during the deployment of the Division Headquarters to Bosnia as Task Force Eagle.

With an extensive career, Mr. Palacios has cultivated and maintains connections within various law enforcement networks. ATA is confident that his local expertise, combined with his commitment to excellence, will significantly contribute to the success and growth of both our companies.

COMING SOON

We are diligently working to finalize the development of a comprehensive website redesign.

Look for an email notification of the launch in the next few months!



Technical accuracy of articles is the responsibility of individual contributing authors. Publication of authors' opinions does not constitute statements or policies of ATA Associates, Inc. Submissions and suggestions are welcome.

© 2024 copyright

Page 2 Page 3