Ken Tandy

MSME, PE, FAACDP

National Director, Accident Reconstruction

Department
Accident Reconstruction & Forensic Animation

Tel: (346) 831-5075
Email: ken.tandy@yaeservices.com

Locations
Dallas, TX
Houston, TX

Biography

Ken began working in the automotive industry in 1992 and has had positions ranging from Vehicle Dynamics Analyst, Vehicle and Tire Development Engineer to Vehicle Dynamics Development Manager of Advanced Vehicle Technology Systems. Prior to joining YAES, Ken has consulted on vehicle accident reconstruction involving automobiles, light trucks, and commercial trucks and matters involving vehicle dynamics testing, simulation and modeling, advanced vehicle technologies, and failure analysis of various equipment and systems since 2003. He is a licensed Professional Engineer in multiple states and has presented his professional findings in courts of law. Additionally, he has owned his own company providing technical consulting in the area of vehicle accident reconstruction involving automobiles and commercial trucks. Ken earned his Bachelor and Master of Science degrees in Mechanical Engineering from The Ohio State University, with his graduate research focused on vehicle dynamics and was primarily conducted on-site at the Vehicle Research and Test Center (VRTC) of the National Highway Traffic Safety Administration (NHTSA). He has written numerous peer-reviewed publications and is a member of the American Society of Mechanical Engineers (ASME) and the Society of Automotive Engineers (SAE). Ken was the recipient of the “Engineer of the Future in Automotive Research,” presented by the FISITA Automotive Society in 1992. He represented North America as one of eight engineers from around the world in the automotive industry.

Credentials

- MSME | Mechanical Engineering - Professional Master of Science
- PE | Professional Engineer
- FAACDP | FAA Certified Drone Pilot

Representative Consulting Assignments

- Chassis Design Analysis | Multiple Locations | Investigation and analysis of chassis system designs including suspension and stability control systems
- Vehicle Electronic Data Download | Multiple Locations | Download vehicle input and response data for analysis of crash sequences. Vehicle Rollover Analysis
- Tire Failure Analysis | Multiple Locations | Investigation, analysis, and reconstruction vehicle response due to tire failures
- Collision Analysis | Multiple Locations | Investigation, analysis, and reconstruction of single and multiple vehicle collisions
- Vehicle Rollover Analysis | Multiple Locations | Investigation, analysis, and reconstruction of passenger and heavy vehicle rollover crash sequences
- Trucking Analysis | Multiple Locations | Investigation, analysis, and reconstruction of single and multiple heavy vehicle collisions

Professional Experience

- 2022 - Current | Director, Reconstruction Services | YA Engineering Services

- 2018 - 2022 | Technical Consulting Project Engineer | S-E-A Ltd.
- 2010 - 2018 | Owner/President/Technical Consultant | VehDyn, LLC.
- 2003 - 2010 | Technical Consulting Project Engineer | Tandy Engineering & Associates
- 1999 - 2003 | Advanced Technology Vehicle Dynamics Development Manager | Visteon Corporation
- 1992 - 1999 | Vehicle Dynamics/Product Engineer | Ford Motor Company

Area of Practice

- Accident Reconstruction
- Failure Analysis
- Heavy Trucking
- Litigation Support
- Tire Failure Analysis
- Vehicle Electronic Data Download
- Vehicle Rollover Analysis

Publications and Presentations

- Tandy, D.F., Tandy, K.T., Colborn, J., Pascarella, R.J., The Effect of Electronic Stability Control Following a Rear Tread Belt Separation, SAE Paper No. 2010-01-0113
- Tandy, K.T., The Ohio State University, Improving Vehicle Handling Simulation via Sensitivity Analysis
- Tandy, D.F., Tandy, K.T., Colborn, J., Pascarella, R.J., SAE Int. J. Passenger Cars – Mech, The Effect of Electronic Stability Control Following a Rear Tread Belt Separation, Syst. 3(1): 226-256
- Tandy, D.F., Granat, K.J., Durisek, N.J., Tandy, K.T, Pascarella, R.J., Baldwin, J., Vehicle Response Comparison to Tire Tread Separations Induced by Circumferentially Cut Tires and Distressed Tires, SAE Paper No. 2007-01-0733
- Tandy, K.T., Heydinger, G.J., Chrstos, J.P., Guenther, D.A., Institution of Mechanical Engineers Paper C389/396, Improving Vehicle Handling Simulation via Sensitivity Analysis, ISITA 925042, FISITA92, 1992, presented at the 1992 FISITA Congress, London, England, June 1992
- Tandy, D.F., Tandy, K.T., Ault, B.N., Coleman, C., Pascarella, R.J., SAE Int. J. Passenger Cars – Mech, Steering and Handling Performance During a Full Tire Tread Belt Separation, Mech. Syst. 4(1): 791-806
- Baldwin, J., Pascarella, R.J., Tandy, D.F., Tandy, K.T., Granat, K.J., Durisek, N.J., Tire Society Presentation, The Chemistry and Physics of a Natural Tread Separation
- Tandy, D.F., Tandy, K.T., Ault, B.N., Coleman, C., Pascarella, R.J., Steering and Handling Performance During a Full Tire Tread Belt Separation, SAE Paper No. 2011-01-0973
- Tandy, D.F., Tandy, K.T, Durisek, N.J., Granat, K.J., Pascarella, R.J., Carr, L., Liebbe, R., An Analysis of Yaw Inducing Drag Forces Imparted During Tire Tread Belt Detachments, SAE Paper No. 2007-01-0836
- Durisek, N.J., Tandy, K.T., Claussen, J.S., Tanner, C.B., Brantman, R., Guenther, D.A., Vehicle Characterization Through Pole Impact Testing, Part II: Analysis of Center and Offset Center Impacts, SAE Paper No. 2005-01-1186 *Selected for SAE 2005 Transactions Journal of Passenger Cars – Mechanical Systems
- Tandy, D.F., Neal J. W., Pascarella, R.J., Tandy, K.T, Bae, J.C., Effect of Aging on Tire Force and Moment Characteristics, SAE Paper No. 2010-01-0772
- Tandy, K.T., FISITA92 Congress, Presented at the 1992 FISITA Congress,

London, England, London, England, Survey of Chassis Measurement Methods, Young Automotive Engineers of the Future Special Session
- Durisek, N.J., Tandy, D.F., Granat, K.J., Tandy, K.T, Pascarella, R.J., Carr, L., Comparative Dynamic Analysis of Tire Tread Belt Detachments and Stepped Diameter ("Lumpy") Tires, SAE Paper No. 2007-01-0846 *Selected for SAE 2007 Transactions Journal of Passenger Cars – Mechanical Systems

Education

- The Ohio State University - Master of Science - Mechanical Engineering/Vehicle Dynamics - Columbus - Ohio
- The Ohio State University - Bachelor of Science - Mechanical Engineering - Columbus - Ohio

Affiliations

- Society of Automotive Engineers (SAE)
- American Society of Mechanical Engineers (ASME)

Licenses

- 53209 - Alabama - Professional Engineer
- 69772 - Arizona - Professional Engineer
- 19057 - Arkansas - Professional Engineer
- 56252 - Colorado - Professional Engineer
- 95641 - Florida - Professional Engineer
- 43698 - Louisiana - Professional Engineer
- 31386 - Mississippi - Professional Engineer
- 26920 - Nevada - Professional Engineer
- 25889 - New Mexico - Professional Engineer
- 31375 - Oklahoma - Professional Engineer
- 135006 - Texas - Professional Engineer