

## **STEPHEN B. CHEWNING**

### **EXPERIENCE**

Over 30 years experience in accident reconstruction and analysis.

Specialist in commercial vehicle crashes and Federal Motor Carrier Safety Regulations.

### **ACADEMIC BACKGROUND**

Bachelor of Science, Administration of Justice and Public Safety, Virginia Commonwealth University, Richmond, VA, 1978

Undergraduate course work in the Highway Safety Option which included courses in Accident Prevention, Accident Analysis and Injury Control Measures

Master of Science, Administration of Justice and Public Safety, Virginia Commonwealth University, Richmond, VA, 1983

### **CERTIFICATION**

Certificate of Full Accreditation from The Accreditation Commission for Traffic Accident Reconstruction - Registration # 411

Certified Director of Safety, North American Transportation Management Institute - CDS # 1773

### **SPECIALIZED TRAINING**

Advanced Accident Investigation, Virginia Commonwealth University, Richmond, VA, 1978

Accident Investigation Institute, Virginia Commonwealth University, Richmond, VA, 1978

Technical Accident Investigation, Traffic Institute, Northwestern University, Evanston, IL, 1979

Graduate of Traffic Accident Reconstruction Training Program, Institute of Police Technology and Management, University of North Florida, Jacksonville, FL, 1982

Certified as an Accident Reconstruction Specialist by the Institute of Police Technology and Management, University of North Florida, Jacksonville, FL

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Motor Fleet Safety Program Training, Virginia Commonwealth University, Richmond, VA, 1980

Lamp Examination and Evaluation Training, Traffic Institute, Northwestern University, Evanston, IL, 1980

Forensic Tire Examination, University of North Florida Institute of Police Technology and Management, Jacksonville, FL, 1984

Special Problems in Accident Reconstruction Seminars, University of North Florida Institute of Police Technology and Management, Jacksonville, FL, 1983, 1984, 1986, 1990, 1994, 2004

Motorcycle Accident Investigation, Traffic Institute, Northwestern University, 1985

Commercial Vehicle Accident Investigation, The Institute of Police Technology and Management, University of North Florida, 1986

GM Medium Duty Truck and Tractor Air Brake Systems - Technology analysis and testing. All system components and functions studied in detail including interrelationship for failure modes, Service Technology Group, General Motors Corporation, 1993

Heavy Duty Truck Air Brake Systems - Technology, analysis and testing. All system components, functions and malfunctions studied in detail. Equipment examined includes Bendix Anti-Lock System for heavy trucks. Certified as a Bendix Factory Trained Brake Specialist. Allied Signal Corporation - Bendix Heavy Duty Vehicle Systems Group, Elyria, OH, 9/94

Advanced Air Brake Systems - Advanced concepts of commercial vehicle air brake systems including design, selection of components for maximum efficiency and safety, extensive simulation and analysis of component and system failures. Haldex Corporation - Midland Heavy Duty Brake Systems, Kansas City, MO, 7/98

Braking Performance of Heavy Commercial Vehicles - Detailed study of factors that influence heavy vehicle air brakes. Commercial vehicle ABS, and EBS development, techniques for measurement, maintenance and optimization of air brake system performance. Examination of FMVSS 121 and discussion of advances in testing procedures and equipment to measure compliance. Update on USDOT/OMC efforts to identify more efficient field test equipment and techniques. Society of Automotive Engineers (SAE), Lexington, KY, 4/99

Heavy Truck Dynamics and Crash Testing Seminar - Testing included high speed truck dynamics, rollover tendencies, brake efficiency, and truck to vehicle crash tests. Combined conference with TAARS, SOAR and WATAI, Texas A&M University, College Station, TX, 9/94

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Mechanics of Heavy Duty Trucks and Truck Combinations - Areas of study include air brakes and actuation systems, thermal properties of brakes and brake systems, components to improve brake system performance with unlocked wheels, braking capacity of heavy duty trucks and multi-vehicle combinations, mechanical properties of heavy truck tires, mechanical and kinematic properties of heavy truck suspensions, truck steering systems, longitudinal acceleration performance, cornering responses, mechanics of rollover, influences of load and load shift on rollover analysis, frames, simulation of truck computations and dynamics. University of Michigan, Ann Arbor, MI, by the Transportation Research Institute (UMTRI), 1996

Heavy Vehicle Rollover Prevention, Analysis and Reconstruction - Advanced on and off scene methodology, computer evaluation of truck crashes, collision dynamics, interaction with roadside objects, data recorders, effectiveness of simulation software in assessment of rollovers, preliminary results of rollover warning system technology, and rollover prevention techniques. The course included two actual staged commercial vehicle rollover events. Society of Automotive Engineers (SAE), Vancouver, British Columbia, Canada, 7/00

Tractor Trailer Side Underride Analysis – History and derivation of the underride speed equation, review of data points, review of previous crash tests, field tests consisting of live crashes, Midwest Institute for Transportation Safety, Indianapolis, IN, 8/05

Military and Emergency Vehicle Safety - Course content included investigation of EMS vehicle crashes, crashworthiness of EMS vehicles, special safety issues pertaining to the EMS environment, technical issues in design and specification of EMS vehicles, special considerations in testing of emergency vehicles, innovations in EMS vehicle occupant protection and safety, computer simulation for occupant safety in special purpose vehicles, and enhancing heavy truck crew cab safety. Society of Automotive Engineers (SAE), Phoenix, AZ, 9/01

MGM Brake Tech Service Course - Factory training and certification course for repair and maintenance of MGM air brake products for commercial vehicles and heavy equipment. MGM a division of Indian Head Industries, Inc., Charlotte, NC, 1/03

1998 Annual Conference of Illinois Association of Technical Accident Investigators (IATAI) - Focus on commercial vehicle accident reconstruction, Field activities included instrumentation of commercial vehicles, field testing to evaluate and compare various data collection devices and effect of induced brake defects on stopping distance and stability. Springfield, IL, 9/98

Ford Anti-Lock Brakes - Technology analysis and testing, systems examined included all Teves Systems used in Ford Motor Company vehicles 1987-1993, Ford Motor Company, Catonsville, MD, 1993

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Rear Wheel and Four Wheel Anti-Lock Brakes - Technology, analysis and testing. Systems examined included Teves, Bosch, Kelsey Hayes, and Delco Moraine, Service Technology Group, General Motors Corporation, 3/92

Supplemental Inflatable Restraints (Air Bags) - Technology analysis and testing. Systems examined included Delco and Siemens, Service Technology Group, General Motors Corporation, 3/92

Tech 1 Bidirectional Scan Tool Training for analysis of all vehicle computer systems including anti-lock brakes, engine controls, supplemental inflatable restraints, and electronic transmissions, Service Technology Group, General Motors Corp., 8/92

Vetronix Crash Data Retrieval System Training - Training covering system operational parameters, data formats, uses and limitations. The training resulted in certification of the operator by Vetronix, Santa Barbara, CA, 7/00

Caterpillar Electronic Engine Controls - Factory training on use of Caterpillar's "electronic technician" computer program for data retrieval from Caterpillar diesel engine electronic control modules. Modes of training included speed and RPM calibration, all engine parameters, trip parameters, including the quick brake function, programmable features, security features, and remote diagnostic capabilities. Caterpillar Power Systems, Richmond, VA, 4/02

Detroit Diesel ProDriver Reports and DDEC Data - Factory training for certification on extracting and analyzing data from Detroit Diesel electronic engine control modules and ProDriver data recorders. Training included detailed data on functions, parameters, and capabilities both of current models and new MBE engines. Detroit Diesel Corporation Training Center, Detroit, MI, 4/04

Cummins Insite Qualification Course - Factory training and qualification on use of Cummins Insite computer program for data retrieval from Cummins diesel engine electronic control modules. Training included detailed data on functions, parameters and capabilities of Cummins ECMs. Training resulted in certification by Cummins. Cummins Atlantic Training Center, Charlotte, NC, 8/05

High Performance Driving/Vehicle Dynamics - Dynamic testing of understeer, oversteer, four wheel drift, driver reaction, and skidding in various configurations at high speeds, both rear and front wheel drive vehicles tested. Bob Bondurant School of High Performance Driving, Phoenix, AZ, 1994

Highway Vehicle Event Data Recorder Symposium - Topics included updates on Ford Motor Company Systems, Vetronix Systems, Siemens VDO Accident Data Recording Systems, and the Eaton Vorad Collision Warning System. Reviewed data on accuracy of various forms of recorded data, comparison of EDR data with other estimates of crash

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severity, and the progress of the event data recorder research and technology assessment by the FMCSA. Presentations were also made by fleet users of EDR equipment, Attorneys on the legal perspective of data retrieval and the European perspective on data recording. Sponsored by the Society of Automotive Engineers (SAE), National Transportation Safety Board (NTSB), and Federal Motor Carrier Safety Administration (FMCSA), National Transportation Safety Board Academy, George Washington University, Ashburn, VA, 6/04

Automobile Vehicle Dynamics - Analysis of factors which affect handling, braking, and response. Topics examined include tire mechanics, suspension kinematics, brake dynamics, steering properties, and use of two and three degree of freedom handling models to analyze vehicle performance, Society of Automotive Engineers (SAE), Troy, MI, 1997

Vehicle Accident Reconstruction Methods Seminar - Content of seminar included analysis of collisions through impulse-momentum theory, crush energy, planar photogrammetry, mechanics and modeling of tire forces, yaw mark discussion and validation, use of dynamics simulation, and application of differential variations and statistics to reconstruction computations, Society of Automotive Engineers - SAE, Troy, Michigan, 8/05

Microcomputer Assisted Traffic Crash Reconstruction - Use of EDCRASH Computer program for both damage and momentum based analysis of crashes. Analysis details include use of trajectory simulations to test calculated speed and post-impact direction. Extensive examinations of data base, calculation procedures, and inherent program functions and capabilities. Traffic Institute, Northwestern University, Evanston, IL, 3/96

EDC Accident Reconstruction - Review of program history, scope and capabilities, including discussion of precursor programs such as Crash, and Crash III. Orientation to the windows based HVE-2D environment. Program training includes detailed study of the analytical procedures and logic contained with the program to perform the calculations of damage based Delta-V, separation velocities, common velocity check, trajectory simulation and linear momentum. Course included case studies, proper data analysis, management of diagnostic messages, and presentation of data. Engineering Dynamics Corp., Richmond, VA, 2/01

VISTA FX3 Accident Reconstruction and Animation Software Training - Training on the capabilities of the Vista FX3 release of the Visual Statement Software. Training included use as an advanced diagramming tool, Vista Crash Analysis, Real Motion 2D and 3D Animations of analysis data, Photo FX module which allows placement and scaling of photos from outside sources into the work product, Hawkeye Photo Rectification module which supports photo analysis applications, Simulation module and extensive data base of data needed for various types of analysis - Visual Statements, Inc. - Richmond, VA 1/07

Accident Reconstruction / Conservation of Momentum and Energy - Course content included history of dynamic analysis, Cartesian and Newtonian treatment of momentum and energy, and rigid body dynamics. Discussion of unusual spin trajectories, constraints

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to planar motion, angular momentum, crush energy determination in central, offset, and oblique. Use of CRASHEX to solve collisions numerically and graphically. Society of Automotive Engineers (SAE), Tempe, AZ, 10/97

2003 ARC/CSI Crash Conference - Training included live crash tests of vehicles, brake tests of commercial vehicles, and presentations from Ford and GM on the new development in their collision data recording capabilities. Additional presentations covered airborne trajectory analysis, biomechanics overview, and updates on available NHTSA data. Collision Safety Analysis and The Accident Reconstruction Network, Las Vegas, NV, 6/03

2006 ARC/CSI Crash Conference - Training included live crash tests of instrumented vehicles with crash test data reviews, review of momentum analysis with secondary contacts, friction applications, aerial photo analysis and updates on numerous areas of interest. Collision Safety Analysis and The Accident Reconstruction Network, Las Vegas, NV, 6/06

2004 Special Problems in Accident Reconstruction Seminar - Training included live crash tests, presentations validating computations used in several analysis modes, hydroplaning, dynamic stability systems, vehicle defect investigations, and railroad crossing investigations. IPTM University of North Florida, Jacksonville, FL, 4/04

Photogrammetry in Accident Reconstruction - Methods of obtaining reconstruction data from photographs. Study of the SAE object space coordinate system and system translation, rotations and projections. Detail analysis of the projection, collinearity and coplanarity equations and their use in photogrammetry. Use of dimensional control, control points, and computerized two and three dimensional photogrammetry methods. Resection of field photographs using iteration of the collinearity equations (ICE) and direct linear transformation (DLT) methods. Use and discussion of various computer hardware and software to link field survey, photographic and other data into a final photogrammetric product. Society of Automotive Engineers (SAE), Troy, MI, 4/99

Biomechanics of Impact Seminar - Topics included the history of impact biomechanics, and crash related biomechanical parameters of the head, neck, chest, abdomen, and extremities to understand the limits of human tolerance. Discussion of current and future occupant restraints. Association for the Advancement of Automotive Medicine, Richmond, VA, 10/01

Concept of Night Visibility For Traffic Accident Reconstruction - Topics included night eye to camera comparison, vision field testing, visual glare testing, Snellen acuity testing, reaction times, night vision testing in field situations, technology for forensic night visibility tests. Institute of Police Technology, University of North Florida, Jacksonville, FL, 5/95

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Accident Investigation Seminars, Virginia Commonwealth University. U.S. Department of Transportation, Dynamic Science, Inc., Phoenix, AZ

Field Testing Experience at Dynamic Science, Inc., Phoenix, AZ in conjunction with the Southwest Association of Technical Accident Investigators, and at various courses across the nation to validate all calculations used in the process of Accident Reconstruction

Crash Testing in conjunction with National Association of Professional Accident Reconstruction Specialists, Crofton, MD, 6/87

Friction Testing in conjunction with National Association of Professional Accident Reconstruction Specialists, Crofton, MD, 11/87

Accident Investigation Techniques Seminar in conjunction with National Association of Traffic Accident Reconstructionists and Investigators, Atlantic City, NJ, 10/88

1990 Accident Reconstruction Conference, Illinois State University, Normal, IL

American Trucking Association 1997 Annual Conference of Safety Managers Council, discussion of SAFESTAT program now being used by Office of Motor Carriers, Federal Highway Administration, discussion of changes in Motor Carrier safety ratings program, updated on potential hours of service changes based on fatigue/sleep disorders study by US DOT, Indianapolis, IN, 10/97

American Trucking Association 1998 Annual Conference of Safety Managers Council, discussion of legal aspects of accident investigation, critical safety behaviors for commercial vehicle operators, updates on USDOT OMC issues, cutting edge technology in the industry, Lake Buena Vista, FL, 10/98

American Society of Safety Engineers Region VI, Professional Development Conference 2004, discussion of the ANSI Z15 standard, safety requirements for motor vehicle fleets, reducing liabilities, OSHA compliance, risk perception, management of the safety function return on investment for safety, Myrtle Beach, SC, 9/04

American Society of Safety Engineers Region VI, Professional Development Conference 2005, Topics include: Accident investigation (speaker), design of a modern safety program, ANSI Z15 standard, motor vehicle fleets update, safety hazard technique recognition, and a model for incident investigations, Myrtle Beach, SC, 9/05

Motor Fleet Safety Principals and Practices, Training for the Safety Supervisor Course work included safety as a management function, commercial vehicle driver selection and testing, designing and implementing training programs for safety, communications with employees to improve safety functions, supervision of drivers and employees from the safety perspective, accident prevention and investigation, regulatory compliance, hazardous

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material transportation and security-North American Transportation Management Institute (NATMI') 2004

Managing Motor Fleet Safety Programs/Training for the Safety Director Course work included the role of the Safety Director in determining needs and setting overall policy, implementation of safety policy and programs, using supervision and communication to reinforce management commitment to safety, monitoring safety programs to determine if objectives are being met, The quality management approach applied to safety, use of statistical control models to evaluate performance, analysis of accident trends and identification of root causes for the purpose of safety training and accident prevention, management of employee injury/illness programs in the transportation industry, North American Transportation Management Institute (NATMI) 2004

North American Transportation Management Instructor Seminar - Certified as an instructor for NATMI subjects, Denver, CO, 6/04

Nikon Advanced Photography Course - Topics included advanced close up techniques, front and rear curtain flash synchronization, filters, advanced night techniques, photo/video transfer, auto exposure and focus manipulation, technical information update, Nikon, Inc., Fairfax, VA, 12/94

## **FIELD EXPERIENCE**

Ten years experience (1976-1986) with the Henrico County, Virginia Division of Police as a Traffic Crash Investigator, responsible for investigation of fatal, serious injury and felony hit and run traffic crashes.

## **MEMBERSHIPS**

- National Association of Professional Accident Reconstruction Specialists
- Texas Association of Accident Reconstruction Specialists
- Illinois Association of Technical Accident Investigators
- The Society of Accident Reconstructionists
- Society of Automotive Engineers
- Commercial Vehicle Safety Alliance (CVSA)
- Appointed to Henrico Co. Transportation Safety Commission, 1980-1983
- South Carolina Accident Reconstruction Society

## **QUALIFIED AS AN EXPERT WITNESS**

**DISTRICT OF COLUMBIA SUPERIOR COURT:** Washington, D.C.

**ALABAMA:** Alabama Circuit Courts;  
Coosa, Covington, Lamar, Mobile

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<b><u>ARIZONA:</u></b>	Arizona Superior Court; Pima
<b><u>FLORIDA:</u></b>	Florida Circuit Court; Broward, Dade, Duval, Palm Beach, Seminole
<b><u>GEORGIA:</u></b>	Georgia Circuit Courts; Athens-Clarke, Cherokee, Cobb, Coweta, DeKalb, Fulton, Liberty, Richmond
<b><u>KENTUCKY:</u></b>	Kentucky Circuit Courts; Boyd, Kenton, Pike, Rowan
<b><u>LOUISIANA:</u></b>	Orleans Parish
<b><u>MARYLAND:</u></b>	Maryland Circuit Courts; Baltimore, Prince Georges, St. Marys, Wicomico, Worcester
<b><u>MISSISSIPPI:</u></b>	Mississippi Circuit Courts; Hinds
<b><u>NORTH CAROLINA:</u></b>	North Carolina Superior Courts; Carteret, Mecklenburg, Rockingham, Wake
<b><u>OHIO:</u></b>	Ohio County Common Pleas Courts (Circuit or Jury level) Pickaway, Seneca
<b><u>PENNSYLVANIA:</u></b>	Pennsylvania Circuit Court; Schuylkill
<b><u>SOUTH CAROLINA:</u></b>	South Carolina Court of Common Pleas (Jury level) Beaufort, Fairfield, Horry
<b><u>TENNESSEE:</u></b>	Tennessee Circuit Court; Knox, Madison, Tipton, Washington (Johnson City)
<b><u>TEXAS:</u></b>	District Courts; Bexar County, Harris County, Tarrant County (48th Circuit)
<b><u>VIRGINIA:</u></b>	Virginia Circuit Courts; Albemarle, Amherst, Bedford, Brunswick, Buchanan, Buckingham, Campbell, Caroline, Charlotte, Chesterfield, Clarke, Culpeper, Dickenson, Fairfax, Fauquier, Franklin, Gloucester, Greenville, Hampton, Hanover, Henrico, Isle of Wight, King and Queen, Lee, Loudoun, Louisa, Lunenburg, Montgomery, Northumberland,

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Orange, Pittsylvania, Powhatan, Prince Edward, Prince William, Pulaski, Russell, Southampton, Stafford, Sussex, Tazewell, Washington, Westmoreland and Wythe Counties, along with the Cities of Alexandria, Bristol, Charlottesville, Chesapeake, Lynchburg, Martinsville, Newport News, Norfolk, Petersburg, Portsmouth, Richmond, Virginia Beach

## **WEST VIRGINIA:**

West Virginia Circuit Courts;  
Berkeley, Boone, Cabell, Greenbrier, Hampshire, Harrison, Jefferson, Kanawha, Mason, Mercer, Mingo, Nicholas, Putnam, Raleigh, Roane, Wayne, Wyoming

West Virginia Court of Claims;  
Charleston

## **UNITED STATES DISTRICT COURTS:**

### **ALABAMA:**

Southern District of Alabama;  
Mobile

### **GEORGIA:**

Northern District of Georgia;  
Atlanta, Gainesville

### **INDIANA:**

Northern District of Indiana;  
Ft. Wayne

### **KENTUCKY:**

Eastern District of Kentucky;  
Ashland

### **MARYLAND:**

District of Maryland;  
Hyattsville

### **SOUTH CAROLINA:**

District of South Carolina;  
Florence

### **TEXAS:**

Eastern District of Texas;  
Lufkin, Marshall

### **VIRGINIA:**

Eastern District of Virginia;  
Alexandria, Norfolk, Richmond

Western District of Virginia;  
Abingdon, Danville, Lynchburg

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**WEST VIRGINIA:** Northern District of West Virginia;  
Wheeling

Southern District of West Virginia;  
Charleston, Huntington

**INDUSTRIAL COMMISSION OF VIRGINIA** - Richmond, VA

**BOARD OF SUPERVISORS, SPOTSYLVANIA COUNTY, VA**, testified as an expert on heavy truck dynamics, crash statistics, and traffic safety issues involving commercial vehicles, 7/97

**ASHLAND TOWN COUNCIL**, testified on commercial vehicle dynamics related to stopping and lane change regarding placement of an intersection near an interstate off ramp, 11/99

Police Disciplinary Trials, Prince William County and Salem, VA

## **PUBLICATIONS**

Published article, 1980 "Accident Scene Preservation" in the Journal of the VA Association of Volunteer Rescue Squads.

Author of various police training and testing instruments used for police training.

Coauthor: "Accident Reconstruction in Virginia; A Primer for the Trial Attorney" published by the Virginia Trial Lawyers Association, March, 1986.

Author: "Commercial Vehicle Brake Issues In Accident Reconstruction" presented to Georgia Motor Truck Association 10/99, presented to the American Trucking Association, 3/00, presented to 2001 Fall Conference of American Trucking Association Safety and Loss Prevention Management Council, 9/01

Coauthor: "Use of Electronic Data in Accident Reconstruction" published in the Summer, 2007 Edition of GA Defense Lawyer Magazine

## **TEACHING ACTIVITIES**

Award for Advancement of Professional Standards in Accident Investigation from Transportation Safety Training Center, Virginia Commonwealth University, 1978

Appointed to Adjunct Faculty, University of North Florida, Institute of Police Technology and Management, 1984

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Instructor in Traffic Crash Investigation and traffic safety related subjects across Virginia through Virginia Commonwealth University, Transportation Safety Training Center.

Instructor in Traffic Crash Investigation and Reconstruction for various police training academies throughout Virginia:

“Basic Accident Investigation”

Henrico County Virginia Police Academy, Richmond, VA, 1980-1985

Richmond Regional Criminal Justice Training Center, Richmond, VA, 4/81

“Technical Accident Investigation”

Richmond Regional Criminal Justice Training Center, Richmond, VA, 10/80, 6/81, 5/82

“Hit and Run Accident Investigation”

Richmond Regional Criminal Justice Training Center, Richmond, VA, 11/80, 6/81

“Personal Injury Accident Investigation”

Henrico County Virginia Bar Association, Richmond, VA, 9/81

“Advanced Accident Investigation”

Northern Virginia Peninsula Criminal Justice Academies, Fairfax, Hampton, VA, 3/81

“Accident Investigation Seminar”

Central Virginia Criminal Justice Training Center, Lynchburg, VA, 11/82

“Advanced Accident Investigation”

Roanoke Virginia Police Academy, Roanoke, VA, 3/82

“Physics - Practical Physics in Accident Investigation”

Hermitage High School, Senior Honors Physics Classes, Henrico Co. VA, 1982, 1983, 1984, 1985, 1996

“Advanced Accident Investigation” for IPTM

Shelby County Sheriff’s Department, Memphis, TN, 1984

“Accident Reconstruction” for IPTM

Tennessee Highway Patrol, Donaldson, TN, 1984

“Advanced Accident Investigation” delivered for IPTM

Baltimore Police Department, Baltimore, MD, 1984

“Accident Reconstruction” for IPTM

Massachusetts State Police, Boston, MA, 1984

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“Advanced Accident Investigation”  
On campus of IPTM, Jacksonville, FL, 3/85

“Accident Reconstruction” for IPTM  
Florida Highway Patrol, Tallahassee, FL, 1985

“Accident Reconstruction”  
Delivered for Committee On Continuing Legal Education, VA Law Foundation,  
delivered at 6 VA locations, 4/85

“Pedestrian Accidents”  
Taught in Accident Reconstruction Seminar, IPTM University of North Florida,  
Jacksonville, FL, 4/86

“Accident Reconstruction”  
Seminars presented to approximately 60 groups of industry related persons between  
1986-1997

“Accident Reconstruction”  
Richmond Claims Association (VA) 1989  
Baltimore Claims Association (MD) 1992  
Tidewater Claims Association (VA) 1992  
Charlottesville Claims Association (VA) 1992

“Accident Reconstruction”  
Delivered to committee on continuing legal education Virginia Law Foundation on the  
following dates:

12/9/87	Roanoke, VA
12/10/87	Richmond, VA
12/16/87	Norfolk, VA
12/17/87	McLean, VA
1/5/88	Abingdon, VA
1/6/88	Staunton, VA

“Accident Reconstruction Experts”  
Presented to VA Association of Civil Defense Attorneys, Roanoke, VA, 1989

“Accident Reconstruction” delivered in May, 1989 Tort Law Seminar of the VA Trial  
Lawyers Association, Richmond, VA

“Accident Reconstruction Experts”  
Defense Research Institute, Richmond, VA, 4/89

Accident Reconstruction Lectures to Senior Law Students,  
George Mason University Law School, Fairfax, VA, 1990, 1991, 1992

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Accident Reconstruction Seminar, VA Safety Association Statewide Meeting, Norfolk, VA, 1991

“Civil Aspects of Accident Investigation”  
Henrico County Basic Police Academy, Richmond, VA, 1991-94

“Fleet Accident Investigation and Reconstruction”  
Bell Atlantic, Baltimore, MD 4/92

“Accident Reconstruction”  
Tidewater Chapter, American Society of Safety Engineers, Hampton, VA, 4/92

“Accident Investigation Seminar”  
Tidewater Claims Association, Hampton, VA, 5/92

“Anti-Lock Brakes in Accident Reconstruction”  
Chesterfield County Police Academy, Chesterfield, VA, 7/92

“Anti-Lock Brakes in Accident Reconstruction”  
Virginia State Police Academy, 9/92

“Fleet Accident Investigation and Reconstruction”  
sponsored by Alexander & Alexander for VA Transit Liability Pool, Richmond, VA, 6/93

“Commercial Vehicle Accident Reconstruction”  
Graebel Van Lines, Wausau, WI, 6/93

“Accident Reconstruction”  
Professional Development Conference, American Society of Safety Engineers, Richmond, VA, 10/93

“Accident Reconstruction / DOT Regulations”  
Professional Development Conference, Region IX, American Society of Safety Engineers, Williamsburg, VA, 9/94

“Accident Reconstruction”  
Waste Management Conference of Safety Managers, Atlanta, GA, 9/94

“Accident Reconstruction”  
FORCON International, Atlanta, GA, 3/95, 4/96, 3/97

“Fleet Accident Investigation and Reconstruction”  
National Conference, American Society of Safety Engineers, Orlando, FL, 6/95

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- “Fleet Accident Investigation and Reconstruction”  
Western Geophysical Division of Western Atlas International, Houston, TX 9/95
- “Fleet Accident Investigation and Reconstruction”  
Professional Development Conference, Region IX, American Society of Safety Engineers, Myrtle Beach, SC, 9/95
- “Accident Investigation and Reconstruction”  
Virginia Transit Liability Pool Safety Personnel, Richmond, VA, 10/95
- “Accident Investigation and Reconstruction”  
USF&G Insurance Co., Charleston, WV, 11/95
- “Vehicle Accident Investigation”  
South Carolina Occupational Safety Council, 59th Annual Safety Conference, Myrtle Beach, SC, 4/96
- “Accident Investigation and Reconstruction”  
Nationwide Insurance Co., Huntington, WV, 5/96
- “Accident Reconstruction, the Law and the Science”  
Virginia Trial Lawyers Association, May Tort Law Program  
May 7, 1996            Roanoke, VA  
May 9, 1996            Virginia Beach, VA  
May 21, 1996           Falls Church, VA
- “Heavy Truck Dynamics - Accident Reconstruction”  
Shenandoah Recycling, Inc., Staunton, VA 8/96
- “Heavy Truck Dynamics - Accident Reconstruction”  
Trucking Industry Seminar, Troy, AL 8/96
- “Accident Reconstruction Technology and Techniques”  
Joint Conference of Mississippi Defense Lawyers Association and Mississippi Claims Association, Jackson, MS, 10/96
- “Accident Reconstruction”  
Edison Electric Institute Claims Conference, Williamsburg, VA, 10/96
- “Accident Reconstruction”  
Construction Industry Seminar, Kingsmill Conference Center, Williamsburg, VA, 11/96
- “Accident Investigation and Reconstruction”  
HRI, Inc., State College, PA, 3/97

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“Fleet Accident Investigation and Reconstruction”  
Blue Circle/Williams, Inc., Atlanta, GA, 7/97

“Accident Reconstruction”  
Northern Virginia Defense Lawyers Association, Fairfax, VA, 10/97

“Fleet Accident Reconstruction”  
1997 Fleet Safety Seminar, Royal Insurance Co., Richmond, VA, 10/97

“Fleet Accident Reconstruction”  
Southeastern Safety Conference, Browning Ferris Industries, Atlanta, GA, 11/97

“Accident Reconstruction”  
FORCON International, Tampa, FL, 11/97

“Fleet Accident Reconstruction”  
Liberty Mutual Insurance Co., Richmond, VA, 2/98

“Ethics in Accident Reconstruction”  
Atlanta Claims Association, Atlanta, GA, 3/98

“Accident Reconstruction”  
FORCON International, Greensboro, NC, 3/98

“Commercial Vehicle / Fleet Accident Reconstruction”  
Rea Construction Co., Myrtle Beach, SC, 3/98

“Accident Reconstruction”  
FORCON International, Ft. Lauderdale, FL, 3/98

“Commercial Vehicle / Fleet Accident Reconstruction”  
SYSCO Claims Management Fleet Safety Seminar, Orlando, FL, 4/98

“Commercial Vehicle / Fleet Accident Reconstruction”  
Royal & SunAlliance Fleet Safety Seminar, Columbia, MD, 4/98

“Accident Reconstruction”  
Nationwide Insurance Co., Gainesville, FL, 4/98

“Commercial Vehicle / Fleet Accident Reconstruction”  
Claims Control, Ft. Lauderdale, FL, 4/98

“Accident Reconstruction”  
Progressive Insurance Co., Ft. Lauderdale, FL, 5/98

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“Commercial Vehicle Accident Reconstruction”  
1998 Southwest Region Meeting & Spring Seminar, Safety Mgmt. Council, American  
Trucking Associations & Texas Motor Transportation Association, San Antonio,  
Texas, 5/98

“Commercial Vehicle / Fleet Accident Reconstruction”  
Deep South Surplus of GA, Atlanta, GA, 5/98

“Accident Reconstruction”  
Progressive Insurance Co., Richmond, VA, 5/98

“Accident Reconstruction”  
FORCON International Industry Seminar, Orlando, FL, 6/98

“Accident Reconstruction”  
Nationwide Insurance Co., Orlando, FL, 6/98

“Accident Reconstruction”  
State Farm Insurance Co., Beckley, WV, 6/98

“Commercial Vehicle Accident Reconstruction”  
Comcar Industries, Inc., Auburndale, FL, 9/98

“Commercial Vehicle Accident Reconstruction”  
Travelers Insurance Co., Orlando, FL, 9/98

“Accident Reconstruction”  
Southeastern Regional Seminar, National Association of Independent Insurance  
Adjusters, Atlanta, GA, 10/98

“Accident Reconstruction”  
FORCON International Industry Seminar, St. Louis, MO, 11/98

“Accident Reconstruction”  
Blue Circle Materials, Atlanta, GA, 2/99

“Accident Reconstruction”  
FORCON International Industry Seminar, College Park, MD, 2/99

“Accident Reconstruction”  
FORCON International Industry Seminar, Charlotte, NC, 3/99

“Accident Reconstruction”  
FORCON International Industry Seminar, Raleigh, NC, 3/99

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“Accident Reconstruction”

FORCON International Industry Seminar for Wal-Mart, Inc.,  
Bentonville, AR, 3/99

“Accident Reconstruction: Principals, Practice & Technology”

Legal and Insurance Professionals, Charleston, WV, 4/99

“Accident Reconstruction”

Law Students, University of Richmond, Forensic Evidence Course,  
Richmond, VA, 4/99, 4/00, 4/01, 4/02, 4/04

“Accident Reconstruction”

FORCON International Industry Seminar, Atlanta, GA, 4/99

“Accident Reconstruction”

FORCON International Industry Seminar, Nashville, TN, 4/99

“Accident Reconstruction”

FORCON International Industry Seminar for Suntory Water, Atlanta, GA, 5/99

“Commercial Vehicle Accident Reconstruction”

Third Annual Florida Liability Claims Conference, Orlando, FL, 7/99

“Commercial Vehicle Accident Reconstruction”

FORCON International Industry Seminar for Claims Control, Inc., Ft. Lauderdale,  
FL, 8/99

“Accident Reconstruction”

FORCON International Industry Seminar for Atlanta Claims Association, Atlanta,  
GA, 9/99

“Accident Reconstruction”

Virginia Claims Association, Fredericksburg, VA, 10/99

“Commercial Vehicle Accident Reconstruction”

Georgia Motor Trucking Association, Atlanta, GA, 10/99

“Commercial Vehicle Accident Reconstruction”

Averitt Express Trucking Company, Cookeville, TN, 10/99

“Accident Reconstruction”

FORCON International Industry Seminar for Atlanta Claims Association, Duluth, GA,  
11/99

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“Accident Reconstruction”  
RSKO Seminar, Duluth, GA, 1/00

“Commercial Vehicle Accident Reconstruction”  
ATA Southwestern Regional Meeting, San Antonio, TX, 3/00

“Commercial Vehicle Accident Reconstruction”  
ATA Southern Regional Meeting, Daytona Beach, FL, 3/00

“2000 Commercial Vehicle Accident Reconstruction Update”  
Seminar for Wal-Mart, Inc., Bentonville, AR, 3/00

“Commercial Vehicle Accident Reconstruction”  
Seminar for ABF, Inc., Fort Smith, AR, 3/00

“Commercial Vehicle Accident Reconstruction”  
2000 RIMS National Conference San Francisco, CA, 5/00

“Commercial Vehicle Accident Reconstruction”  
ATA Central Regional Meeting, Detroit, MI, 5/00

“Accident Reconstruction”  
RSKO Seminar, Dallas, TX 5/00

“Commercial Vehicle Accident Reconstruction”  
SYSCO Foods National Claims Meeting, Houston, TX, 5/00

“Emergency Vehicle Accident Reconstruction”  
American Medical Response, Atlanta, GA, 8/00

“Commercial Vehicle Accident Reconstruction”  
St. Paul Transport, St. Paul, MN, 8/00

“Commercial Vehicle Accident Reconstruction”  
Claims Control, Inc., Ft. Lauderdale, FL, 9/00

“Emergency Vehicle Accident Reconstruction”  
American Medical Response, Richmond, VA, 9/00

“Accident Reconstruction”  
Memphis, TN, 9/00

“Accident Reconstruction”  
Harleysville Insurance, Nashville, TN, 9/00

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“Fleet Traffic Accident Reconstruction”  
Professional Development Conference for the American Society of Safety Engineers  
Region VI, Myrtle Beach, SC, 9/00

“Accident Reconstruction”  
Chubb Insurance, Atlanta, GA, 11/00

“Commercial Vehicle Air Brake Issues In Accident Reconstruction”  
Georgia Motor Truck Association Safety Management Council, Atlanta, GA, 1/01

“Accident Reconstruction”  
Erie Insurance Co., Richmond, VA, 2/01

“Commercial Vehicle Accident Reconstruction”  
Carolina Casualty, Jacksonville, FL, 2/01

“Accident Reconstruction”  
Progressive Insurance Co., Richmond, VA 3/01

“Safe Commercial Vehicle Operation”  
Presented to over 100 CDL Drivers of Arlington Co., VA Public Works and  
Equipment Maintenance Division, Arlington Co., VA, 3/01

“Accident Reconstruction”  
Sentry Insurance Co., Richmond, VA, 4/01

“Commercial Vehicle Accident Reconstruction”  
CSX Transportation, Orlando, FL, 5/01

“Commercial Vehicle Accident Reconstruction”  
American Freightways, Inc., Harrison, AR, 5/01

“Commercial Vehicle Accident Reconstruction”  
Wal-Mart, Inc., Bentonville, AR, 5/01

“Commercial Vehicle Accident Reconstruction”  
SAIA Motor Freight, New Orleans, LA, 6/01

“Commercial Vehicle Accident Reconstruction”  
Merit Transport & McLane Transport, Temple, TX, 7/01

“Commercial Vehicle Accident Reconstruction”  
FCCI, Tampa, FL, 8/01

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“Fleet Accident Reconstruction”

2001 Fall Conference of American Trucking Association Safety and Loss Prevention Management Council, Nashville, TN, 9/01

“Commercial Vehicle / Fleet Accident Reconstruction”

Royal & SunAlliance Fleet Safety Seminar, Glen Allen, VA, 10/01

“Commercial Vehicle / Fleet Safety”

Lectures to management personnel and complete safety audit review, Moores Lumber Co., NY, VA, WV, PA, MD, TN, NC, 10/01-1/02, 10/02-2/03

“Safe Commercial Vehicle Operation/ FMCSR Compliance”

Annually presented to CDL Drivers of Arlington Co., VA Public Works and Equipment Maintenance Division, Arlington Co., VA, 3/02

“Accident Reconstruction”

FCCI, Sarasota, FL, 4/02

“Collision Data Retrieval for Cars and Commercial Vehicles by Accident Reconstructionists” presented in Auto Insurance Law and Accident Litigation in Georgia Seminar, Lorman Education Services, Atlanta, GA, 6/02

“Commercial Vehicle Accident Reconstruction”

Roadway Express, Inc., Akron, OH, 7/02

“Commercial Vehicle Accident Reconstruction”

2002 Fall Conference & Exhibition, ATA Safety & Loss Prevention Management Council, Reno, NV, 10/02

“Commercial Vehicle / Fleet Accident Reconstruction”

Presented to the Trucking Industry Group, Chicago, IL, 10/02

“Commercial Vehicle Accident Reconstruction”

Presented to the Tennessee Trucking Association, Nashville, TN, 11/02

“Commercial Vehicle Accident Reconstruction”

Claims Control, Inc., Ft. Lauderdale, FL, 1/03

“Accident Reconstruction Seminar”

Presented to the Allen, Allen, Allen & Allen Law Firm, Richmond, VA, 2/03

“Commercial Vehicle / Fleet Accident Reconstruction”

Presented to 2003 Oklahoma Trucking Association Midwinter Conference, Oklahoma City, OK, 3/03

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“Accident Reconstruction Seminar”

Ferguson Enterprises, Inc., Newport News, VA, 3/03

“New Technologies in Accident Reconstruction”

Presented to 2003 PLRB/LIRB Claims Conference & Insurance Services Expo, Orlando, FL, 4/03

“New Technologies in Accident Reconstruction”

Presented to Conroy, Simberg, Ganon, Krevans & Abel Annual Client Seminars, Michael Paris, Esq., Ft. Lauderdale and Orlando, FL, 4/03

“New Technologies in Accident Reconstruction”

Presented to Fleet Solutions Loss Control Meeting, San Francisco, CA, 9/03

“New Technologies in Commercial Vehicle Accident Reconstruction”

Presented to 2003 Safety & Human Resources National Conference of the American Trucking Association, Jacksonville, FL, 9/03

“New Technologies in Accident Reconstruction”

Presented to Florida Power & Light, Miami, FL, 10/03

“Accident Reconstruction and The Importance of Physical Evidence”

Presented at RLI Transportation Seminar, Atlanta, GA, 1/04

“Accident Reconstruction and The Importance of Physical Evidence”

Presented to Cotton States Insurance, Atlanta, GA, 3/04

“Downloading Accident Reconstruction Data From Commercial Vehicle Electronic Control Modules” Presented to 2004 Special Problems in Accident Reconstruction Seminar, Institute of Police Technology and Management, University of North Florida, Jacksonville, FL, 4/04

“Accident Reconstruction Information Management”

Co-Presented to the 22<sup>nd</sup> Annual Safety and Security Division Meeting, Truckload Carriers Association, Minneapolis, MN, 5/04

“Downloading and Analyzing Commercial Vehicle Event Data Recorders”

Presented at the Highway Vehicle Event Data Recorder Symposium sponsored by the Society of Automotive Engineers (SAE), National Transportation Safety Board (NTSB), and Federal Motor Carrier Safety Administration (FMCSA), National Transportation Safety Board Academy, George Washington University, Ashburn, VA, 6/04

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“Overview of Accident Reconstruction”

Presented to the Ft. Lauderdale Claims Association, Ft. Lauderdale, FL, 7/04

“Downloading and Analyzing Commercial Vehicle Event Data From the ECM”

Presented to Joint Conference of South Carolina Accident Reconstruction Society, Southeast Accident Reconstruction Society and the International Association of Accident Reconstruction Specialist, Biloxi, MS, 7/04

“Techniques in Crash Scene Management”

Presented to the Iowa Motor Truck Association and the Safety & Loss Prevention Management Council of the American Trucking Association, Des Moines, IO, 8/04

“New Technologies in Accident Reconstruction”

Presented to the American Society of Safety Engineers Region VI, Professional Development Conference 2004, Myrtle Beach, SC, 9/04

“Basics of Traffic Accident Reconstruction In Missouri”

Seminar designed for Attorneys, police officers and administrators, detectives, training officers and insurance professionals, Lorman Education Services, St. Louis, MO, 1/05

“Commercial Vehicle Accident Reconstruction”

Ft. Lauderdale, FL, 1/05

“Accident Reconstruction - 2005”

Annual Education and Management Conference of the National Private Truck Council, Pittsburgh, PA, 5/05

“Technologies In Crash Scene Management/Accident Reconstruction”

2005 Western Regional Meeting Safety and Loss Prevention Management Council, American Trucking Association, Phoenix, AZ, 5/05

“Commercial Vehicle Accident Reconstruction”

Vale Technical Institute, Harrisburg, PA, 6/05

“New Technologies In Accident Reconstruction”

2005 Annual Conference of the West Virginia Chapter of the International Association of Special Investigation Units, Parkersburg, WV, 8/05

“Commercial Vehicle Accident Reconstruction”

Jacksonville, FL, 8/05

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“Commercial Vehicle Accident Reconstruction”  
Lynden, Inc., Seattle, WA, 9/05

“Commercial Vehicle Accident Reconstruction”  
Wal-Mart Fleet Safety Managers Conference 2005, Bentonville, AR, 9/05

“New Technologies in Accident Investigation”  
American Society of Safety Engineers Region VI Professional Development  
Conference 2005, Myrtle Beach, SC, 9/05

“New Technologies in Accident Reconstruction”  
Liberty Mutual Group, Atlanta, GA 2/06

“Commercial Vehicle Accident Reconstruction”  
Aequicap, Ft. Lauderdale, FL, 4/06

“Commercial Vehicle Accident Reconstruction”  
Accordia, Atlanta, GA, 5/06

“Commercial Vehicle Accident Reconstruction”  
ESIS, Atlanta, GA, 5/06

“Commercial Vehicle Accident Reconstruction”  
Gallagher Bassett Services, Inc., Miramar, FL, 9/06

“Auto Insurance: Uninsured, Underinsured and Accident Litigation in GA”  
Collision Data Retrieval In Cars and Commercial Vehicles  
Lorman Legal Educational Services, Atlanta, GA, 9/06

“Commercial Vehicle Inspections As A Part Of Accident Reconstruction”  
National Association of Subrogation Professionals (NASPA) Southeast Region, GA  
Chapter Meeting, Atlanta, GA, 10/06

“Accident Reconstruction and the Importance of Physical Evidence”  
Florida Trucking Association, Cocoa Beach, FL, 10/06

“Technologies In Crash Scene Management/Accident Reconstruction”  
Charleston Police Department Training, Charleston, WV, 10/06

“Commercial Vehicle Accident Reconstruction”  
Baldwin - Lyons, Inc. Safety Seminar 2006, Indianapolis, IN, 10/06

“Commercial Vehicle Accident Reconstruction”  
Gallagher Bassett Services, Inc., Tampa, FL, 12/06

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“New Technologies In Accident Reconstruction”

19th Annual Claims Management Seminar - Conroy, Simberg, Ganon, Krevans, Able, Lurvey, Morrow & Schefer - Ft. Lauderdale, FL, Orlando, FL, 4/07, 5/07

“Accident Reconstruction and the Importance of Physical Evidence”

Nationwide teleconference seminar for Lorman Educational Services, 5/07

“Crash Scene Management Techniques for Commercial Vehicle Litigation Support”  
presented to FCCI Insurance Group, Midwest Region Office, Carmel, IN, 5/07

“Commercial Vehicle / Fleet Safety”

Lectures to management personnel, drivers, and complete safety audit review, The Contractor Yard, VA, WV, MD, TN, NC, SC, FL 2006, 2007

“Commercial Vehicle / Fleet Safety”

Lectures to management personnel, drivers, and complete safety audit review, Strober, Inc., VA, MD, DE, 2007

“Motor Fleet Accident Investigation”

Presented for the North American Transportation Institute at the South Carolina Trucking Association, 6/07

“Accident Reconstruction”

Gallagher Bassett, Dallas, TX, 6/07

“Accident Prevention, Management and Investigation”

Presented for the North American Transportation Institute at the Georgia Motor Trucking Association, 8/07

“Commercial Vehicle Accident Reconstruction”

Presented to Meijer Distribution, Lansing, MI, 8/07

“Motor Fleet Accident Investigation”

Presented for the North American Transportation Institute to Wal-Mart Safety Directors, Fayetteville, AR, 10/07