Bruce F. McNally

PO Box 310 • Rochester, New Hampshire 03866 • (603) 516-4560

Traffic Accident Reconstructionist
ACTAR Accreditation, Registration No. 670
National Headquarters, Hudson, Florida

Full accreditation as a Traffic Accident Reconstructionist through the Accreditation Commission for Traffic Accident Reconstruction

Professional Experience

McNally & Associates Accident Reconstruction Services, LLC **2004 to Present**

President
Directs and coordinates overall company operations. Principal investigator, providing services to various federal, state, county and local law enforcement agencies, as well as to insurance companies and law firms that require accident reconstruction for use in civil litigation. Services include accident reconstruction, re-enactment animations, forensic mapping, professional photography, and computer-generated graphic accident reconstruction. Have consulted on or reconstructed over 2,500 collisions as a private sector accident reconstructionist.

Northeast Collision Analysis, Inc. **1994 to 2004**
Rochester, New Hampshire

Director **2000 to 2004**
Directed and coordinated overall company operations. Principal investigator, who provided services to various federal, state, county and local law enforcement agencies, as well as to insurance companies and law firms that required accident reconstruction for use in civil litigation.

Director of Testing and Research **10/1995 to 2004**
Coordinated crash testing for corporation. Organized and interpreted crash test data and occupant data for use in accident reconstruction. Completed crash testing in the area of low speed rear-end impacts, lateral impacts, sideswipe impacts, and transit bus collisions. In this capacity I was directly involved with over 300 various crash tests. Also completed performance testing with various automobiles and motorcycles, as well as motorcycle drop tests to evaluate sliding friction levels.

Professional Experience - continued

Northeast Collision Analysis, Inc. - continued

Senior Consultant
Conducted accident reconstruction for corporation. Provided services to various federal, state, county, and local law enforcement agencies, as well as to insurance companies and law firms that required the data for use in civil litigation.

Millinocket Police Department **1987 to 1993**

Patrolman
Responsibilities included all aspects of a law enforcement police patrol. Enforcement of traffic and criminal statutes of the State of Maine. Accident investigator, whose responsibility included investigating or assisting in the investigation of serious or fatal accidents. Shared the responsibility of reviewing and approving all accident reports for the police department. Investigated several hundred motor vehicle accidents including several fatalities.

Detective for the police department for approximately one year. Responsible for the investigation of all serious crimes including felony offenses and narcotics investigations. Also responsible for the review and supervision of all criminal investigations within the department.

Instructor

Field training officer for new police officer. Assisted in the field training of new officer in the area of traffic law enforcement and accident investigation.

Instructor for the Millinocket Police Explorers. Gave several blocks of instruction in OUI enforcement and criminal investigation.

Instructed block of instruction in Constitutional Law and Search and Seizure Law at Stearns High School Adult Education Program.

Conducted seminars on questionable liability and low-velocity impacts for insurance companies. Topics included damage correlation, evidence collection, photography, occupant kinematics, and biomechanics. Have also completed numerous crash tests for these seminars.

Instructor - continued

Conducted seminar for a group of physicians on biomechanics and accident reconstruction of low velocity impacts.

Reconstruction of Low Speed Collisions, International Association of Accident Reconstruction Specialists (IAARS), July 13, 1998.

Reconstruction of Low Velocity Impacts, Vermont Trial Lawyers Association, October 8, 1999.

Accident Reconstruction in Insurance Fraud Investigations, Third Annual Insurance Fraud Directors Conference, State of New Hampshire Insurance Department, Bedford, NH, October 11, 2000.

Accident Investigation Report Writing, McIntosh College, Dover, NH, periodic lectures.

Motorcycle Momentum, 20th Annual Special Problems in Traffic Crash Reconstruction, IPTM, University of North Florida, April 15-19, 2002.

Reconstruction of Motorcycle Collisions, refresher for Belknap Regional Accident Investigation Team (BRAIT), June 5, 2002.

Motorcycle Sliding Friction, 21st Annual Special Problems in Traffic Crash Reconstruction, IPTM, University of North Florida, April 28-May 2, 2003.

Update on Trucking Litigation and Claims, New York State Bar Association, Syracuse, NY, November 16, 2006.

Momentum & Rotational Mechanics, use of linear and angular momentum in motorcycle crashes and comparison of methods used to estimate yaw moment of inertia, Midwest Association of Technical Accident Investigators Annual Conference, St. Paul, Minnesota, May 2007

Reconstruction In-Service Training, presented advanced momentum techniques for active law enforcement Reconstructionist, as well as crash test results from tests we ran earlier in the year, Maine State Police, held at the Bangor Police Department, Bangor, Maine, September 2007

Instructor – continued

Accident Reconstruction, National Tort Claims Training Conference, U.S. Army Claims Service, Office of Judge Advocate General, Baltimore, Maryland, November 2007

An Examination of "Strange" Ford PCM Behavior, CDR User's Summit 2010, Houston, Texas, January 2010

Forensic Animations and Effective Court Exhibits, 2010 Vehicular Homicide Conference, Wisconsin Department of Justice, Traffic Safety Resource Prosecutor Program, Stevens Point, Wisconsin, March 22-24, 2010

Small Errors and Big Problems, A Defense Expert's Perspective, 2010 Vehicular Homicide Conference, Wisconsin Department of Justice, Traffic Safety Resource Prosecutor Program, Stevens Point, Wisconsin, March 22-24, 2010

Professional Memberships

Fellow of the International Association of Accident Reconstruction Specialists **(IAARS)**

Member of the Association for the Advancement of Automotive Medicine **(AAAM**)

Member of the National Association of Professional Accident Reconstruction Specialists **(NAPARS)**

Member of the Society of Accident Reconstructionists **(SOAR)**

Member of Society of Automotive Engineers **(SAE)**

Member of the Maryland Association of Traffic Accident Investigators (**MATAI**)

Member of the National Committee on Uniform Traffic Laws and Ordinances **(NCUTLO)** (1997-2001)

Bruce F. McNally

Recognized Expert

Have testified as an Expert Witness in civil and/or criminal litigation in Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, Michigan, Illinois, Missouri, Kentucky, South Carolina, Alabama, Florida and Arizona.

Have testified as an Expert Witness in U.S. District Court, District of Vermont, Rutland, Vermont and U.S. District Court, District of Massachusetts, Boston, Massachusetts.

Certifications

Certified Bosch/Vetronix CDR-Tool Technician

Certified Bosch/Vetronix CDR-Data Analyst

Certified Traffic Accident Reconstructionist since 1993

Certified in Police Photography by the Maine Criminal Justice Academy in 1990

Certified as Intermediate Officer by the Maine Criminal Justice Academy in 1990

Certified in Police Traffic Radar by the Maine Criminal Justice Academy in 1988

Certified as an Emergency Medical Technician in 1984

Education and Training

CDR User's Summit 2010
January 25-27, 2010, Houston, TX
The CDR product Past, Present and Future, An Examination of "Strange" Ford PCM Behavior, CDR Exclusion Case Study, Chrysler Data Reliability from Crash Tests, Insurance Applications for Crash Data Retrieval, Legal Considerations, Seat Belt Systems and Their Interface with CDR Data, Ford PCM Data - The Restraint Deployment Signal (RDS) and Impact Speed Timing Considerations, Case Study: Two-Vehicle Fatal Crash Investigation and Non-Deployed Air Bag Results in a Recall, Wet or Frozen ACM Access Considerations, Data from non-CDR System OEM's, Ford RCM Runtime Considerations Based on Testing, Retrieving & Translating Event Data from Non-CDR-Vehicles, Including 2003-2005 Ford Explorer, & Various Toyota, Hyundai and Mazda Models, OEM Updates as the Relate to CDR (GM, Ford, and Chrysler)

Crash Data Retrieval User's Conference
January 26-28, 2009, Houston, TX
The CDR Product Future Releases and Product Support; CDR Legal Issues Update; EDR Data & Collision Reconstruction Analysis: Toyota Case Study; The Affect of ACM Reprogramming on Stored Crash Data; Using Ford PCM Data to Evaluate Deceleration Rates and Braking Distance; Results of Full Scale Chrysler Crash Tests; Signal Processing Applied to Vehicle Speed Measurement and Recording; Accuracy of Selected 2008 Chrysler Airbag Control Module Pre-Crash Speed Data During Braking; OEM Updates.

Collision Safety Institute
Crash Data Retrieval Data Technician Course
January 14, 2008, Chantilly, VA
CDR System Operations, Current Coverage, Connectivity Collection Methodology, Legal Considerations.

Crash Data Retrieval Data Analyst Certification Course
January 15-18, 2008, Chantilly, VA
Legal Considerations, Terms and Conventions, Airbag Control Algorithms, Reading and Interpreting CDR Reports for GM, Ford and Chrysler Modules.

Education and Training – continued

SAE International
Highway Vehicle Event Data Recorder Symposium
September 5-6, 2007, Ashburn, Virginia
EDR and Legal Issues, EDR Standards Update, EDR Data Validity, Global Initiatives and Perspectives, Insurance Industry Perspectives, Passenger Car EDR Data Case Studies, Commercial Vehicle EDR Applications.

Cummins Northeast
Insite Orientation
May 21, 2007, Dedham, MA
Basic Operation of Cummins Insite, Connection Methods, Troubleshooting, Bench Downloads, Use of Work Orders, Communication Protocols.

Midwest Association of Traffic Accident Investigators
Annual Conference
May 15-18, 2007, St. Paul, Minnesota
Crashzone Version 8 Overview, Seatbelts Analysis in Frontal Collisions and Rollovers, Non-Conforming Pedestrian Impacts, Forensic Friction, Bicycle Acceleration, Momentum & Rotational Mechanics, Driver Fatigue, Highway Sightline Determination, Issues Regarding Post-Impact Trajectories.

Crash Data Retrieval User's Conference
January 29-31, 2007, Houston, Texas
Future Release of Vetronix CDR System Updates, Accuracy of Vehicle Speed and Delta-V in GM EDR's, Average Daily Ignition Cycles, Two Dimensional Analysis of EDR Data, New Ford PCM and RCM Event Data Recorder Capabilities, Final NHTSA Ruling on EDR's, Using Diagnostic Tools with CDR System, Airbag Deployment Algorithms.

Maine State Police & National Association of Professional Accident Reconstruction Specialists, Inc. (NAPARS)
Commercial Vehicles
May 15-19, 2006, Augusta, Maine
Heavy Truck Nomenclature, Air Brake Systems, Antilock Braking Systems and Stability Control Systems, Braking Performance and Maintenance, Retrieval of Data From Heavy Truck Engine Control Modules, Tractor-trailer Skid Testing.

Education and Training – continued

The Accident Reconstruction Network (ARC Network) &
Collision Safety Institute (CSI)
Crash Data Retrieval User's Conference
February 13-14, 2006, Dallas, Texas
Vetronix CDR System Update, Incorporating CDR Services in an Existing Forensic Practice, Implementing Policy for Crash Data Retrieval, CDR as a Tool for Intelligent Transportation Systems and Human Factors Issues, A Review of Various ACM Module Types and Data Recorded, Motorcycle and Motor Vehicles Equipped With EDR's, Analysis of the GM Sensing and Diagnostic Module in 360° Linear Momentum Collisions: Real Case Analysis, CDR Data Presentation and Validation in Legal Proceedings, Legal Implications of Data Collection, A Comparison of Airbag Control Modules to Flight Data Recorders, the 'Black Box' Misperception, Investigation Into the Durability of ACM**s,** Quantifying Uncertainties in Ford and General Motors EDR's, The Accuracy of Speed Recorded by an SDM and the Effects of Brake and Yaw Events, Overview of New GM Modules Using CAN Bus Technology, Practical Applications for CDR Gathered CAN Bus Data.

Sokkia Corporation
Total Station Mapping
February, 2005, Dover, New Hampshire
Completed 16-Hour Equivalency Course Presented by Sokkia Corporation in the Use of Their Instruments For Total Station Scene Mapping.

Tony Foale Designs
Motorcycle Dynamics Seminar
November 13-14, 2004, New York City, New York
Motorcycle Tire Characteristics, Front and Rear Suspension Systems and Settings, Motorcycle Geometry, Suspension Kinematics and Dynamics, Steering and Cornering, Damping Methods and Adjustments, Rear and Front Braking Characteristics, Drive Systems.

University of North Florida, Institute of Police Technology and Management
CDR Tool - User Certification Course
November 20-22, 2002, Jacksonville, Florida
History and Background of CDR Technology, Technical Information on Current CDR Data, Data Recovery Techniques, Practical Download Field Exercises, Real-world Case Studies.

Education and Training – continued

The Texas A&M University • Texas Engineering Extension Service
World Reconstruction Exposition 2000
September 24-29, 2000, College Station, Texas
Conference Focused on Crash Testing of Motorcycles at Various Speeds and Configurations, Skid Tests at Low-End Moderate Speeds With Different Tires, High Speed Vehicle-to-Vehicle Crash Tests, Crash Data Retrieval Systems, Full-Scale Force/Weight Tests of Air-Braked Trucks, Truck Tractors, and Semi-trailers Compared to Automobiles.

Physical Medicine Research Foundation
Whiplash Associated Disorders World Congress
February 7-11, 1999, Vancouver, British Columbia
Attended Presentation of Research Papers in the Traffic Safety and Auto Engineering section. Papers Included Experimental Studies-Human Volunteers; Child Occupant Protection; Experimental Studies-Human Cadavers, Mathematical Modeling and Other Computer Studies; Anthropometric Test Dummies; Regulations and Prevention.

The Texas A&M University • Texas Engineering Extension Service
CRASH 98
October 19-23, 1998, College State, Texas
History of Crash Testing, Overview of "CRASH" Concepts, Validation of CRASH Algorithm, Vehicle Measurement Protocol, CRASH III Applications in Europe, Total Station Applications for Vehicle Measurement, Car-to-Car and Car-to-Barrier Crash Tests, Derivation of Crush Stiffness Coefficients, Overview of HVE Software, Application of WinCrash Software, and Applications of PC-Crash Software.

Education and Training – continued

Society of Automotive Engineers and Wayne State University School of Medicine
Whiplash 98
November 5-6, 1998, Tempe, Arizona
Anatomy of the Cervical Spine; Biomechanics of Neck Injury; Physiology of Pain; Psychology of Pain; Biomechanics of the Cervical Facet Capsule; Radiological Aspects of Whiplash; Whiplash Injury Mechanisms; MRI of Soft Tissue Injuries; Osteopathic Manipulation and Whiplash; Neck Injury Risks in Low Speed Rear Impacts; Rehabilitation in Whiplash; Low Speed Rear-end Collisions - Neck Injury Mechanisms and Dummy Design; Headaches and Whiplash; CNS Problems Related to Whiplash; Age and Gender Affects of Whiplash in Low Velocity Collisions; Injuries to the Cervical Plexus and Temporomandibular Joint; Biomechanics of the Temporomandibular Joint; Mechanisms of Injury; and Whiplash Associated Dynamics of the Head, Neck and Mandible.

International Association of Accident Reconstruction Specialists (IAARS)
Annual Conference
July 13-17, 1998, Boston, Massachusetts
Biomechanics of Low Speed Impacts, Low Velocity Impacts and Insurance Fraud, Elderly Driving Issues, Issues of Driver Awareness and Traffic Control Devices, Transfer and Trace Evidence, Blood Evidence, Tire Dynamics, and Crash Testing.

Midwest Association of Traffic Accident Investigators (M.A.T.A.I.)
11th Annual Conference
May 18-20, 1998, Kansas City, Missouri
Momentum, Energy and Restitution in Accident Reconstruction.

41st Annual Stapp Car Crash Conference
November 13-14, 1997, Lake Buena Vista, Florida
Biomechanics of Child Injuries, Biomechanics of Side Impacts, Interaction of Air Bags With Upper Extremities, Biomechanics of Lower Extremities, Restraint System Performance, Biomechanics of Head Injuries, Biomechanics of the Neck in Rear Impacts, Neck Modeling, and Injury Tolerance.

2nd Child Occupant Protection Symposium
November 12, 1997, Lake Buena Vista, Florida
Air Bags and Seating Position - Effect on Child Injury; Restraint Use, Usability and Tether Performance; Restraint Misuse and Injury Patterns; Restraint Test Procedures and Child Dummies.

Education and Training - continued

Association for the Advancement of Automotive Medicine
41st Annual Conference
November 10-11, 1997, Lake Buena Vista, Florida
Alcohol-related Studies, Impaired Driving, Crash Injury Data Sources and Epidemiology, Bicycle/Pedestrian Injuries, Driver Characteristics and Vehicle Interaction, Cost of Traffic Injuries, Injury Patterns and Mechanisms: Field Studies, Biomechanical and Experimental Studies, Occupant Restraints and Air Bag Effectiveness.

Society of Automotive Engineers (SAE)
Air Bag Design and Performance TOPTEC
August 14-15, 1997, Costa Mesa, California
Air Bags: How and Why They Work, Regulatory History, Depowering Air Bags, System Level Design of Occupant Restraints, Fatalities Associated with Air Bag Deployments, Crash Sensor Performance, Air Bag Injuries in Head-On Crashes, Air Bag Performance in the Real World, Auditory and Visual System Injury Potential, Smart Restraint Systems, Air Bag Deployment Demonstration, Field Investigation of Air Bags, Seat Belts, and Interior Markings.

Association for the Advancement of Automotive Medicine
Car Crashes and Occupant Injuries: A Team Approach to Crash Investigation
April 24-25, 1997, Tempe, Arizona
Crash Scene Evidence; Investigating Crashes by Type; Post-Crash Examination of Vehicles (Hands-On); Multiple Collisions; Tree/Pole Impacts; Compatibility Issues; New Techniques for Crash Investigation; Defining Crash Mode, Its Frequency and Injury Risks; Change in Velocity; Principal Direction of Force; Restrained Versus Unrestrained Occupant Kinematics; Importance of Seating Position; and Physiological Variation. Aspects Specific to Crash Type Such as Far-Side and Near-Side Occupants, Seat Performance, and Roof Crush. Hands-On Examination of Vehicles Involved in Different Types of Collisions With Specific Emphasis on Vehicle Damage, Occupant Kinematics, and Injury Risk.

The Texas A&M University • Texas Engineering Extension Service
CRASH 97
March 24-28, 1997, College Station, Texas
Commercial Vehicle Under-ride Collisions, Commercial Vehicle Under-ride Crash Tests, Human Acceleration Thresholds, Nighttime Visibility and Reaction Times, System Based Energy & Momentum, Low Speed Crash Tests, Air Bag Deployment Test Impact.

Education and Training - continued

Society of Automotive Engineers (SAE) International
Congress and Exposition
February 24-27, 1997, Detroit, Michigan
Attended Presentation of Papers on Automotive Safety and Accident Reconstruction.

MacInnis Engineering Associates, Ltd.
PC-Crash and PC-Rect Workshop
February 25, 1997, Detroit, Michigan
Training on the Computer Accident Simulation Program (PC-Crash) and the Photo-Rectification Program (PC-Rect).

University of North Florida, Institute of Police Technology and Management
Advanced Accident Reconstruction and Collision Prediction (Simulation) with WinSmac
November 11-14, 1996, Jacksonville, Florida
Classification of Prediction Programs, Damage Prediction, Pre-Impact Analysis, Post-Impact Analysis, Practical Application, Single Vehicle Motion, Use of Prediction in Occupant Injury Severity Analysis, Validation Strategies, Limitations of Prediction Programs.

University of North Florida, Institute of Police Technology and Management
Applied Physics for Traffic Accident Investigators
September 9-13, 1996, Jacksonville, Florida
Work-Energy Relationships, Conservation of Linear Momentum/Impulse, Uniform Projectile Motion, Uniform Circular Motion, Tire Forces and Tire Mark Evidence, Energy Losses in Collisions/CRUSH, Rotational Mechanics, Occupant Kinematics, Low-Speed Collision Considerations.

Society of Automotive Engineers International (SAE)
Low Speed Collision TOPTEC (with crash testing)
August 19-20, 1996, Vancouver, British Columbia
Injury, Understanding "Whiplash," Human Volunteer Testing, Structures and Injuries of the Neck, Dynamic Requirements of Automobile Seat backs, Dummy Development, Reconstruction of Minor Collisions, Comparison of Car Seats Regarding Head-Neck Kinematics During Rear-End Impacts.

Education and Training – continued

The National Institute of Forensic Studies
Biomechanics of Injury from Traffic Collisions
May 6-8, 1996, Orange, California
Injury From Vehicle Collisions, Physics and Mathematics of Vehicle Collisions, Occupant Kinematics, Analysis of Restraining Systems, Biomechanics of Low Speed Rear-End Collisions.

University of North Florida, Institute of Police Technology and Management
Special Problems in Traffic Accident Reconstruction

April 28-May 2, 2003, Jacksonville, Florida
Motorcycle Brake Testing, Validation of Spin Model, Rollover Testing and Analysis, Geometric Design of Streets and Highways, 3-Point Trajectory For Vaulting Vehicles, Photogrammetry, Occupant Kinematics, NHTSA Crash Test Data, Vehicle Instrumentation and Data Analysis, Pedestrian Amputation and Speed Association, Motorcycle Impact Friction Values, Vetronix CDR-Tool Ford Update.

April 15-19, 2002, Jacksonville, Florida
Motorcycle Crash Tests, Commercial Vehicle ABS Braking and Skid Tests, Heavy Truck Rollover Mechanics, Human Factors, Energy Methods in Collisions, Error Analysis, Motorcycle Momentum, Train Collisions, Pole Impacts, Rotational Mechanics, Drag Sled Validity and Case Law Updates.

April 22-26, 1996, Jacksonville, Florida
Human Factors/Perception and Response, Hydroplaning, Low Speed Impact Analysis with Crash Testing, Pedestrian Hit-and-Run Investigation, Vehicle Mechanical-Failure Analysis, Computer-Aided Collision Prediction, Effects of Aerodynamics on Vehicles, Tire Retread Technology.

Association for the Advancement of Automotive Medicine
39th Annual Conference
October 16-18, 1995, Chicago, Illinois
Alcohol's Role in Driving and Injuries, Seat Belt Usage Studies, Injury Patterns and Mechanics, Intelligent Restraint Systems, Crash & Vehicle Characteristics and Injury Risk, Injury Outcome Studies, Fatality Risk Studies, Driver Licensing and Impairment.

Education and Training – continued

SOAR/WATAI/TAARS
1995 Combined Conference
August 24-26, 1995, Charlottesville, Virginia
Vehicle Research Center, Insurance Institute for Highway Safety;
National Crash Analysis Center and Research Library, George Washington University, Automobile Collision Estimating and Evaluation of Written Repair Estimates.

Colorado School of Mines
Forensic Physics Applied to Accident Reconstruction
August 1-4, 1995, Golden, Colorado
Vector Analysis and Application, Kinematics, Newton's Laws, Applications of Newton's Laws, Coefficient of Friction and Drag Factors, Law of Conservation of Linear Momentum, Law of Conservation of Energy, Case Studies.

The Texas A&M University • Texas Engineering Extension Service
Bio-Mechanics of Accidents
June 12-16, 1995, College Station, Texas
Traffic Accident/Medicine Link, Physicians' View of Auto Accidents, Injury Classification Systems, PDOF and Occupant Response, Occupant Dynamics, Blunt and Sharp Injuries, Mechanics of Materials, Analysis and Documentation of Evidence, Occupant Restraint Systems, Occupant Restraint Testing, Physical Evidence and Emergency Care, Introduction to Forensic Toxicology, Medico-Legal Autopsy Report.

Association for the Advancement of Automotive Medicine in Cooperation with International Research Council on the Biomechanics of Impact
Biomechanics of Impact and Current Occupant Restraint Issues
April 6-7, 1995, Washington, DC
Biomechanics, Occupant Kinematics and Crash Testing Assessment, Anatomy, Injuries and their Mechanisms. Cervical Spine and Injury Mechanisms and Spine Tolerance Limits. Seat Belt and Air Bag Performance.

The Texas A&M University • Texas Engineering Extension Service
Pedestrian/Bicycle Accident Reconstruction
March 20-24, 1995, El Paso, Texas
Vehicle Documentation, Body Movement and Trajectories, Perception and Reaction, Bicycle/Vehicle Theory, Cyclist Riding Dynamics, Pedestrian Conspicuity, Pedestrian Behavior, Walking and Running Speeds, History of Pedestrian Collision Analysis, Reconstruction Methodology, Crash Testing.

Education and Training - continued

Institute of Police Technology and Management at the
Massachusetts State Police Academy
Advanced Traffic Accident Reconstruction with Microcomputers
February 27 to March 3, 1995
Introduction to Slam, Right Hand Cartesian Coordinate System, Vector Analysis, Engineering Definition, Kinetic Energy and Crush Analysis, A and B Stiffness Coefficients, Practical Reconstruction Projects Using SLAM, Linear Momentum Using SLAM.

The Society of Automotive Engineers International (SAE)
Low Speed Impact Collision (with crash testing)
August 7-9, 1994, Irvine, California
Accident Reconstruction of Low Velocity Rear-end Impacts, Occupant Kinematics, Cervical Injuries, Crash Severity, and Injury Frequency. Current Research, Staged Collisions at Low Speeds, Role of the Bumper in a Crash, Estimating Impact Severity and Injury Potential.

University of North Florida, Institute of Police Technology and Management
Traffic Accident Reconstruction
November 8-19, 1993, Jacksonville, Florida
Formula Derivations, Motorcycle Speed Estimates, Conservation of Linear Momentum, Weight Shift, Vehicle Behavior in Collisions, Interpretation of Scene Evidence, Vector Analysis Theory and Crush Analysis.

Advanced Accident Investigation
October 25 to November 5, 1993, Jacksonville, Florida
Introduction to Vehicle Dynamics, Human Factors, Conservation of Linear Momentum, Slips, Falls and Vaults, Time/Distance Analysis, Vehicle Damage Analysis, Interpretation of Roadway Evidence.

University of North Florida, Institute of Police Technology and Management
At-Scene Accident Investigation
March 30 to April 10, 1992 at Maine Criminal Justice Academy, Waterville, Maine
Speed from Skids, Critical Speed, Documentation of Scene Evidence, Preparation of Scale Diagrams, Human Factors, Identification and Interpretation of Physical Evidence from the Traffic Way and the Vehicle, Accident Photography and Case Preparation.

Education and Training – continued

University of North Florida, Institute of Police Technology and Management
Drug Unit Commander Seminar
May 1991 at Maine Criminal Justice Academy, Waterville, Maine

Federal Bureau of Investigation
Investigation of Sexual Exploitation of Children
September 1990 at Maine Criminal Justice Academy, Waterville, Maine

Millinocket Fire Department
Hazardous Material Training, National Fire Academy
December 1989, Millinocket, Maine

Portland Area Center for Training, Portland Police Department
Advanced S.R.T. Training
August 1989, Portland, Maine

Maine Criminal Justice Academy
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April 1989, Waterville, Maine

Portland Area Center for Training, Portland Police Department
SRT Tactical Training
November 1988, Portland, Maine

Kennebec Valley Vocational-Technical Institute
First Responder Course
May 1988 at Maine Criminal Justice Academy, Waterville, Maine

Maine Criminal Justice Academy,
59th Municipal/County Basic Police School, 1988

Maine Criminal Justice Academy
Reserve Officer Training Program
October 1987, Waterville, Maine

University of Maine, Legal Technology Program, 1985

Katahdin High School, Sherman Station, Maine, 1984

Training in Photography

The Nikon School of Photography
Introduction to Digital SLR Photography
March 4, 2006, Boston, Massachusetts

Eos Systems Technology
PhotoModeler
January 24-26, 2006, Jacksonville Florida
Photography Techniques, Scene Diagramming and Mapping From Photos, Scene and Crush Measurements, Evaluating Accuracy and Developing Standard Operating Procedures, Exporting to a CAD Package for Further Enhancement and Diagramming, Measurements From Single Photos and/or Photos From Unknown Camera, Photo-realistic Surfacing for Visualizations and Rendering, Nighttime Photography and the Use of Sub-pixel Marked, Retro-reflective Targets, Ortho-photo and Rectified-photo Generation, Admission of Photogrammetry and PhotoModeler Into Court.

Morgan Press
How to Control from Monitor to Printer
April 12, 2005, Manchester, New Hampshire
Attended a Seminar Addressing the Matching of Scanned/Digital Images to Final Output, Specific Areas of Concentration Included Color Gamuts and Profiles, Limitations and Strengths of Various Color Spaces, and Output Techniques Designed to Increase Impact and Accuracy.

The Nikon School of Photography
January 6, 2001
Regis College, Weston, Massachusetts

Polaroid School of Law Enforcement Imaging
Basic Theories and Principles
June 1992

Maine Criminal Justice Academy
Police Photography
October 1990, Waterville, Maine

Publications

Retrieving and Interpreting Data from Ford Powertrain Control Modules using the Bosch Crash Data Retrieval Tool, by Bruce F. McNally, Collision Volume 5, Issue 1, Spring 2010

Estimating the Yaw Moment of Inertia of Typical Passenger Vehicles, presented at the Midwest Association of Traffic Accident Investigators Annual Conference, St. Paul, Minnesota, May 2007

Motorcycle Sliding Coefficient of Friction Tests, presented at the 21st Annual Special Problems in Traffic Crash Reconstruction at the Institute of Police Technology and Management, University of North Florida, April/May 2003. (Published in Accident Reconstruction Journal, March/April 2007, Volume 17, No. 2, pages 47-49.)

Summary of Motorcycle Friction Tests, presented at the 21st Annual Special Problems in Traffic Crash Reconstruction at the Institute of Police Technology and Management, University of North Florida, April/May 2003

Reconstruction of Motorcycle Collisions, handout materials for lecture, Belknap Regional Accident Investigation Team, (BRAIT) June 5, 2002

Motorcycle Speed Estimates Using Conservation of Linear and Rotational Momentum, presented at the 20th Annual Special Problems in Traffic Crash Reconstruction at the Institute of Police Technology and Management, University of North Florida, April 2002

Accident Investigation Report Writing
Materials for lecture at McIntosh College, August 2001

The Accident Reconstructionist's Role in Automobile Fraud Cases
Teaching materials for the Third Annual Insurance Fraud Director's Conference, October 2000

Low Speed Impacts Using Human Volunteers
by Bruce F. McNally, Robert A DuBois, Joseph S. DiGregorio, Sr., and Gary J. Phillips, submitted to Accident Reconstruction Journal, 1999

IAARS Annual Conference Crash Test Results
by Bruce F. McNally and Joseph S. DiGregorio, Sr., August 1998

Publications – continued

Coefficient of Restitution Values in Low Velocity Impacts
by Bruce F. McNally, Robert A. DuBois, and Joseph S. DiGregorio, Sr., submitted to Accident Reconstruction Journal, 1998

Reconstruction of Low Speed Impacts
Teaching materials for IAARS Conference, July 1998

Further Discussion of 'Normal' Acceleration Rates
Letter to the editor, Accident Investigation Quarterly, Winter 1997

Insurance Fraud and Motor Vehicle Collisions
by Robert A. DuBois and Bruce F. McNally, Prokit 1997

Low Velocity Collisions
by Bruce F. McNally and Robert A. DuBois, Prokit 1997

Who's the Driver?
by Bruce F. McNally, Nightstick, 1997

Photography and Measuring Protocol
by Bruce F. McNally and Joseph S. DiGregorio, Sr., Northeast Collision Analysis, Inc. Proper photography and examination techniques to document low velocity impacts. Used as teaching material at SIU and claims seminars nationwide, 1997.

Low Velocity Car-to-Bus Test Impacts
Details the results of 18 test impacts where a typical passenger vehicle struck the rear of a stopped transit bus. Testing included measurement of the velocities and acceleration experienced by the test vehicles, the damage sustained by the test vehicles, and videotape recordings of the occupants of the test vehicles. September/October 1996, Accident Reconstruction Journal pp. 44-51.

For Your Information (FYI)
Publication submitted to Low-Velocity Claims Handlers that critiques two articles, one by Dr. Baxter W. Paschal on the physics of rear-end collisions, and one on whiplash and neck sprain injuries by Kosterman Chiropractic Clinic, PA, March 1996, Northeast Collision Analysis, Inc.

Honors and Awards

- Salutatorian, Class of 1984, Katahdin High School
- Bausch and Lomb Honorary Science Award
- Academic Achievement Award, Maine Criminal Justice Academy, R.O.T.P.
- President, National Honor Society, Katahdin Chapter

Revised: May 20, 2010