

CURRICULUM VITAE
OF
JAMES W. SLOAN

Crashteam Georgia

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CV - James Sloan**EXPERIENCE HIGHLIGHTS**

- 2007 to Present** **VERICRASH, LLC (2008 dba Crashtams Georgia)**
Saint Simons Island, GA
Transportation Accident Reconstructionist
- 2006 to Present** **University of North Florida**
INSTITUTE OF POLICE TECHNOLOGY AND MANAGEMENT
Jacksonville, Florida
Member of Adjunct Faculty
Commercial Vehicle Crash Investigation
Motorcycle Crash Investigation
Motor Vehicle Crash Investigation & Reconstruction
- 1999 to 2007** **SOUTHEAST COLLISION ANALYSIS, INC**
Brunswick, Georgia
Senior Traffic Accident Reconstructionist
Watercraft Collision & Incident Reconstructionist
- 1997 to 1999** **THOMAS LANGLEY & COMPANY**
Acworth, Georgia
Traffic Accident Reconstructionist
- 1987 to 1997** **CHEROKEE COUNTY SHERIFF'S OFFICE**
Canton, Georgia
Sergeant - Traffic Unit
Supervisor of Traffic Enforcement and Accident
Investigation/Reconstruction Unit
Trained Officers in Traffic Accident Investigation and
Traffic Enforcement
Conducted underwater search and recovery operations, lake
patrol watercraft operation and investigations
- 1985 to 1987** **RISK MANAGEMENT ASSOCIATE**
Stouffer Hotel Corporation
Atlanta, Georgia
Physical Property Security
Internal Loss Investigation
Critical Incident Response

1983 to 1996 **UNITED STATES MARINE CORPS**
 (Reserve and Active Duty)
 MCAF Marietta, Georgia
 Rank of Sergeant (E5)
 Aviation Ordnance Non-Commissioned Officer

ACCIDENT RECONSTRUCTION EDUCATION AND TRAINING

2007 **Crash Data Retrieval User's Conference**
Houston, Texas
20 Hours

VS Visual Statement Inc.
Advanced Diagraming and Animation Using Vista FX3
Brunswick, Georgia

South Carolina Association of Reconstruction Specialists
Combined Conference (SCARS, SeARS, NAPARS)
Charleston, SC
32 Hours

2006 **Institute of Police Technology and Management**
University of North Florida
Jacksonville, Florida
Special Problems
28 Hours

Institute of Police Technology and Management
University of North Florida
Jacksonville, Florida
Applied Physics for the Traffic Crash Investigator
40 Hours
 Advanced Mathematics overview
 Work-energy relationships and applications
 Conservation of linear momentum/impulse (with vector sum
 analysis using mathematical and graphical methods)
 Uniform projectile motion/airborne equations
 Uniform circular motion/critical speed
 Tire forces and tire mark evidence
 Time-distance relationships
 Energy loss in collisions/CRUSH
 Rotational mechanics/rotation after collision and pitch down in take

off

Low-speed collision considerations including coefficient of restitution

Bendix Corp.

Atlanta, Georgia

32 Hours

Air Brake Systems Training
 Fundamentals of Compressed Air Braking
 Air Brake System Failure Mode Diagnosis/Troubleshooting
 Air Brake System & Foundation Component Servicing
 ABS and Stability Control Systems
 Bendix Certification – Air Brake System Specialist

MJC & Associates

Sokkia Systems Training Program

Brunswick, Georgia

16 Hours

Forensic Mapping Specialist

Texas Association of Accident Reconstruction Specialists

Houston, Texas

28 Hours

Factors, Formulae, Forensic Technology

Crash Data Retrieval Specialist

Atlanta, Georgia

8 Hours - CDR System Technician

25 Hours - CDR Data Analysis

Crash Data Retrieval System Operator Training Series

2005

Practical Applications of PhotoModeler in Collision Reconstruction

32 Hours

Brunswick, Georgia

Institute of Police Technology and Management

University of North Florida

Jacksonville, Florida

Special Problems in Traffic Crash Reconstruction

28 Hours

MJC & Associates

**Sokkia Systems Training Program
Mapscenes Software
Brunswick, Georgia**

PhotoModeler Pro 5 Collision Investigation

**EOS Systems, Inc.
Raleigh, North Carolina**

32 Hours

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
cameras
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

Detroit Diesel Training Center

Detroit, Michigan

DDEC ECM Systems Data Retrieval

2004

**Institute of Police Technology and Management
University of North Florida
Jacksonville, Florida**

Human Factors In Traffic Crash Reconstruction

40 Hours

Perception and Response Time Development
Simple and Complex Task
Nighttime Visibility Studies
Eyewitness Testimony

MJC & Associates

Sokkia Systems Training Program

Mapscenes Software

Brunswick, Georgia

Forensic Mapping Specialist

16 Hours

Drafting, Profiles and Contours

New Evidence Recorders
Field Mapping Exercises

**Southeastern Collision Reconstruction Conference
Sixth Annual Conference**

Biloxi, MS

**Institute of Police Technology and Management
University of North Florida**

Jacksonville, Florida

Special Problems in Accident Reconstruction

28 Hours

Electronic Control Modules in Commercial Vehicles
Critical Speed and Lane Change Equations
Data Collection, Analysis, and Collision Reconstruction
(Presentation)

2003

**Institute of Police Technology and Management
University of North Florida**

Jacksonville, Florida

Special Problems in Accident Reconstruction

16 Hours

Motorcycle Impact Friction Values
Performance of Motorcycle Brake Systems
Rollover Accident Reconstruction
Rollover Testing, Spin Analysis, and Motorcycle Braking
Photogrammetry
Crash Data Retrieval, Ford RCM

2002

MJC & Associates

Sokkia Systems Training Program

Mapscenes Software

Brunswick, Georgia

Forensic Mapping Specialist

24 Hours

Drafting, Profiles and Contours
Mathematical Analysis Using Mapscenes
Field Mapping Exercises and Downloading

**Institute of Police Technology and Management
University of North Florida**

Jacksonville, Florida

CDR Tool - User Certification Course

24 Hours

Methodology for accessing components
Applications of the data recorded

Recovery of data recorded
Types of SDM's
Data Interpretation
Operation of CDR System

**Institute of Police Technology and Management
University of North Florida
Jacksonville, Florida**

**Advanced Traffic Crash Reconstruction with WINCRASH
40 Hours**

Speed change from crush damage
Computer aided linear momentum analysis
The importance of Delta-V to the understanding of collision dynamics
Methods for calculating the trajectories of vehicles after collision
Crashes where the computer cannot help
Quality of scene data required and how to gather it
Vector analysis

**Operator of Uninspected Passenger Vessels (Near Coastal)
Sea Schools, Inc.**

**Brunswick, Georgia
U.S. Coast Guard Captain's Course
54 Hours**

**South Carolina Association Of Reconstruction Specialists
Myrtle Beach, South Carolina**

Fourth Annual Southeastern Collision Reconstruction
Conference 24 hours
Crash Testing, Motorcycle Skid Test, Vehicle Vaults
Drag Sleds
Motorcycle Collision Reconstruction
Commercial Vehicle Acceleration
PDOF and Delta V
Transit Bus Crash Study

**Southeast Accident Reconstruction Society
Orange Beach, AL**

**2002 Conference
32 Hours**
Conservation of Linear Momentum - Facts and Myths
Event Data Recorders
Collision Photography

Heavy Truck Braking Efficiency - Computer Modeling

Watercraft Crash Investigation and Incident Reconstruction University of North Florida - IPTM Jacksonville, Florida

40 Hours

Nautical Terminology
 Watercraft Operations
 USGC Rules and Regulations
 Rules of the Road: Domestic, International, Inland
 Characteristics of Powerboats, Sailing Vessels, Personal
 Watercraft
 Navigation and Plotting
 Search Patterns and Practices
 Vessel Construction Materials and Methods
 Propulsion Technology
 Personal Flotation Devices
 Firefighting Equipment
 Watercraft Reconstruction Methodologies
 Speed Determination

2001

Sokkia Systems Training Program - Forensic Mapping Specialist

32 Hours

Mapscenes, Drafting, Profiles and Contours
 Mathematical Analysis Using Mapscenes
 Field Mapping Exercises and Downloading

South Carolina Association Of Reconstruction Specialists Myrtle Beach, South Carolina

Third Annual Southeastern Collision Reconstruction Conference

24 hours

Crash Data Retrieval System
 Staged Crash and Data Recovery
 Motorcycle Collision Reconstruction

Pedestrian and Bicycle Accident Reconstruction TAMU

40 hours

Pedestrian crash problems
 Pedestrian impact dynamics
 Types of data: objective, subjective and performance

Collection of data
 Pedestrian conspicuity
 Reaction time/human factors
 Reconstruction techniques
 Speed analysis
 Hit and run investigation techniques
 Vehicle Parts and Terminology,
 Body Trajectories and Movement
 Pedestrian Behavior, Walking and Running

**Southeast Coast Collision Conference
 Southeast Accident Reconstruction Society
 Cocoa Beach, Florida**

12 Hours
 Human Factors
 Understanding and Applying PDOF

2000

**Professional Society of Forensic Mapping
 Sokkia Systems Training Program, Forensic Mapping Specialist
 Course (Level II-CPX)
 Brunswick, Georgia**

**Forensic Mapping Specialist
 32 Hours**
 Mapping Crush Profiles of Vehicles
 Vertical Mapping
 Map Software

**Advanced Commercial Vehicle Accident Reconstruction TAMU
 50 Hours**

National Transportation Safety Board Study of Heavy Vehicle
 Airbrake Performance
 Weight and Balance, Rollover Equation
 Investigation of Driver and Carrier
 Commercial Tire Properties
 Heavy Vehicle Braking Efficiency & Regulated Formula
 Dynamics Testing of Various Rigs, Formula Validation
 Hands on Truck Driving
 Nighttime Conspicuity Studies

**Truck Accident Litigation Seminar
 8 Hours**

**World Reconstruction Exposition 2000
 Sponsored By Various Reconstruction Associations
 Texas A & M University**

College Station Texas**32 Hours**

Accident Reconstruction - A Search For The Truth
 Event Data Recorders
 Crash Data Retrieval Systems
 Vehicle Restitution
 Highway Liability
 Human Factors
 Numerous other seminars

1999

Texas Association of Accident Reconstruction Specialist Conference**8 Hours****Special Problems in Traffic Accident Reconstruction IPTM Seminar****Jacksonville, FL****27 Hours**

Tire Forensics
 Energy Calculation Methodologies
 Forensic Evidence
 Momentum Applications

International Association of Accident Reconstruction Specialists Conference**Charleston, SC****32 Hours**

Parts Failure Analysis
 Occupant Kinematics
 ABS/ Vehicle Control Devices

MJC & Associates**Forensic Mapping Specialist Course****Brunswick, Georgia****32 Hours**

EDMI/Theodolite
 Data Collector
 Map Software

Commercial Vehicle Inspection and Collision Investigation TAMU**40 Hours**

Federal Motor Carrier Safety Regulations
 Commercial Vehicle Terminology
 Commercial Vehicle Inspection
 Air Brake Systems and Performance

Dynamics of Articulated Vehicles
 Driver Views, Blind Spots, Mirrors
 Skid Testing of Various Configurations
 Speed Calculations

**1998 Special Problems In Traffic Accident Reconstruction IPTM Seminar
 32 Hours**

Rollover Accident Reconstruction
 Analyzing Nighttime Accidents
 Accident Fraud II
 Friction and Energy
 Human Factors
 Mechanical Vehicle Inspection
 New Automotive Technologies

**Midwest Association of Technical Accident Investigators Seminar
 20 Hours**

**1998 Crush and Momentum Application in Accident Reconstruction
 Course
 32 Hours**

**Forensic Mapping Using AutoCAD LT98 Course
 40 Hours**

**1997 Supervising a Selective Traffic Enforcement Program Course IPTM
 40 Hours**

Crash Causation, Pattern Identification, and Enforcement
 Strategies
 Collecting and Analyzing police traffic data
 Elements of a well designed records system
 Elements of a selective traffic law enforcement program
 Roles of the traffic supervisor
 Writing a highway safety grant

**Conference on Reconstruction and Safety on the Highways TEEX
 32 Hours**

**Special Problems in Traffic Accident Reconstruction Seminar IPTM
 32 Hours**

Neuro Linguistics
 Accident Reconstruction, Legal Issues, Air Brakes
 Advanced Computerized Collision Diagraming
 Low Speed Collisions

Motorist Processing of Traffic Control Devices in Road Construction

SOKKIA Accident Scene Surveying for Accident Reconstruction Course

24 Hours

High Speed - Low Speed Crash Reconstruction Seminar (MacInnis)

40 Hours

1996

NHTSA Community Traffic Safety Programs Workshop

32 Hours

AutoCAD LT for Accident Reconstruction Course

40 Hours

Railroad Grade Crossing Incident Management Instructor Course

32 Hours

Advanced Accident Reconstruction and Collision Prediction Course (WinSMAC) IPTM

32 Hours

Prediction program operation and function

Types of prediction programs

Input data required and their scores

Damage prediction

Pre-impact analysis

Post-collision analysis

Practical applications

FEMA Response to Hazardous Material Incidents Course

8 Hours

Hazardous materials classification; labeling; packaging;

recognition; identification; and use of response guides

Systematic process for Haz/Mat incident response

Hazard and risk assessment techniques

Basic options, requirements, and limitations of methods to control, contain, and confine the hazard

1995

Field Training Officer Course

24 Hours

NHTSA Standardized Field Sobriety Testing Instructor Course

40 Hours

Basic instructor techniques

Overview of alcohol, drugs and highway safety
 Review of Standardized Field Sobriety Tests including horizontal
 gaze nystagmus
 Proper procedures for conducting drinking exercises
 Practice teaching
 Curriculum revisions

LASER Operator / RADAR Recertification Course
12 Hours

Advanced Accident Investigation Update
24 Hours

Speed Detection Devices Instructor Certification Course IPTM
40 Hours

History of the development of Lasers
 Theory of Lasers: how they operate and how they measure speed
 Operational considerations
 Preparation for court presentation
 Practical application, field training
 Radar policy and procedure
 Legal requirements/case law
 Factors affecting Radar
 Visual speed estimates
 Technical aspects of Radar
 Same direction moving Radar
 Lesson plan preparation
 Methods of instruction
 Practical and written examinations
 Classroom presentations

**Advanced Commercial Vehicle Accident Reconstruction
 Course**
19 Hours

1994 Occupant Protection Usage and Enforcement Workshop
16 Hours

Supervisory Training Levels I and II
80 Hours

Supervisory Training Level III
40 Hours

**Advanced Report Writing
16 Hours**

**1993 Railroad Grade Crossing Collision Investigation Course
24 Hours**

Scope of the grade crossing collision problem: statistics, causation, speed and weight factors, stopping distances
Information needed to investigate grade crossing collisions
Railroad operations
Locomotives and railcars
Active and passive traffic control devices
Event recorders
Freight and passenger trains
Railroad personnel and their responsibilities
Highway-rail grade crossing signs and signals
Extensive hazardous materials training, including recognition, assessment and appropriate emergency response
Review of state and federal motor vehicle codes pertaining to highway-rail grade crossing safety and railroad trespass prevention
Review of case law pertaining to grade crossing collisions

**Instructor Training Course
80 Hours**

**1991 Traffic Management Systems Computer Course
24 Hours**

**DUI Standardized Field Sobriety Testing
24 Hours**

DUI Visual Detection
Standardized field sobriety testing (including horizontal gaze nystagmus)
Sobriety checkpoints
Legal aspects of DUI enforcement
Two NHTSA recommended drinking exercises

**Accident Investigation Update
8 Hours**

**Traffic Law Update
8 Hours**

1991 Traffic Accident Reconstruction Course IPTM

80 Hours

Derivation and origin of the commonly used speed formula
 Speed of vehicles at impact using conservation of linear momentum
 Behavior of vehicles in a collision using Newton's three laws of motion
 Effects of weight shift in braking involving large trucks and buses, including truck-tractor semi-trailer combinations
 Effects of computer or anti-skid braking systems in stopping distances and braking action
 Determination of direction of travel, initial contact and position of vehicles on the roadway
 Extensive project work and controlled vehicle experiments

Intoximeter Breath Analyzer Operator Course**16 Hours**

1990

On Scene Accident Investigation**Georgia Public Safety Training Center****80 Hours**

Physical evidence from the roadway
 Physical evidence from the vehicle
 The human element and occupant kinematics
 Mathematical principles and equations
 Skid marks and vehicle speeds
 Crash scene photography
 Traffic templates
 Measuring and scale diagramming
 Driver and witness interviews
 Information analysis and case preparation

RADAR Operator Course**16 Hours****Technical Traffic Accident Investigation Course****Georgia Public Safety Training Center****104 Hours**

Speed estimates from kinetic energy, skidmarks, scuffmarks, and airborne situations
 Vehicle dynamics and motion
 Time, distance, and motion equations
 Conservation of momentum equations
 Center of mass calculation
 Vehicle damage analysis including thrust, overlap and collapse
 Vehicle lamp examination

Tire damage evaluation
 Use of photographs, video recording and computer images
 Vector sum analysis

**1989 Advanced Traffic Law
 32 Hours**

**Emergency Vehicle Operations Course
 24 Hours**

**Basic Law Enforcement Management and Supervision
 40 Hours**

**1987 Basic Law Enforcement Training Course
 240 Hours**

**1200+ hours of additional training in law enforcement courses from:
 University of North Florida, Institute of Police Technology and Management
 Texas A&M University, Engineering Extension Service
 Georgia Public Safety Training Center
 Georgia Peace Officer Standards and Training Council**

CERTIFICATIONS:

Peace Officer Standards And Training Council-1987
 Peace Officer Standards And Training Council-1993; General Instructor
 National Highway Traffic Safety Administration Instructor-1995;
 Standardized Field Sobriety Testing
 Peace Officer Standards and Training Council Specialized Instructor-1996;
 Railroad Grade Crossing Collision Investigation
 Peace Officer Standards and Training Council Specialized Instructor-1996;
 Speed Detection Devices (LIDAR/RADAR)
 United States Coast Guard Captain - 2002
 U.S. Merchant Marine Officer (OUPV)

PROFESSIONAL AFFILIATIONS:

Accreditation Commission for Traffic Accident Reconstruction
 Southeast Accident Reconstruction Society - Charter Member

Professional Society of Forensic Mapping
International Network of Collision Reconstructionists
National Association of Professional Accident Reconstruction Specialists
Society of Automotive Engineers
South Carolina Association of Reconstruction Specialists
Southeastern Admiralty Law Institute
American Professional Captains Association

QUALIFICATIONS:

Investigated or assisted in the investigation and reconstruction of over 100 fatal traffic crashes, 400 serious injury crashes, and over 2000 minor injury/property damage crashes while with the Cherokee County Sheriff's Office.

Investigated or assisted in the investigation and reconstruction of over 100 boating accidents, incidents, or drownings while with the Cherokee County Sheriff's Office.

Reconstructed or assisted in the reconstruction of over 150 injury or fatal crashes while with Thomas Langley & Company.

Reconstructed or assisted in the reconstruction of over 1500 injury or fatal crashes while with Southeast Collision Analysis, Inc. Trained staff reconstructionists in investigative techniques, evidence interpretation, photography, and advanced reconstruction methodology.

Testified as an expert witness in accident reconstruction for the State in the prosecution of vehicular homicide cases. Testified as an expert witness in civil proceedings in State, Superior, and Federal courts in motor vehicle accident cases.

Trained law enforcement officers in traffic law, accident investigation, advanced accident investigation and reconstruction, forensic mapping and computerized reconstruction topics.

Fully Accredited by the Accreditation Commission for Traffic Accident Reconstruction. Accreditation number 1018.