

2300 Cline Avenue, Suite 204 Schererville, IN 46375 *Tel* (219) 322-7639 *fax* (866) 820-1843 www.neese-assoc.com

# Stephan M. Neese Accident Reconstruction Specialist

**ACTAR** Certified since 1997, certification # 563- ACTAR is the national comprehensive program of accreditation and certification in Accident Reconstruction (Accreditation Commission for Traffic Accident Reconstruction)

Attended the Traffic Institute at Northwestern University, Evanston, Illinois-Successfully passed and completed all the crash investigation and reconstruction courses (1978-1990)

**Collision Analysis Consultant**, self-employed since 1986, incorporated 1992- President of Stephan M. Neese & Associates Accident Reconstruction, Inc

Certified Data Retrieval Specialist in downloading automobiles' event data recorder and analysis of data provided by the software to assist in the understanding of and analyzing a traffic collision

**Expert Testimony** given in more than seventy trials and one-hundred-fifty depositions-including Federal, Civil and Criminal Courts for civil plaintiffs and defendants, criminal prosecution and criminal defense

**Retired Police Officer**, twenty years continuous service with the Schererville Police Department, Schererville, Indiana, (1976-1996); with Accident Investigation specialty; Created and supervised the departmental accident reconstruction team and accident training

As a Police Officer Investigated Over 1000 Collisions since 1976 as primary investigator; minor property damage collisions, serious bodily injuries and fatality crashes; including pedestrian, automobile, commercial vehicle, motorcycle, bicycle and train collisions

As a Police Officer Assisted in More Than 2500 Police Crash Investigations- at scene and follow-up investigations as a first responder, supervisor and/or consultant

Completed over 2200 Specialized Hours of instruction in accident investigation, reconstruction procedures and scientific principles used in the reconstruction process including physics, mechanics, kinematics

#### Stephan M. Neese

Accident Reconstruction Specialist (cont.)

Mapped & Measured Hundreds of Crash Scenes- road dimension, grade profiles, skid marks, gouges and other crash related evidence

**Inspected and Analyzed Thousands of Vehicles** and damage to determine impact configuration, vehicle defects, lamp illumination and specific crush measurements

Photographed Hundreds of Crash Scenes and Vehicles for collision analysis, scene preservation, photogrammetry and court proceedings

**Attended Indiana Law Enforcement Academy** (1976), Plainfield, Indiana- Completed and passed the Indiana Police Officer's Basic Training Course

**Certified Instructor** by State of Indiana Law Enforcement Training Board for Crash Investigation and Photography; developed and taught accident investigation curriculum for Northwest Indiana Law Enforcement Training Council

**Guest Speaker/Instructor** at Institute of Police Technology and Management Special Problems, Illinois Association of Technical Accident Investigators, Indiana Prosecutor's Conference, and the Indiana Association of Certified Accident Investigators

Graduated Griffith High School, Griffith, Indiana (1972); Math, Science and Business majors

**Developed and Operate the Highway Control Driving School,** a defensive driving program for local city and county courts and company fleet managers

**Principal Partner with The Visual Courtroom**, LLC- trial exhibits and 3-D computer animations for all types of litigation

#### **Memberships**

Indiana Association of Certified Accident Investigators (since 1990)
Illinois Association of Technical Accident Investigators (since1990, secretary 2002-2008)
International Network of Collision Reconstruction (since 2000)
Society of Automotive Engineers Affiliate Member (since 2002)

In recognition of demonstrated academic achievement, completion of accident specific training, applied experience in the field, and in view of the successful completion of the ACTAR Full Accreditation

Written and Practical Examination, the ACTAR Governing Board of Directors hereby awards the level of

# Full Accreditation as a Traffic Accident Reconstructionist

to

# Stephan M Neese

Issued this 15th Day of September, 2010.

Robert J. Squire Chair, ACTAR

ARNOR G. WHAT

Arnold G. Wheat Secretary/Treasurer, ACTAR



Expiration date: September 15, 2015

Registration Number: 563

#### ACCIDENT INVESTIGATION

The Traffic Institute, Northwestern University Evanston, Illinois November 1978

#### **Course Topics Include:**

Analysis of Accident Data

Events of an Accident

**Human Elements and Factors** 

Mapping and Measuring

Physical Facts From the Road

Physical Facts From the Vehicle

**Speed Estimates From Road Markings** 

The Investigation Process

The Enforcement Process



#### TECHNICAL ACCIDENT INVESTIGATION

The Traffic Institute, Northwestern University
Evanston, Illinois October 1986

#### **Course Topics Include:**

Accident Data Analysis

Lamp Examination

Legal Aspects of Technical Accident Investigation

Mapping and Measuring

Perspective Grid Mapping

Qualitative Vehicle Dynamics

**Road Information** 

Technical Preparation vs. At-Scene Investigation

Tire Damage

Vehicle Damage Evaluation

# The Traffic Institute Northweeders University This is to certify that Steplicate 1th Masse has successfully completed the course TECHNICAL ACCIDENT INVESTIGATION Proportion, Illimit September 22-October 3 1984 Solve Belley Solve Belle

#### VEHICLE DYNAMICS WORKSHOP

The Traffic Institute, Northwestern University Evanston, Illinois October 1986

#### **Course Topics Include:**

Articulated Vehicles Energy Applications Momentum Applications Vehicle Dynamics



#### TRAFFIC ACCIDENT RECONSTRUCTION I

The Traffic Institute, Northwestern University Evanston, Illinois June 1988

#### **Course Topics Include:**

**Articulated Vehicles** 

Conservation of Momentum

**Driving Strategy and Tactics** 

Mechanics

Microcomputer Applications

**Reconstruction Process** 

Vehicle Behavior in Collisions



#### TRAFFIC ACCIDENT RECONSTRUCTION II

The Traffic Institute, Northwestern University Evanston, Illinois November 1988

#### **Course Topics Include:**

Conservation of Momentum

Motorcycles

Occupant Kinetics

Pedestrian Accidents



#### MICRO-COMPUTER ASSISTED TRAFFIC ACCIDENT RECONSTRUCTION

The Traffic Institute, Northwestern University
Evanston, Illinois September 1990

#### **Course Topics Include:**

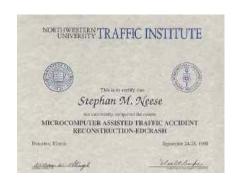
Crush Profile Measurements

Damage Classifications

**EDCRASH** 

Photogrammetry

Vehicle Fixed Coordinate Systems



#### ARAS 360 ADVANCED 3D COMPUTER DIAGRAMMING

Aras 360Technologies, Inc.

Fishers, Indiana December 2010

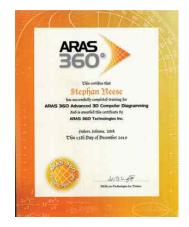
#### **Course Topics Include:**

**CAD Basics** 

Downloading Total Station Mapping Data

Animations

Calculations Using ARAS 360



#### ADVANCED PHYSICS & ANIMATION-REC-TEC & FORENSIC 3D SOFTWARE

REC-TEC LLC

Jekyll Island, Georgia

December 2007

#### **Course Topics Include:**

Physics Review

Advanced Physics and Reconstruction

**REC-TEC Software Usage** 

**Animation Basics** 

Use of Forensic 3-D Software with REC-TEC



#### CRASH DATA RETRIEVAL (CDR) CERTIFICATION SYSTEM OPERATOR

Collision Safety Institute,

Bloomington, Illinois September 2007

#### **Course Topics Includes:**

Event Data Technology

**CDR** Terminology

Airbag Deployments

GM and Ford Downloading Procedures

**Certification Process** 



#### PHOTOMODELER PRO5 COLLISION INVESTIGATION

EOS Systems, Inc.

Raleigh, North Carolina, March 2005

#### **Course Topics Include:**

**Photogrammetry Process** 

PhotoModeler Pro 5 Software

Camera Calibration

Referencing Photographs

Creating 3-D Models

Scene and Evidence Photogrammetry

**Inverse Camera Process** 



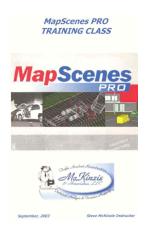
#### **MAPSCENES PRO**

Mount Vernon, Illinois

September 2003

#### **Course Topics Include:**

CAD Software Overview Getting Started in MapScenes Pro Field Exercise With Total Stations



#### CRASH DATA RETRIEVAL (CDR) CERTIFICATION SYSTEM OPERATOR

Collision Safety Institute,

Arlington Heights, Illinois

September 2002

#### **Course Topics Include:**

Event Data Technology CDR Terminology Airbag Deployments GM Downloading Procedures Certification Process



#### ANALYSIS OF LOW SPEED COLLISIONS

Texas A & M University Engineering Extension Service Houston, Texas April 1997

#### **Course Topics Include:**

Anatomy Biomecha

Biomechanics- Physical Parameters Damage & Delta V Applications Force, Momentum, PDOF, Energy Occupant Motion & Tolerances Vehicle Safety



#### PEDESTRIAN CRASH INVESTIGATION

Canadian Police College

Ottawa, Ontario August 1991

#### **Course Topics Include:**

Bicycle Collision Analysis Car/ Bicycle Nomenclature Human Anatomy Pedestrian Collision Analysis Tire Marks



#### LAW ENFORCEMENT VIDEO I

Indiana Law Enforcement Academy
Plainfield Indiana

Plainfield, Indiana August 1991

#### **Course Topics Include:**

Basic Video Terminology Video Tape Mechanics Scene Video Tape Principles



#### LAW ENFORCEMENT VIDEO II

Indiana Law Enforcement Academy

Plainfield, Indiana August 1991

#### **Course Topics Include:**

Close-up Videography Lighting Techniques Video Tape Editing



#### HEAVY VEHICLE CRASH INVESTIGATION

University of Indianapolis

Indianapolis, Indiana June 1989

#### **Course Topics Include:**

Air Brakes

Articulated Vehicles Investigation Federal Motor Carrier Regulations Vehicle Dynamics



#### SEATBELT ACCIDENT INVESTIGATION

Institute of Police Technology and Management
Jacksonville, Florida June 1988

#### **Course Topics Include:**

Child Restraint and Seatbelt Injuries Frontal, Side, and Rear Impacts Restraint Hardware Rollovers Unrestrained Injuries Vehicle and Occupant Dynamics



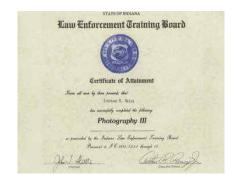
#### **VEHICLE CRASH PHOTOGRAPHY III**

Indiana Law Enforcement Academy

Plainfield, Indiana December 1981

#### **Course Topics Include:**

Color Theory Crash Photography Lighting Techniques Process Controls



#### **EMERGENCY VEHICLE OPERATOR'S COURSE**

United States Department of Interior Lake/Suburban Safety Training Council

Gary, Indiana October 1981

#### **Course Topics Include:**

Controlled Braking Evasive Maneuvers Highway Response Vehicle Dynamics



#### ADVANCED INTERVIEW TECHNIQUES

Lake/Suburban Public Safety Training Council
Gary, Indiana October 1981

#### **Course Topics Include:**

Critical Question Technique Human Behavior Verbal & Non-verbal Communications



#### LAW ENFORCEMENT PHOTOGRAPHY II

Indiana Law Enforcement Academy
Plainfield, Indiana June 1981

#### **Course Topics Include:**

Macro Photography
Nighttime Photography
Scene Photography Technique



#### **EVIDENCE TECHNICIAN TRAINING**

Lake/Suburban Public Safety Training Council
Gary, Indiana April 1981

#### **Course Topics Include:**

Data Collection
Diagraming Scene
Scene Management



#### LAW ENFORCEMENT PHOTOGRAPHY I

Indiana Law Enforcement Academy

Plainfield, Indiana April 1979

#### **Course Topics Include:**

Basic Camera Mechanics Film Principles Photography Techniques

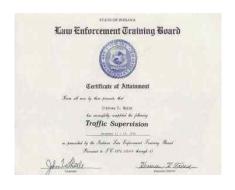


#### TRAFFIC SUPERVISION

Indiana Law Enforcement Academy
Plainfield, Indiana December 1978

#### **Course Topics Include:**

Human Behavior & Motivation Problem Analysis Supervisory Leadership Traffic Safety Program

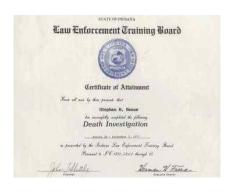


#### **DEATH INVESTIGATION**

Indiana Law Enforcement Academy
Plainfield, Indiana August 1977

#### **Course Topics Include:**

Alcohol/Drug Deaths Injury Patterns Role of Pathologist Scene Management Traffic Deaths Vehicle Safety



#### CHEMICAL TESTS FOR INTOXICATION

Indiana University, School of Medicine

Indianapolis, Indiana March 1977

#### **Course Topics Include:**

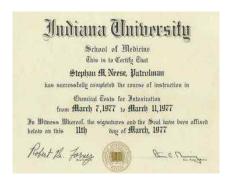
Blood Alcohol Calculations Breath Alcohol Methods

Breathalyzer Theory & Operation

Pharmacology & Toxicology

Procedure

Stages of Alcoholic Intoxication



#### **GRADUATE INDIANA LAW OFFICER BASIC COURSE**

Indiana Law Enforcement Academy

Plainfield, Indiana March 1977

#### **Course Topics Include:**

Basic Police Functions
Basic Scene Investigation
Crash Elements
Mapping & Measuring
Report Writing
Vehicle Safety Overview



#### **ARC-CSI Crash Conference**

Accident Reconstruction Network-Collision Safety Institute Las Vegas, Nevada June 2012

#### **Seminar Topics Include:**

Overview of GM Hybrid and Electric Vehicle Technology-Its Relationship to EDR Data Seat Belt Analysis

Low Speed Collisions- Reconstruction Applications Low Speed Collisions- Biomechanical Analysis

Closing Speed Workshop

Highway Design- Safety Appurtenances

Establishing Safe and Realistic Speed Limits

Using ECM Diagnostic Data in Crash Reconstruction

Tread Separation Crashes Involving Axle Tramp

**Drug Recognition Training** 

Measuring Yaw Marks from Digital Maps

Crash Test- 7 Crash Tests and Reviews



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management
Orlando, Florida April 2011

#### **Seminar Topics Include:**

An Introduction to Energy Concepts in Reconstruction EDR Data in Reconstruction Real World Studies

**Basics Physics for Crash Reconstruction** 

**Bicycle Crash Investigation** 

CDR-Crash Data Collection Guide for GM Airbag Unit

Introduction to Microsoft Excel for Reconstruction

**NASCAR Safety Innovations** 

Police Fleet & Vehicle Crash Concerns

Portable GPS Usage in Reconstruction

Safe Following Distances Nighttime Commercial Vvehicles

Simulation 101

Tires, Tire Forces and Stability

Traffic Signal Timing Essentials

Event Data Recorders- What's New

Working with Crush and Momentum- Motorcycle-car



# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS

**CONFERENCE** 

Bloomington, Illinois

September 2010

#### **Seminar Topics Include:**

Crush and Restitution

Drag Sled Testing

EBS, KEES and Delta-V

ECM Field Guide

**Excel for Reconstruction** 

Pedestrian and Cycles Crashes

Tires, Forces and Stability

Trailer Crash Analysis



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management

Orlando, Florida April 2010

#### **Seminar Topics Include:**

Commercial Motor Vehicle Drive Train Analysis
Advanced Pedestrian/Bicycle Crash Investigation
Research Stiffness/Calculate Stiffness Values
Planning and Bullet Proofing Your Reconstruction
Validation of On-going Drag Sled Studies
Case Preparation and Courtroom Presentation
History & Application of EDCRASH in Preparative

History & Application of EDCRASH in Reconstruction

Digital Photography for Traffic Crash Investigators

Occupant Kinematics

Instrumentation and Testing for Crash Reconstruction



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management
Orlando, Florida April 2010

### **Crash Data Retrieval Update 2010**

Heavy Truck Electronic Control Module (ECM)





#### ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS **CONFERENCE**

Bloomington, Illinois

September 2009

#### **Seminar Topics Include:**

Momentum Considerations

Rollover, Occupant Kinematics and Ejection Issues Digital Photography/Video in Crash Investigation

C.V. Stability and Bendix ESP Systems

Pedestrian Crash- Issues of Concern

Airborne Trajectory Analysis

The Dramatic Impact of Courtroom Visual Aids

From Call-out to Court

Crash Tests

Crash Test Review



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management

Orlando, Florida 2009 April

#### **Seminar Topics Include:**

Validation for the Use of Drag Sled for Friction

Application of Throw Distance

Damage Profile Analysis

Using Microsoft Excel in Graphing ACM/PCM Data

Commercial Motor Vehicle Foundation Brakes

Hybrid Vehicles- Challenge for Investigators

Modern Technology for Measuring Friction

Using Simulation to Reconstruct and Visualize Crashes

Single Image Planar Rectification and Photogrammetry

Drag Sled Protocol

CDR Release 3.1

Airborne Trajectories and Analysis

Lamp Analysis

Motorcycle Lateral Acceleration and Lean Angles

REC-TEC Update

Crash Tests

#### ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS **CONFERENCE**

#### Bloomington, Illinois

September 2008

# **Seminar Topics Include:**

**Determining Occupant Seating Positions** 

Vehicle Rollover Dynamics

A Comparison of ABS Braking Systems

**Preparing For Trial** 

Reconstruction hardware

Energy Analysis Workshop

Crash Testing and Analysis

Trucks-Second Division vehicles

Danger of Hybrid Vehicles

CDR Retrieval Updates

**Human Factors** 

Spin Analysis





CERTIFICATE OF ATTENDANCE

Traffic Crash Reconstruction Conference

September 10-12, 2008 Bloomington, Illinois Stephan Neese

ANNUAL

22nd

# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS CONFERENCE

Bloomington, Illinois

September 2007

#### **Seminar Topics Include:**

Fraudulent Crash Reporting

Truck Technology

m-SMAC

**Crush Measuring Protocol** 

Crash Scene Documentation

Eye Witness Testimony

**Investigating truck Crashes** 

Scan Tool and CDR

CDR Retrieval Updates

Pedestrian vaults

**Reconstruction Formulas** 

Modeling ABS Brake Forces

Airbag Control Modules



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

2007

Institute of Police Technology and Management

Jacksonville, Florida April

#### **Seminar Topics Include:**

Digital Photography for the Crash Investigator

**Interviewing Techniques** 

Spin Analysis

Forensic Animation

Tire Failure

From Scene to Courtroom

Traffic Homicide and DUI

NHTSA Crash Investigation Program Overview

360-degree Momentum and GM Module

Drag Coefficients in Yaws and Skids

Balancing Forces in Crush

Case Preparation and Courtroom Testimony

Pedestrian and Bicycle Reconstruction

Crash Tests



# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS

#### **CONFERENCE**

Bloomington, Illinois

September 2006

#### **Seminar Topics Include:**

**ABS Braking Systems** 

Accelerometers

Airbag Control Modules

Animations & Simulations

Commercial Brake New Technology

Crash Data Retrieval

Forensic Evidence

Pedestrian Vaults

Reconstruction Formulas



2006

#### **CDR USER'S CONFERENCE**

Collision Safety Institute/ Accident Reconstruction Network Dallas, Texas February 2006

#### **Seminar Topics Include:**

Vetronix New Cables and Coverage

Practical Aspects of CDR in Crash Investigation

Implementing CDR Policy

CDR Data and Human Factor Issues

Various Types of ACM modules and Data Recorded

Motorcycle Collision Involving Vehicles with CDR

CDR Validation and Legal Proceedings

Analysis of CDR Data in 360 Linear Momentum Collisions

CDR Data Comparison to Flight Data Recorders

**Durability of ACMs** 

Quantifying Uncertainties in CDR Data

Accuracy of Speeds Recorded by SDM

GM Modules Overview

Practical Applications of CDR Usage



#### ADVANCED PHYSICS USING MICROCOMPUTERS

**REC-TEC** Orlando, Florida January

#### **Seminar Topics Include:**

360-degree Momentum

Delta-V From Damage

Pedestrian Vaults

**Basic Photogrammetry** 



#### ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT

#### **INVESTIGATORS CONFERENCE**

Springfield, Illinois September 2005

#### **Seminar Topics Include:**

Crash Data Retrieval

Heavy Truck ECM's

Pedestrian Crash Reconstruction

Pedestrian Statistical Surveys

Pedestrian Crash Tests

# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT

#### **INVESTIGATORS CONFERENCE**

Peoria, Illinois September 2004

#### **Seminar Topics Include:**

B.A.C. Evidence

Crash Tests

The Forensic Pathologist

Injuries in the ER

**Roll-over Crash Investigations** 

**Roll-over Dynamics** 



#### SOUTHEASTERN COLLISION RECONSTRUCTION CONFERENCE

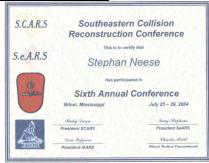
Biloxi, Mississippi

July

2004

## Seminar Topics Include:

Accident Reconstruction Review Using Excel in Reconstruction



#### ACCELERATION AND VERICOM

#### **FAMILIARIZATION**

Vericom Computers

Arlington Heights, Illinois

November 2003

#### **Seminar Topics Include:**

Road and Friction Values

Accelerometers

Vericom Field Testing



## ADVANCED PHYSICS USING MICROCOMPUTERS

#### **REC-TEC**

New Orleans, Louisiana

September 2003

#### **Seminar Topics Include:**

**AASHTO Sight Triangle** 

Air Brake Chambers

Off-Tracking

Weight Shift

Quadratic Solver

The Problems With Turns

Train Crash Investigation

SMAC & CRASH III



# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS

#### **CONFERENCE**

Mount Vernon, Illinois

September 2003

#### **Seminar Topics Include:**

Crash Tests

Forensic Mapping

Motion & Airborne Applications



# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS

#### **CONFERENCE**

Aurora, Illinois

September 2002

#### **Seminar Topics Include:**

Crash Tests

**Evidence Collection** 

**Breakaway Fracture** 

Perception & Response

Pole & Tree Impacts



#### ADVANCED PHYSICS USING MICROCOMPUTERS

#### **REC-TEC**

Cocoa Beach, Florida

August 2002

2002

#### **Seminar Topics Include:**

Time & Distance

Critical Turn-away

Crush

Momentum

Conservation of Energy

Photogrammetry



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management

Jacksonville, Florida April

#### **Seminar Topics Include:**

Case Law Updates

Commercial Vehicle ABS

Commercial Vehicle Rollover Data

Drag Sleds Study

**Energy Methods in Collisions** 

Error Analysis in Reconstruction

**Human Factors** 

Motorcycle Momentum

Motorcycle Crashes

Pole Impacts

**Rotational Mechanics** 

**Trains** 

Truck Instrumentation



#### **TIPS ANNUAL CONFERENCE 2002**

Traffic Institute for Police Services

Champion, Pennsylvania 2002 April

#### **Seminar Topics Include:**

**Advanced Occupant Protection Systems** 

**Event Data Recorders** 

Driver Visibility and Response Time

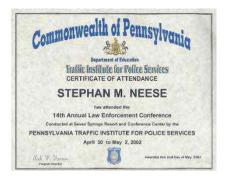
Commercial Vehicle Brake/Engine Reconstruction

Pedestrian Accident Reconstruction Update

**Computer Animation** 

Rotational Mechanics in Collision Reconstruction

Crush Analysis



#### ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS **CONFERENCE**

Danville, Illinois

September 2001

#### **Seminar Topics Include:**

**Barrier Crash Tests** 

Crash Tests

Eyewitness Reliability

**Grade Crossing Trains** 

**Human Factors- Perception** 

Pedestrian Crash Reconstruction

**Traffic Signal Basics** 

Vehicle Forensics



# ADVANCED PHYSICS USING MICROCOMPUTERS

**REC-TEC** 

Cocoa Beach, Florida June 2001

#### **Seminar Topics Include:**

Time & Distance

Critical Turn-away

Crush

Momentum

Conservation of Energy

Photogrammetry



#### ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS

#### **CONFERENCE**

Peoria, Illinois

September 2000

#### **Seminar Topics Include:**

Air Bags

Crash Event Recorders

Crash Photography

Crash Tests

**Injury Patterns** 

Witness Statements



#### **WREX 2000**

College Station, Texas

September 2000

#### **Seminar Topics Include:**

Alcohol Involvement

Basics of Crush

Crash Data Recorders

Crash Tests

Critical Speed

**Estimating Uncertainty** 

**Event Recorders** 

Factors in Detection and Response

Forensic Mapping

Hands on Testing

**Highway Liability** 

Laser Measuring

Photogrammetry

Role of Weather Expert

Traffic Signal Timing

Trailer Underride

Vehicle Considerations Investigator

Vehicle Restitution



2000

#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management

Jacksonville, Florida May

#### **Seminar Topics Include:**

Accuracy & Precision Reconstruction

**Blood Stain Patterns** 

Co-Axial Impact Theory

Collection of Crash Evidence

Commercial Vehicle Crash Update

Crash Worthiness Safety

**Data Recorders** 

Forensic Lighting

Forensic Meteorology

Head-on Collision Speed Calculation

**Heavy Truck Rollovers** 

Impaired Driving Collisions

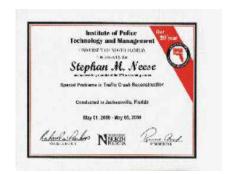
Measure/Computer Diagraming

Momentum and Physics

Pedestrian Injury Patterns

Photography

Pitfalls in Reconstruction Testimony



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management

Jacksonville, Florida April 1999

#### **Seminar Topics Include:**

Accelerometers

Blood Evidence & Reconstruction

Car Tires

Damage Analysis

DNA and Trace Evidence

**Energy Methods Applications** 

Inspection of Car Seats

Low Speed Collisions

Momentum Applications

Pedestrian/Bicycle Investigation

Railroad Accident Investigation

Sport Utility Vehicles

**Trailer Brakes** 

**Trial Preparation** 



#### ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS

#### **CONFERENCE**

Springfield, Illinois

September 1998

#### **Seminar Topics Include:**

**Articulated Vehicles** 

Crash Tests

Federal Trucking Regulations

Night Time Visibility



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management

Jacksonville, Florida April 1998

#### **Seminar Topics Include:**

Commercial Vehicle Investigation

Crash Diagraming

Dauber & Forensic Animation

In-Car Video

Linear Momentum

Math and Physics

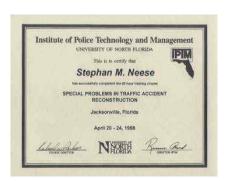
**Occupant Protection Systems** 

**Occupant Seating Positions** 

**Occupant Kinematics** 

Reconstructionalist-Expert

**Trailer Swing-Out** 



# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS CONFERENCE

Arlington Heights, Illinois

September 1997

#### **Seminar Topics Include:**

Barrier Equivalent Velocity

Collection of Forensic Evidence

Coordinate Method Vector Analysis

Crash Tests

Forensic Mapping

Mathematical Methods

Momentum Revisited

Simultaneous Equations

Rear-end Collisions



# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS CONFERENCE

Collinsville, Illinois

September 1996

1996

#### **Seminar Topics Include:**

Aerodynamics

Civil & Criminal Law

Crash Tests

Low Speed Collisions

Measuring Techniques- Laser

Pedestrian Crash

Photography Technology



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management

Jacksonville, Florida April

#### **Seminar Topics Include:**

Acceleration & Deceleration

**Computer Analysis Projections** 

**DUI Prosecutions** 

Effects of Aerodynamics

Human Factors-Perception/Reaction

Hydroplaning

Low Speed Impact Analysis

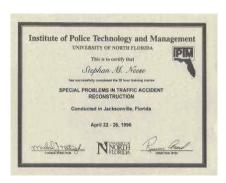
Pedestrians

Police Product Liability

Tire Retread Technology

**Underground Rail Accidents** 

Vehicle Mechanical Analysis



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management Jacksonville, Florida April 1995

#### Seminar Topics Include:

**Animation & Simulation** 

**Bus Accident Reconstruction** 

Commercial Vehicle Analysis

Demonstrative Evidence

Friction & Tire Forces

Headlight Pattern Analysis

Motorcycle Reconstruction

Night Visibility

**Occupant Kinematics** 

Physical Evidence vs. Eye Witness

Tire Forensics

Vector Analysis



# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS CONFERENCE

Collinsville, Illinois

August 1994

#### **Seminar Topics Include:**

3-D Video Animation

Crash tests

Forensic Lab Analysis

Friction & Energy Speed Computations

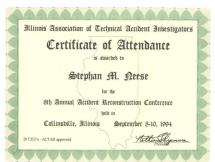
Photography

Reports

Trailer Underride

Vehicle Damage Inspection

Vehicle Dynamics



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management

Jacksonville, Florida April 1994

#### **Seminar Topics Include:**

Aerial Crush Photography

Airbag Technology

**AutoStats** 

**Body Works Computer Program** 

Commercial Vehicle Paper Trail

Radial Tires

Restraint Systems

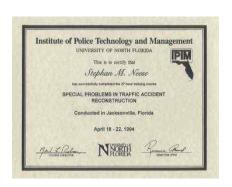
**Total Station** 

Truck Rollovers

Truck Brake Failure

**Underride Accidents** 

Windows Software



# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS CONFERENCE

Mundelein, Illinois

October 1993

#### **Seminar Topics Include:**

Crash Tests

Friction and Energy Methods

Mathematical and Vector Analysis



#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

Institute of Police Technology and Management
Jacksonville, Florida April 1993

#### **Seminar Topics Include:**

Accident Fraud

Airborne Accidents

Analyzing Nighttime Accidents

**Computer Programs** 

Computerized Accident Drawing

Deceleration/ Accelerometers

Friction & Energy

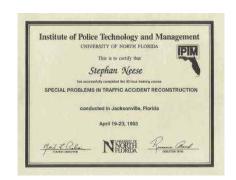
Lamps

Mechanical Vehicle Inspection

Occupant, Pedestrian Injuries

Rollovers

Truck-trailer Jack-knifing



# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS CONFERENCE

Illinois State University

October 1992



# MIDWEST ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS

West Des Moines, Iowa May 1992

#### **Seminar Topics Include:**

NTSB- Federal Motor Carrier Laws Railroad Crossing Crash investigation

Occupant Restraints Vehicle Dynamics

# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS CONFERENCE

Illinois State University October 1991

#### **Seminar Topics Include:**

**Articulated Vehicles** 

**Bumper Standards** 

Crash Tests

Heavy Truck Deceleration Rates

Low Speed Impacts

The Expert's Role



#### INDIANA ASSOCIATION OF CERTIFIED ACCIDENT INVESTIGATORS

Indianapolis, Indiana

June

1991

#### **Seminar Topics Include:**

**Anti-Locking Braking Systems** 

# ILLINOIS ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS CONFERENCE

*Illinois State University* 

October 1990

#### **Seminar Topics Include:**

Anti-Locking Brake Systems

**Articulated Vehicles** 

Basic Speed Formula

Crash Tests

Critical Speed Yaw Analysis

**Injury Pattern** 

**Pedestrian Investigations** 



#### INDIANA ASSOCIATION OF CERTIFIED ACCIDENT INVESTIGATORS

Indianapolis, Indiana

June 1990

#### **Seminar Topics Include:**

Mapping & Measuring

#### SPECIAL PROBLEMS IN TRAFFIC ACCIDENT RECONSTRUCTION

*Institute of Police Technology and Management* 

Jacksonville, Florida April 1990

#### **Seminar Topics Include:**

Hazardous Materials

**Injury Patterns** 

Legal Issues

Motorcycle Dynamics

Motorcycle Stopping

Photogrammetry

Photography

**Railroad Crossings** 

Tire & Pavement Frictions

**Trailer Stability** 

Video Animation

Weight Shift



# Statement of Policy

My goal is to provide you with a thorough and accurate account of how the accident happened. I will make every effort to find the evidence that will support your case. I realize that when you hire me, you are primarily interested in the results that best support you and/or your client's version. However, if the evidence does not support this view, I will rely on the evidence for my conclusion. It is my practice to provide you with all the information that supports your case, as well as any that may be detrimental.

Stephan M. Necen