



# Northeast Crash Dynamics, LLC

## Andrew McNeill, MFS

ACTAR #2833, CSCSA #12866

### *Curriculum Vitae*

#### OVERVIEW

Andrew McNeill has spent most of his professional life in forensic science. He retired from the Monroe County Sheriff's Office after a 20-year career, nearly all of which was spent as a crime scene investigator. His responsibilities included crime scene investigation, collision reconstruction, latent fingerprint examination, forensic video analysis, and training. Andy has testified as an expert witness at the local, county, and state court levels and has provided technical and consulting assistance to other law enforcement agencies, prosecutors, defense attorneys, and civil practice attorneys on a variety of cases.

Andy served as one of several consulting subject matter experts for the New York State Division of Criminal Justice Services during the development of its Basic Investigative Photography and Police Crime Scene and Evidence Specialist courses. During his law enforcement career, Andy was the lead instructor for these courses at Monroe Community College's Public Safety Training Facility, and he has been invited back as a contracted instructor post-retirement. Andy also taught Fire Investigative Photography at the New York State Academy of Fire Science as an Academy/Regional State Fire Instructor. He continues to teach forensic photographic concepts in his role as lead trainer for L-Tron Corporation's OSC360 spherical imaging system.

Andy has presented various topics related to crime scene investigation and forensic photography at educational seminars hosted by the International Association for Identification and several of its regional divisions, the NYS Division of Homeland Security and Emergency Services, the New York Statewide Traffic Accident Reconstruction Society, and the STEP Council of the Genesee Region, as well as at several Western New York area colleges and the George Eastman Museum. He holds a Master of Forensic Sciences degree from The George Washington University and a Bachelor of Arts degree from the University at Buffalo. He is an ACTAR-accredited collision reconstructionist and is certified as a Senior Crime Scene Analyst by the International Association for Identification.

#### EMPLOYMENT EXPERIENCE

**Northeast Crash Dynamics, LLC**, Buffalo, NY

2021 – Present

*Partner*

Manage team of investigators; handle caseload consisting of forensic consultation; collision investigation, analysis, and reconstruction; forensic photography and mapping; passenger and commercial vehicle EDR imaging; and expert testimony. Also responsible for project management, client communications, and meeting deliverable deadlines.

**L-Tron Corporation**, Victor, NY

2018 – Present

*OSCR360 Account Manager and Lead Trainer*

Develop and deliver forensic DSLR and spherical photographic training, both in-person and remotely; provide technical support for OSC360 spherical imaging system; manage accounts for all New York State and first-in-state customers.

<b>Avalon Document Services</b> , Buffalo, NY	2018 – 2021
<i>Director, Special Investigations Unit (2020-2021)</i>	
Managed daily operations of Accident Reconstruction Unit and all associated services; handled regular investigative caseload; responsible for case management, client communications, and meeting deliverable deadlines, as well as employee payroll, training, and certification maintenance. Assisted executive team with successful sale of unit and ensured seamless continuity of all open cases for existing clients.	
<i>Senior Investigator, Accident Reconstruction Unit (2018-2020)</i>	
Collision investigation, analysis, and reconstruction; forensic photography and mapping; passenger and commercial vehicle EDR imaging; expert testimony.	
<b>Monroe County Sheriff's Office</b> , Rochester, NY	1998 – 2018
<i>Deputy Sheriff – Police Bureau</i>	
<ul style="list-style-type: none"> <li>• <i>Technical Services Unit (2004-2018)</i>: Full time responsibilities in crime scene investigation, collision reconstruction, forensic mapping, evidence processing, latent print examination, and forensic video analysis. Additional duties included recruit-level and specialized academy instruction, field training of recruit deputies and newly assigned TSU members, and presentations to the public on various forensic topics.</li> <li>• <i>Uniformed Field Technician (2000-2004)</i>: Road Patrol deputy with additional responsibilities in crime scene investigation, forensic photography, scene measurement, latent fingerprint development, and evidence collection.</li> <li>• <i>Road Patrol Deputy (1998-2004)</i>: Responsible for general aspects of public safety, law enforcement, and criminal investigations.</li> </ul>	
<b>New York State Division of Homeland Security and Emergency Services</b>	
<i>Academy/Regional State Fire Instructor</i>	2013 – 2018
Instructor for Fire Investigative Photography course and photography portion of Level II Arson Investigation course	
<b>Brighton Police Department</b> , Rochester, NY	
<i>Public Safety Dispatcher</i>	1992 – 1995
<b>Brighton Volunteer Ambulance</b> , Rochester, NY	
<i>EMT, Advanced EMT, Driver, Dispatcher</i>	1991 – 1993

## EDUCATION

<b>The George Washington University</b> , Washington, DC	
<i>Master of Forensic Sciences</i>	1995 – 1996
Internship - Prince George's County, Maryland Police Department: Evidence Technician and Firearms Examination Units; investigated combinations of liquid gun bluing chemicals and cyanoacrylate to develop latent finger impressions on fired cartridge cases.	
<b>University at Buffalo</b> , Buffalo, NY	
<i>Bachelor of Arts - Political Science</i>	1989 – 1992
Pi Sigma Alpha – National Political Science Honor Society	
<b>The Johns Hopkins University</b> , Baltimore, MD	
<i>Majored in International Relations and Political Science</i>	1987 – 1989



**CERTIFICATIONS**

<i>Certified Senior Crime Scene Analyst, No. 12866</i> International Association for Identification	2017 – Present
<i>Full Accreditation: Traffic Accident Reconstructionist, No. 2833</i> Accreditation Commission for Traffic Accident Reconstruction	2016 – Present
<i>Certified Police Instructor (General Topics)</i> New York State Division of Criminal Justice Services	2007 – 2018
<i>Certified Latent Print Examiner</i> New York State Division of Criminal Justice Services	2004 – 2018
<i>Emergency Medical Technician, No. 139252</i> New York State Department of Health	1990 – 2020

**COLLISION INVESTIGATION TRAINING AND CONTINUING EDUCATION**

<i>NYSTARS Winter Training Seminar, Brighton Fire Department, Brighton, NY</i> Introduction to Heavy Vehicle EDRs, GPS, other tracking systems	2020
<i>NYSTARS Fall Training Seminar, Brighton Fire Department, Brighton, NY</i> Pedestrian Crash Test Data Review from Joint Seminar	2019
<i>Digital Forensics of Heavy Vehicle Event Data Recorders</i> Synercom Technologies/University of Tulsa, Tulsa, OK	2019
<i>NYSTARS Spring Training Seminar, Brighton Fire Department, Brighton, NY</i> Motorcycles and Physics	2019
<i>Joint Collision Reconstruction Conference, NYSTARS, Lake George, NY</i> Live crash testing with video and data capture; pedestrian collision investigation; distracted drivers and pedestrian visibility	2018
<i>Traffic Collision Technology</i> Webinar: Laser Technology, Inc.	2018
<i>NYSTARS Winter Training Seminar, Brighton Fire Department, Brighton, NY</i> Basic Low Light Photography, Review of Case Studies	2018
<i>NYSTARS Fall Training Seminar, Brighton Fire Department, Brighton, NY</i> Photo Rectification and Photogrammetry for Collision Reconstruction	2017
<i>Pennsylvania State Police Collision Reconstruction Seminar, Gettysburg, PA</i> Live crash testing with video and data capture, Results of Human Factors Studies at WREX 2016, Simultaneous Equations, Using Body-Worn Cameras in Accident Reconstruction, Case Preparation, Smartphone Apps for Reconstruction, Truck Inspections, Semi-Autonomous Driving Systems, Bosch CDR Update	2017
<i>NYSTARS Spring Training Seminar, Brighton Fire Department, Brighton, NY</i> Tires – How Technological Advances Affect Handling and Braking	2017
<i>NYSTARS Winter Training Seminar, Brighton Fire Department, Brighton, NY</i> Courtroom Preparation and Testimony	2017



<i>Pennsylvania State Police Collision Reconstruction Seminar</i> , State College, PA Live crash testing with video and data capture; Expectancy in Reconstruction, Minimizing Speed Ranges; Emergency Vehicle Collisions; EBS, Delta-V, and the First Law of Thermodynamics; Testifying in Court; Trailer Stability, Bosch CDR Update	2016
<i>NYSTARS Spring Training Seminar</i> , Brighton Fire Department, Brighton, NY Accident Reconstruction Review and Practical Project	2016
<i>Pennsylvania State Police Collision Reconstruction Seminar</i> , State College, PA Live crash testing with video and data capture, Occupant Kinematics, Determining Vehicle Operator Fatigue in Accident Reconstruction, Data Latency and its Influence on EDR Speed at Impact, Using EDR Delta-V to Calculate Closing/Impact Speeds, Forensic Evidence from Traffic Crash Fatalities, Human Factors – Results of Nighttime Field Testing, Bosch CDR Update	2015
<i>Forensic Mapping Specialist</i> , Collision Forensic Solutions, MCC-PSTF, Rochester, NY Leica TS12 robotic electronic total work station, Microsurvey Evidence Recorder 9 and Forensic CAD 2013	2015
<i>Pennsylvania State Police Collision Reconstruction Seminar</i> , State College, PA Live crash testing with video and data capture, Sources of Data from Commercial Motor Vehicles, Smartphone Applications for Reconstruction, Tire Failures, Video Analysis for Crash Investigation, Step-by-Step Analysis of a Nighttime Pedestrian Crash, Spin Analysis, Bosch CDR Update	2014
<i>Bosch Crash Data Retrieval Technician – Levels 1 and 2</i> , Collision Safety Institute, Sponsored by New York State Police CRU, Romulus, NY	2013
<i>New York State Police Collision Reconstruction Update</i> , Romulus, NY Live crash testing with video and data capture, Hyundai/Kia EDR tools	2013
<i>Pennsylvania State Police Collision Reconstruction Seminar</i> , State College, PA Live crash testing with video and data capture, Crush Measurement Protocol Review, Forensic Mapping Review and Best Practices, Trace Evidence Collection at a Collision Scene, Forensic Analysis of Collision Evidence, Post-Crash Vehicle Inspections, Investigative/Forensic Photography	2012
<i>Pennsylvania State Police Collision Reconstruction Seminar</i> , State College, PA Live crash testing with video and data capture, Commercial Vehicle EDR Overview, OnStar Functionality, Traffic Signal Timing Overview, Airborne Trajectory Analysis, Naturalistic Study of Distracted Driving, Damage Profile Measuring Procedures	2011
<i>New York State Police Collision Reconstruction Update</i> , Romulus, NY Live crash testing with video and data capture, At-Grade Railway Collisions	2010
<i>Pennsylvania State Police Collision Reconstruction Seminar</i> , State College, PA Live crash testing with video and data capture, nighttime pedestrian crash case study, EDR issues, tire dynamics, elderly drivers and pedestrians, sensitivity analysis	2010
<i>National Boating Accident Investigation and Analysis, Level 1</i> , National Association of State Boating Law Administrators, Embassy Suites, East Syracuse, NY	2010
<i>NYSTARS Spring Training Seminar</i> , NYS Preparedness Training Center, Oriskany, NY Critical speed yaw analysis, demonstration, and field measurement protocol	2009



<i>Vericom VC3000/VC4000 training</i> , Vericom Computer Corporation, Genesee County Fire Training Center, Batavia, NY	2008
<i>Advanced Traffic Crash Reconstruction with WinCRASH</i> , Institute of Police Technology and Management, New York State Police Academy, Albany, NY	2007
<i>Traffic Crash Reconstruction</i> , Institute of Police Technology and Management, New York State Police Academy, Albany, NY	2006
<i>Forensic Mapping Specialist</i> , Mick Capman and Associates, MCC-PSTF, Rochester, NY Sokkia LEA 530R3 electronic total work station, Microsurvey Evidence Recorder 3 and MapScenes Pro 2006	2006
<i>Motor Vehicle Collision Investigation, Advanced Course</i> , New York State Division of Criminal Justice Services, MCC-PSTF, Rochester, NY	2003
<i>Motor Vehicle Collision Investigation, At-Scene Course</i> , New York State Division of Criminal Justice Services, MCC-PSTF, Rochester, NY	2003
<i>Collision Scene Diagramming with AutoSketch, Total Station Familiarization, Prism Pole Operation</i> , New York State Police Troop E CRU, Canandaigua, NY	2002

#### OTHER FORENSIC TRAINING AND CONTINUING EDUCATION

<i>iINPUT-ACE Certified Operator Course</i> Online: Occam Video Solutions, Spokane, WA	2021
<i>Chesapeake Bay Division IAI Educational Conference</i> , Richmond, VA Working as a Defense Expert, Defense Fingerprint Case Study	2019
<i>New York &amp; Connecticut IAI Joint Divisional Educational Conference</i> , Hauppauge, NY Advanced Digital Imaging Workshop (David Witzke, Foray Technologies) Evidence Detection Across the Spectrum: Using Forensic Light Sources from 254nm to >1 $\mu$ m (Walter Hiller, SPEX Forensics)	2018
<i>Digital Crime Scene Photography</i> Online: National Forensic Science Technology Center, Florida International University	2018
<i>Digital Photography and Digital Enhancements</i> Online: Forensic Technology Center of Excellence, National Institute of Justice	2018
<i>IAI 103<sup>rd</sup> Annual Educational Conference</i> , San Antonio, Texas Latent Print Case Study, Understanding Video Files, DVR Retrieval Methods, Strengthening the Scientific Foundation of Fingerprint Examination, RAW photography	2018
<i>Essential Ridgeology Concepts</i> , Ron Smith & Associates, New York State Division of Criminal Justice Services, Albany, NY	2018
<i>Field Training and Orientation</i> , New York State Division of Criminal Justice Services, MCC-PSTF, Rochester, NY	2016
<i>Palm Print Comparison Techniques</i> , Ron Smith & Associates, New York State Division of Criminal Justice Services, New York State Police Academy, Albany, NY	2014



<i>DVR Assessment and Video Recovery</i> , Ocean Systems, Inc., New York State Police Academy, Albany, NY	2014
<i>TSU In-Service Training</i> , Monroe County Sheriff's Office, Rochester, NY DNA evidence update, GIS applications for forensic use	2014
<i>Fire Investigative Photography</i> , New York State Academy of Fire Science, Montour Falls, NY	2013
<i>Ultraviolet and Infrared Capture of Crime Scene Evidence</i> Webinar: King Brown, West Palm Beach, FL Police Department	2013
<i>Digital Crime Investigation Course</i> , MCC-PSTF, Rochester, NY	2013
<i>Forensic Investigation of Violent Crime Scenes</i> , Henry C. Lee Forensic Science Institute, MCC-PSTF, Rochester, NY	2012
<i>Forensic Video Analysis (with dTective)</i> , Ocean Systems, Inc., Burtonsville, MD	2012
<i>Instructor Evaluator Course (General Topics)</i> , New York State Division of Criminal Justice Services, MCC-PSTF, Rochester, NY	2010
<i>Search and Seizure of Digital Evidence</i> , Rochester Institute of Technology, Rochester, NY	2009
<i>DNA Recognition, Collection, and Preservation</i> , New York State Division of Criminal Justice Services, Erie Community College, Amherst, NY	2008
<i>Digital Imaging for Law Enforcement</i> , MCC-PSTF, Rochester, NY	2008
<i>Police Crime Scene and Evidence Specialist Course</i> , New York State Division of Justice Services, MCC-PSTF, Rochester, NY	2007
<i>Instructor Development Course (General Topics)</i> , New York State Division of Criminal Justice Services, MCC-PSTF, Rochester, NY	2007
<i>Forensic Video Analysis and the Law, Level 1</i> , Law Enforcement Video Association, University of Indianapolis, Indianapolis, IN	2006
<i>Police Photography Course</i> , New York State Division of Criminal Justice Services, MCC-PSTF, Rochester, NY	2005
<i>Computer Technology and Investigations Workshop</i> , MCC-PSTF, Rochester, NY	2004
<i>Fingerprint Practices and Procedures, Level III</i> , Latent Print Unit, New York State Division of Criminal Justice Services, Albany, NY	2004
<i>Fingerprint Practices and Procedures, Level II</i> , New York State Division of Criminal Justice Services, MCC-PSTF, Rochester, NY	2003
<i>Fingerprint Practices and Procedures, Level I</i> , New York State Division of Criminal Justice Services, MCC-PSTF, Rochester, NY	2002
<i>Basic Course for Police Officers, Full-Time Class #31</i> , New York State Division of Criminal Justice Services, MCC-PSTF, Rochester, NY	1998
<i>American Academy of Forensic Sciences 49<sup>th</sup> Annual Meeting</i> , New York, NY	1997



*New Jersey Association of Forensic Scientists Spring 1996 Seminar, Edison, NJ* 1996  
 Footwear Impressions: From Crime Scene to Court

*American Academy of Forensic Sciences 48<sup>th</sup> Annual Meeting, Nashville, TN* 1996

## TEACHING EXPERIENCE

*Forensic Photography Refresher and Introduction to Spherical Photography* 2018 – Present  
 L-Tron Corporation, Rochester, NY

*OSCR360 Capture Kit and Desktop Software Training Course* 2018 – Present  
 L-Tron Corporation, Rochester, NY

*Leica TS12 Robotic Electronic Total Work Station and Evidence Recorder 11,* 2017 – 2018  
 Monroe County Sheriff's Office, Rochester, NY

*Fire Investigative Photography, NYS Academy of Fire Science, Montour Falls, NY* 2013 – 2018

*Basic Camera Operation, Crime Scene Diagramming* 2010  
 Monroe County Public Defender's Office, Rochester, NY

### *Basic Investigative Photography Course*

- MCC-PSTF, Rochester, NY 2008 – Present
- Monroe County Sheriff's Office, Rochester, NY 2010 – 2018
- Ulster County Sheriff's Office, Kingston, NY 2008
- New York State Division of Criminal Justice Services, Guilderland, NY 2007

### *Police Crime Scene and Evidence Specialist Course*

- MCC-PSTF, Rochester, NY 2007 – Present
- Monroe County Sheriff's Office, Rochester, NY 2010 – 2018

*Fingerprint Practices and Procedures, Level I, MCC-PSTF, Rochester, NY* 2006 – 2018

*Fingerprint Practices and Procedures, Level II, MCC-PSTF, Rochester, NY* 2007 – 2018

*Police Photography Course, MCC-PSTF, Rochester, NY* 2006

## PRESENTATIONS

*Introduction to Forensic Spherical Photography with Homicide Case Study*  
 New York & Connecticut IAI Joint Divisional Educational Conference, Hauppauge, NY 2018  
 Chesapeake Bay Division IAI Educational Conference, Richmond, VA 2019

*Introduction to Forensic Spherical Photography*  
 IAI 103<sup>rd</sup> Annual Educational Conference, San Antonio, TX 2018

*Case Study – Use of Forensic Spherical Photography in a Greece, NY Homicide*  
 IAI 103<sup>rd</sup> Annual Educational Conference, San Antonio, TX 2018

*Applied Photography and Spherical Imaging for Forensic Engineers*  
 National Academy of Forensic Engineers Summer Training Conference, Buffalo, NY 2018

*Forensic Photography Review (condensed) and Introduction to Spherical Imaging*  
 NYSTARS Winter Training Seminar (both sessions), Albany, NY and Brighton, NY 2018



<i>Introduction to Death Investigations: Lecture and Case Studies</i> Hilbert College, Hamburg, NY	2017
<i>Physical Evidence and the Emergency Medical Technician</i> Given in conjunction with the Monroe County District Attorney's Office STEP EMS Conference, Rochester, NY	2016
<i>Digital Photography for Fire Investigators</i> Annual Arson Seminar, NYS Academy of Fire Science, Montour Falls, NY	2013, 2014
<i>Forensic Photography</i> Lecture given as part of <i>Law &amp; Order</i> exhibition George Eastman House, Rochester, NY	2005

## PROFESSIONAL ASSOCIATIONS

IAI – International Association for Identification: *Life/Sustaining Member*

NYIAI – New York State Division, International Association for Identification: *Member, Western NY Delegate*

NYSTARS – New York Statewide Traffic Accident Reconstruction Society: *Member*

PCARS – Pennsylvania Collision and Accident Reconstruction Society: *Member*

NYSDA – New York State Defenders Association: *Non-Attorney Member*

ICSIA – International Crime Scene Investigators Association: *Member*

