
ACCIDENT RECONSTRUCTION CURRICULUM VITAE

Terry W. McClanahan, ACTAR
Accident Reconstructionist

PROFESSIONAL SUMMARY

My accident investigation experience has involved approximately 150 or more fatal accidents. Approximately 3,000 injury & non-injury accidents and approximately 500 reconstructions. I have approximately 28 years of experience in the field of accident reconstruction having received my reconstruction training in 1994. I have received approximately 2000 hours of specialized/technical training courses or technical seminars. I am a fully accredited accident reconstructionist (ACTAR) since 1998 and have renewed my accreditation in 2003, 2008, 2013, 2018, 2023 through 2028. I have handled accidents that have occurred in the State of Ohio, West Virginia, Tennessee, Michigan, Kentucky, Florida, Georgia & New Jersey.

Some of the types of analysis performed include but not limited to: rollovers, airbornes, intersection impacts, sight obstructions, airbag control module data imaging & analysis, crush damage/energy, rotational mechanics, conservation of linear momentum analysis, vector analysis, planar impact analysis, velocity-time-distance analysis, occupant kinematics.

PROFESSIONAL CRASH RECONSTRUCTION EXPERIENCE

- 2009 – Present: T-M Accident Reconstruction, LLC
- Principal Accident Reconstructionist
- 2008 -2015: Butler County Sheriff's Office
- Crash Reconstruction Unit / Investigations Division
 - Specialist/Deputy Sheriff
- 2007 – 2020: Ohio Peace Officer's Training Academy
- Adjunct Instructor – Crash Reconstruction Topics
- 2006 – 2008: Introtech Crash Reconstruction Services
- Crash Reconstructionist / Consultant
- 1985 – 2006: Sugarcreek Township Police Department
- Police Officer / Crash Reconstructionist (Retired)

FORMAL EDUCATION

- 2003: B.S. Degree, Organizational Management, Wilberforce University (Wilberforce, Ohio)
1979: A.S. Degree, Law Enforcement, Sinclair Community College (Dayton, Ohio)

ACCIDENT RECONSTRUCTION ACCREDITATION

- 1998– 2028 Full Accreditation as an Accident Reconstructionist
Accreditation Commission for Traffic Accident Reconstruction (ACTAR)

PROFESSIONAL & TECHNICAL TRAINING COURSES

1. **2019** **Advanced Traffic Collision Reconstruction Course**
Ohio Peace Officer's Training Academy
London, Ohio,
2. **1994** **Traffic Accident Reconstruction Course**
University of North Florida
London, Ohio,
3. **2009** **Traffic Crash Reconstruction Update Course**
University of North Florida
London, Ohio
4. **1997** **Traffic Accident Reconstruction Refresher Course**
University of North Florida
City of Dayton, Ohio Police Academy
5. **2009** **Energy Methods & Damage Analysis in Crash Reconstruction Course**
University of North Florida
West Chester, Ohio Police Department
6. **1998** **Vehicle Damage & Energy Relationship in Collision Reconstruction Course**
Texas A&M University
City of Dayton, Ohio Police Academy
7. **2018** **Basic Crush Protocol and Review**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
8. **2014** **Occupant Kinematics for the Traffic Crash Reconstructionist Course**
University of North Florida
West Chester, Ohio Police Department
9. **1996** **Biomechanics for Traffic Accident Reconstruction Course**
Texas A&M University
City of Collinsville, Illinois
10. **1999** **Applied Physics for Traffic Accident Investigators Course**
University of North Florida
Union Township, Ohio Police Department
11. **2004** **Advanced Traffic Crash Reconstruction with WinCrash Course**
University of North Florida
City of Jacksonville, Florida

12. **2000** **Advanced Crash Reconstruction with WinSMAC Course**
University of North Florida
City of Jacksonville, Florida
13. **2013** **Advanced Traffic Collision Reconstruction Course**
Ohio Peace Officer's Training Academy
London, Ohio
14. **2021** **Pedestrian Bicycle Crash Investigation**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
15. **1995** **Investigation of Pedestrian Accidents and Human Factors**
University of North Florida
City of Dayton, Ohio
16. **2022** **Investigation of Pedestrian Collisions**
University of North Florida
VOD On-line
17. **2001** **Special Problems in Traffic Crash Reconstruction Seminar**
University of North Florida
City of Jacksonville, Florida
 - Post Collision Drag from Spin
 - Vehicle Damage analysis
 - Predicting Driver Perception-Reaction Time
 - Vehicle Occupant Evidence
 - Practical Evidence Interpretation
 - Bicycle Crash Dynamics
 - Collision Scene Mapping
 - Black Box Technology in Cars & Light Trucks
 - Tire Failure Analysis & Litigation
 - Traffic Engineering & Reconstruction
 - Staged Crash Testing
18. **2005** **Crash Investigation & Reconstruction Update 2005 Seminar**
National Association of Professional Accident Reconstruction Specialists/
Ohio State Highway Patrol Academy
City of Columbus, Ohio
 - Rotational Mechanics
 - Commercial Air Brake Systems
 - Drag Sled/VC3000/Escort G-Timer Testing & Comparison
 - CDR System Overview
 - Commercial Vehicle EDRS
 - DNA Fatal Crashes
 - Criminal Prosecutions in Fatal Crashes
 - Staged Crash Testing

19. **2011** **Crash Data Retrieval System & Analysis & Applications Course**
Crash Data Specialists, LLC
City of Dayton, Ohio Police Academy
20. **2019** **EDR Update and Calculating Impact Speed From EDR Pre-Crash Data**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
21. **2012** **Traffic Collision Reconstruction Refresher Seminar**
Ohio Peace Officer's Training Academy
London, Ohio
22. **2009** **Reconstruction of Collisions Involving Airborne's Course**
Ohio Peace Officer's Training Academy
London, Ohio
23. **2012** **CRASH3 Impact Model and Advanced Momentum Techniques in Traffic Crash Reconstruction Seminar**
Ohio Traffic Accident Reconstruction Association
City of Columbus, Ohio Police Academy
24. **2016** **Momentum and Vectors for the Reconstructionist Seminar**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
25. **2018** **Momentum and Vectors for the Reconstructionist Seminar**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
26. **2011** **Rotational Mechanics Seminar**
Ohio Traffic Accident Reconstruction Association
City of Columbus, Ohio Police Academy
27. **2017** **Basic Spin Analysis Seminar**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
28. **2008** **Reconstruction Seminar**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
 - Narrow Object Collision Reconstruction
 - Applied Statistics for the Collision Reconstructionist

29. **1990** **Advanced Traffic Accident Investigation (Level II) Course**
Ohio Peace Officer's Training Academy
London, Ohio
30. **1987** **Traffic Accident Investigation (Level I) Course**
Ohio Peace Officer's Training Academy
London, Ohio
31. **2010** **Investigation of Collisions Involving Public Safety Vehicles Course**
Ohio Peace Officer's Training Academy
London, Ohio
32. **2015** **Crash Reconstruction Using Video Evidence Seminar**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
33. **2016** **Civil Engineering for the Reconstructionist Seminar**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
34. **2009** **Railroad Grade Crossing Collision Investigation Course**
Ohio Peace Officer's Training Academy
London, Ohio
35. **2003** **Low Speed Impact in Accident Reconstruction Course**
Northcoast Polytechnic Institute
City of Centerville, Ohio Police Department
36. **2022** **Pavement Edge Drop Off**
University of North Florida
VOD – Online
37. **2022** **Forensic Evidence Recovery for Crash Investigators**
University of North Florida
VOD – Online
38. **2006** **Technology Issues in Accident Reconstruction Course**
Northcoast Polytechnic Institute
City of Centerville, Ohio Police Department
39. **1999** **Heavy Vehicle Crash Reconstruction Course**
Northwestern University Traffic Institute
City of North Bend, Indiana

40. **1997** **Inspection and Investigation of Commercial Vehicle Accidents Course**
University of North Florida
Union Township, Ohio Police Department (Butler County)
41. **2012** **Commercial Motor Vehicle Collision Investigation Level III Course**
Ohio Peace Officer's Training Academy
London, Ohio
42. **2007** **Commercial Vehicle Accident Investigation, Airbags / Black Boxes Seminar**
Northcoast Polytechnic Institute
City of West Lake, Ohio
43. **2022** **Preservation of Crucial Evidence in Commercial Motor Vehicle Crashes**
University of North Florida
VOD - Online
44. **2009** **Commercial Motor Vehicle 2009 Legal Update Seminar**
Ohio Peace Officer's Training Academy
City of London, Ohio
45. **2021** **Commercial Vehicle Crash Investigation Seminar**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
46. **2008** **Commercial Vehicle Enforcement Seminar**
Clinton County Sheriff's Office
City of Wilmington, Ohio
47. **2007** **Comprehensive Air Brake Systems Training Program Course**
Bendix Corporation
City of Huntington, Indiana
48. **1999** **Acceleration and VC2000 Familiarization Course**
Vericom Computers, Inc.
Butler Co. Engineers Office – City of Hamilton, Ohio
49. **2010** **Acceleration and Vericom Computer Familiarization Course**
Vericom Computers / Ohio Peace Officer's Training Academy
London, Ohio
50. **1996** **Investigation of Motorcycle Accidents**
University of North Florida
City of Dayton, Ohio

51. **1999** **13th Annual IATAI Accident Reconstruction Conference Seminar (Motorcycle Crash Reconstruction)**
Illinois Association of Traffic Accident Investigators
City of Collinsville, Illinois
52. **2001** **Paint Analysis in Traffic Investigation Seminar**
Ohio Bureau of Criminal Identification & Investigation
City of Dayton, Ohio Police Academy
53. **2006** **Mapscenes Certified Professional Forensic Mapping w/ Total Station Course**
Mapscenes Systems, Inc.
West Chester, Ohio Police Department
54. **2011** **Edge FX Basic Diagramming Software with Total Station Course**
Visual Statement, Inc.
Butler Co. Sheriff Training Facility / Butler Technology, Liberty Township, Ohio
55. **2004** **Forensic Mapping Specialist Course (Total Station)**
MJC & Associates, Inc.
City of Kalamazoo, Michigan
56. **2012** **Forensic Mapping for the Collision Investigator Course**
Ohio Peace Officer's Training Academy
London, Ohio
57. **2009** **Forensic Mapping with Electronic Measuring Devices Course**
Ohio Peace Officer's Training Academy
London, Ohio
58. **2015** **Advanced Diagramming with FARO Blitz Seminar**
Crash Tech Reconstruction Services, LLC
Ohio Peace Officer's Training Academy, London, Ohio
59. **2019** **FARO Zone 3D Seminar**
FARO Technologies
Ohio Traffic Accident Reconstruction Association, Blue Ash, Ohio
60. **1997** **L.I.D.A.R. Based Accident / Crime Scene Reconstruction Course**
Sinclair Community College
City of Dayton, Ohio
61. **2017** **Post Crash Mechanical Exam Seminar**
Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department

62. **2006** **Tire Technology and Vehicle Dynamics Seminar**
Introtech Crash Reconstruction Services
City of Oberlin, Ohio
63. **2015** **Tire Technology, Forensics and Tire Failure Analysis Clinic**
Bridgestone / Firestone Inc.
Ohio State Highway Patrol Academy
City of Columbus, Ohio
64. **2018** **Crash to Court: Courtroom Success Seminar**
Ohio Traffic Safety Office / Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
65. **2000** **Human Factors in Collisions Seminar**
Dr. Patrick J. Robins
Union Township, Ohio Police Department (Butler County)
66. **1994** **Occupant Protection Usage Enforcement Training Seminar**
Ohio Department of Public Safety
City of Xenia, Ohio
67. **2013** **National Traffic Incident Management Responder Train-The-Trainer Seminar**
Federal Highway Administration / Ohio Department of Transportation
City of Dayton, Ohio Fire Academy
68. **2013** **Basic Cellular Records Analysis in Criminal Investigations Seminar**
Ohio Peace Officer's Training Academy / City of Columbus Police
City of Cincinnati Police Academy
69. **2009** **BMV Fraudulent Document Seminar**
BMV / Ohio Traffic Accident Reconstruction Association
West Chester, Ohio Police Department
70. **1999** **Emergency Vehicle Operations Course**
Professional Driving Systems
Sugarcreek Township, Ohio Police Department / Wright Patterson Air Force Base
71. **2009** **Practical Law Enforcement Driving**
Butler County Sheriff's Office
Butler Co. Sheriff Training Facility / Butler Technology, Liberty Township, Ohio
72. **2009** **Interviewing Techniques for Traffic Collision Investigation**
Ohio Peace Officer's Training Academy
London, Ohio

73. **1987** **Interview and Interrogations Workshop Course**
Ohio Peace Officer's Training Academy
London, Ohio
74. **1997** **BAC Data Master Instrument – Senior Operator Permit Course**
Ohio Department of Health
Sugarcreek Township, Ohio Police Department (Greene County)
75. **1987** **Theory, Technical Aspects and Practical Use of Traffic Radar Course**
Ohio State Highway Patrol Academy
City of Columbus, Ohio
76. **1993** **Traffic Radar Instructor Course**
Ohio State Highway Patrol Academy
City of Columbus, Ohio
77. **1981** **Doppler Traffic Radar Operation Course**
MPH Industries, Inc. / Miami Township Police Department
City of Milford, Ohio
78. **1998** **LTI 20/20 Ultralyte Laser Detection System Operator / Instructor Course**
Laser Technology Inc.
Sugarcreek Township, Ohio Police Department (Greene County)
79. **1991** **General Police Photography Course**
Federal Bureau of Investigation Training School (FBI)
Great Oaks Police Academy, Hamilton County, Ohio)
80. **1982** **Homicide Investigation Seminar**
Hamilton County Police Association
Great Oaks Police Academy, Hamilton County, Ohio
81. **2003** **Death Investigations for Police Officers Seminar**
Greene County Coroner's Office
Greene Memorial Hospital – Xenia, Ohio
82. **1992** **Death Investigation Course**
Ohio Peace Officer's Training Academy
London, Ohio
83. **1989** **Managing Criminal Investigations Course**
Ohio Peace Officer's Training Academy
London, Ohio
84. **1988** **Drug Interdiction Course**
Ohio State Highway Patrol Academy
City of Columbus, Ohio

85. **1982** **Drug Investigation Course**
Ohio Peace Officer's Training Academy
London, Ohio
86. **2008** **Power Point for Public Safety Course**
Ohio Peace Officer's Training Academy
City of London, Ohio
87. **1989** **Police Report Writing Course**
Ohio Peace Officer's Training Academy
London, Ohio
88. **1988** **Evidence Room Management Course**
Ohio Peace Officer's Training Academy
London, Ohio
89. **1992** **Instructor Training Course**
Ohio Peace Officer's Training Academy / Central State University
Wilberforce, Ohio
90. **2007** **Instructor Update Training Course**
Greene County Career Center / Criminal Justice Training Academy
Greene County, Ohio
91. **1977** **Basic Law Enforcement Training Academy (Certificate #77-823)**
Greene County Training School – Greene County Sheriff's Office
City of Xenia, Ohio

ADJUNCT INSTRUCTOR / PRESENTATIONS

Ohio Peace Officer's Training Academy (Office of the Ohio Attorney General)

Traffic Crash Investigation (Level I) Class

- 2007, 2012, 2013, 2016, 2017, 2018, 2019

Advanced Traffic Collision Investigation (Level II) Class

- 2008, 2010, 2011, 2014, 2015, 2016, 2017, 2018, 2019

Vehicle Dynamics (Level III) Class

- 2011, 2016, 2017, 2018, 2019

Traffic Crash Reconstruction Level (IV) Class

- 2007, 2008, 2010, 2011, 2013, 2015, 2016, 2017, 2018, 2019

Advanced Traffic Collision Reconstruction Class

[Quadratic Equations/Simultaneous Equations/Rotational Mechanics/Speed from Trailer Under-Ride]

- 2013, 2014, 2015, 2016, 2017, 2019

Crash Reconstruction Update Class

- 2010, 2011, 2012

Crash Reconstruction Refresher Class

- 2018

Investigation and Reconstruction of Pedestrian & Bicycle Involved Collisions Class

- 2009, 2010, 2011, 2014, 2016, 2018

Introduction to Energy & Crush Class

- 2018

Forensic Mapping for the Collision Investigator Class

- 2009, 2012, 2013, 2015, 2016

Forensic Aspects in Traffic Collision Reconstruction

- 2015

Commercial Motor Vehicle Inspection (Level 1)

- 2011, 2019

Commercial Motor Vehicle Collision Investigation (Level 1)

- 2011, 2018, 2019

A.C.T.A.R. Exam Preparation Class

- 2011, 2016

Speed Measuring Devices

- 2014, 2015, 2017, 2018, 2019, 2020

City Of Chillicothe Police Department (Ross County, Ohio)

Nikon Total Station w/ MFX / Edge FX Refresher Training

- 2016

Crawford County Sheriff's Office (Ohio)

Sokkia Total Station w/ MFX / Edge FX Training

- 2018

Expert Testimony

- Testified as an expert in numerous trials and depositions in the State of Ohio.

Crash Reconstruction Assistance

I have been requested to assist agencies with fatal or serious injury traffic crashes including but not limited to:

- City of Cincinnati Prosecutor's Office/Cincinnati Police (Ohio)
- Louisville Metro Police – Traffic Unit (Kentucky)
- City of Dayton Police – Traffic Unit (Ohio)
- City of Chillicothe Police (Ohio)
- City of Beavercreek Police (Ohio)
- City of Xenia Police (Ohio)
- City of Washington C.H. Police (Ohio)
- City of Oregon Police (Ohio)
- City of Lorain Police (Ohio)
- City of Monroe Police (Ohio)
- Preble County Sheriff's Office (Ohio)
- Henry County Sheriff's Office (Ohio)
- Fayette County Sheriff's Office (Ohio)
- Butler County Sheriff's Office (Ohio)
- Wood County Sheriff's Office (Ohio)
- Pickaway County Sheriff's Office (Ohio)
- Darke County Sheriff's Office (Ohio)
- Licking County Sheriff's Office (Ohio)
- Union County Sheriff's Office (Indiana)
- West Chester Township Police (Ohio)
- Sugarcreek Township Police (Ohio)
- Oxford Township Police (Ohio)
- Sylvania Township Police (Ohio)
- Law Science Technologies, Inc.
- Crash Tech Reconstruction Services, LLC

Field Testing

- Cars / SUV Skid Testing (Vericom Accelerometer) ABS / Non-ABS (Asphalt / Grass / Gravel)
- Tractor- Double Trailers Skid Testing Tractor Bobtail Skid Testing (Asphalt) (Vericom Accelerometer)
- Tractor- Double Trailers Acceleration Testing (Asphalt)
- Tractor- Tanker Trailer Skid Testing (Vericom Accelerometer) (Asphalt) ABS
- Tractor-Trailer Engine Only Deceleration Testing
- Tractor Trailer v. Car(s) Crash Testing
- Semi-Trailer / Car Side Underride Crash Testing
- Semi-Trailer / SUV Side Underride Crash Testing
- Cars v. Cars Crash Testing
- Utility Pole Impact by a Car Testing (Cincinnati, Ohio)

- School Bus v. Pickup Truck Crash Testing
- School Bus Deceleration Testing (Vericom Accelerometer)
- School Bus Acceleration Testing (Vericom Accelerometer)
- Fire Engine Truck / Fire Ladder Trucks / Fire Medic Truck Acceleration Testing
- Fire Engine Truck / Fire Ladder Trucks / Fire Medic Truck Deceleration Testing
- Pedestrian v. Car / SUV / Pickup Truck Crash Testing (Vericom Accelerometer)
- Bicycle / Rider Vehicle Collision Testing (Vericom Accelerometer)
- Pedestrian with Bike Crash Testing (Vericom Accelerometer)
- Pedestrian Drop Testing From Truck (Asphalt / Grass / Gravel)
- Vehicles Left Turn Acceleration Testing
- Vehicles Right Turn Acceleration Testing
- Vehicles Straight Acceleration Testing (Vericom Accelerometer)
- Car / SUV/Pickup Truck Deceleration Engine Off - In Gear (Drive)
- Car / SUV/Pickup Truck Deceleration Engine Off - In Gear (Reverse)
- Vehicles Head On & Side Impact w/ Pole Testing
- Critical Speed Yaw Testing
- Pedestrian Walking / Running Speeds Testing
- Motorcycles v. Cars Crash Testing
- Motorcycle Drop / Coefficient of Friction Testing
- Drove a 2006 Volvo Tractor w/ Double Trailers – Driving / Test Track
- Bicycle Braking (Deceleration) Testing
- Bicycle Acceleration Testing
- Drag Factor Measurement Comparison Testing (G-Analyst, VC4000, VC3000, VC2000, Drag Sled)

Affiliations

- 1998 – Present: The Accreditation Commission for Traffic Accident Reconstruction (ACTAR No. 804)
- 2016 – Present: Ohio Traffic Accident Reconstruction Association, (O.T.A.R.A.)
- 2008 – 2015: Butler County Serious Traffic Accident Reconstruction Team (S.T.A.R.T.)
- 1995 – 2001: National Association of Professional Accident Reconstruction Specialists, Inc. (NAPARS)