DANIEL R. BILLINGTON II, ACTAR #1913

A C C R E D I T E D   C O L L I S I O N   R E C O N S T R U C T I O N I S T

CURRICULUM VITAE

EXECUTIVE SUMMARY

Mr. Billington is an expert in the field of collision reconstruction, human factors, visibility, and lighting. He has provided expert testimony throughout the United States and has also provided expert services on cases in Europe, Africa, and the Americas. His knowledge has made him a speaker in high demand with many legal and insurance organizations as well.

His training and experience history is as follows:

- Accredited by ACTAR (Accreditation Commission of Traffic Accident Reconstructionist) – Recognized for excellence in leadership for developing collision reconstruction standards while serving as a member of the ACTAR Governing Board of Directors

- Specialist in human factors & forensic visibility analysis

- Specialist in pedestrian collision analysis

- 25 years crash and crime scene investigation and reconstruction experience

- 18 years of experience in law enforcement

- Collision reconstruction cases involving occupant positioning, speed determination, time/distance studies, point of impact placement and computer-aided reconstruction

- Security consulting and analysis

- Motorcycle/bicycle/pedestrian/commercial vehicle collision analysis

- Emergency vehicle operation and collision analysis

- Police Procedures

- Railroad incidents

- Forensic animator

- Low-velocity collision analysis

- Photographer and videographer

- Occupant kinematics analysis

- Vehicular collision causes relating to mechanical malfunctions

- Seat belt usage and function analysis

- Speed determinations from video

- Video enhancement and analysis

- Collision investigations involving witness interviews, scene investigations, and vehicle examinations

- Computer simulation of motor vehicle collisions

- Dynamic avoidance analysis

- Completed approximately 1000 collision reconstructions since 2005

- Investigation of more than 3000 collisions since 1998

- Certified instructor of ARAS 360, HD, & Reality, and Visual Statement FX3

EXPERT WITNESS EXPERIENCE – CRIMINAL & CIVIL MATTERS

- Expert testimony provided 130 times in matters related to collision reconstruction (more than 100 additional court appearances for matters not pertaining to collision reconstruction).

- More than 10,000 hours of experience in traffic safety & enforcement

- Qualified as an expert in criminal and civil courts within U.S. Federal Districts and the states of Wisconsin, Washington, Wyoming, Tennessee, Texas, Georgia, Illinois, Iowa, Ohio, Minnesota, Massachusetts, and Michigan, and U.S. Military Court in Germany.

- Evidence given on the following issues: forensic visibility, emergency vehicle operation, rail yard lighting, transit vehicle collisions, injury cause analysis, seat belt usage, low-speed impact analysis, police vehicle operations and pursuits, patrol procedures, vehicle vs. pedestrians collisions, vehicle rollover speed, time/distance analysis, motorcycle collisions, commercial vehicles, impact speed analysis, crime scene preservation and diagramming, human factors, video analysis, animation, ballistic trajectory analysis, identification of persons, and more.

ACADEMIC BACKGROUND   *Training hours are found in parenthesis*

- Various seminars, conferences, and lectures; on-going

- Event Data Recorder Analysis – Level II; University of North Florida State Institute of Police Technology and Management; September, 2023 (40)

- Virtual Crash 5 Training; Robert Scurlock; February, 2023 (24)

- Advanced Troubleshooting and Vehicle Systems for the CDR/EDR Operator-Technician; Kent E. Boots & Associates; March, 2022 (40)

- Virtual Crash 4 Training; Forensic Training Group; March, 2018 (24)

- Motorcycle Collision Investigation; University of North Florida State Institute of Police Technology and Management; February, 2018 (40)

- Pedestrian/Bicycle Collision Investigation – Level II; University of North Florida State Institute of Police Technology and Management; October, 2017 (40)

- Microsoft Excel for Collision Reconstruction; Rich Consulting; May 2017 (24)

- Electronic Data Recorder Analysis in Traffic Collision Reconstruction; University of North Florida State Institute of Police Technology and Management; April, 2017 (40)

- Human Factors in Collision Reconstruction; University of North Florida State Institute of Police Technology and Management; June, 2016 (40)

- WREX 2016 Collision Reconstruction – Various sessions focused on human factors, motorcycle, and pedestrian collisions; May, 2016 (40)

- Fundamentals of Statistics for Traffic Crash Reconstruction; Rich Consulting; October, 2015 (40)

- Pedestrian/Bicycle Collision Investigation & Human Factors; University of North Florida State Institute of Police Technology and Management; July, 2015 (40)

- MA in Business Management, Emphasis in Project Management, Ashford University, Iowa; Summa Cum Laude; March, 2014

- Forensic Visibility and Lighting – one-on-one mentoring/training with Mr. James Sobek; June, 2013 to October, 2013. (120)

- BA in Criminal Justice, Ashford University, Iowa; Cum Laude; April, 2012

- Reflectivity and Forensic Vision; September, 2011 (8)

- Energy Analysis and CRASH 3; University of North Florida State Institute of Police Technology and Management; January, 2011 (40)

- Heavy Truck ECM use in Traffic Crash Reconstruction; University of North Florida State Institute of Police Technology and Management; September, 2010 (8)

- ARAS360; Train-the-Trainer; September, 2010 (40)

- Vehicular Homicide Conference; Wisconsin Department of Justice; Brookfield, WI; March, 2009 (16)

- Collision Reconstruction Update and Special Problems; University of North Florida State Institute of Police Technology and Management; February, 2009 (40)

- Successfully completed the examination for the Accreditation Commission for Traffic Accident Reconstruction; September, 2008

- Experiments in Crash Reconstruction; University of North Florida State Institute of Police Technology and Management, 2008 (24)

- Rail collision investigation and grade crossings; CP Railroad; October, 2007 (8)

- Certified as an airbag control module technician and analyst; Collision Safety Institute; October, 2006 (40)

- Advance Evidentiary Photography; Waukesha County Technical College; May, 2006 (40)

- Commercial Vehicle Inspection Training; Waukesha County Sheriff's Department; April through October, 2006 (80)

- VS Visual Statement, Inc.; Completed training in the use and application of the VistaFx computer aided diagramming software; January, 2006 (40)

- Certified Basic Evidentiary Photography; Milwaukee Area Technical College; January, 2006 (24)

- iWitness Photogrammetry Scene and Evidence Diagramming software; Dechant Consulting, LLC; August, 2005 (24)

- Traffic Collision Reconstruction; University of North Florida State Institute of Police Technology and Management; October, 2004 (80)

- Vehicle Dynamics; University of North Florida State Institute of Police Technology and Management; September, 2004 (40)

- Technical Collision Investigation; Wisconsin Department of Transportation; June, 2004 (40)

- LTI Quick-Map System; Laser Technologies, Inc.; January, 2004 (8)

- Rail collision investigation and grade crossings; CP Railroad; October, 2003 (8)

- CrashZone computer aided diagramming software; Fox Valley Technical College; October, 2003 (40)

- Certified in the application of standard field sobriety tests; Waukesha County Technical College; September, 2003 (40)

- Trained in the use of VC3000 accelerometers; Vericom Computers; September, 2003 (8)

- Joint training in Collision Reconstruction Techniques and Methodologies; Waukesha County Sheriff's Department; September 2003 – January, 2009 (424)

- Basic Collision Investigation; Wisconsin Department of Transportation; August, 2003 (40)

- Field Training Officer Certification, Fox Valley Technical College; October, 2000 (40)

- Milwaukee County Sheriff's Department Training Academy; Certified as a law enforcement officer in the State of Wisconsin; June - August, 1998 (400)

- Milwaukee County Sheriff's Department Training Academy; Corrections Certification, 1994 (120)

- Undergraduate degree program in Sociology & Criminal Justice, UW-Whitewater, 1990-1994

PROFESSIONAL WORK EXPERIENCE

- Great Lakes Forensic Experts (Formerly Great Lakes Collision Experts), LLC; Principal Collision Reconstructionist and Forensic Visibility Analyst – 2009 to present

- M-Crash Group (licensed as CrashTeams Great Lakes); Senior Collision Reconstructionist – 2005 to 2015

- Collision Reconstruction Instructor; 2005 to present

- Lauderdale Lakes Police Officer; June, 2010 to 2012

- Waukesha County Sheriff's Department; Deputy Sheriff – June, 1998 to January, 2009

- DB II Productions; Owner – 1999 to 2009

- Waukesha County Sheriff's Department; Correctional Officer – April, 1994 to June, 1998

- Wisconsin Department of Natural Resources – Range Safety Officer; 1992 to 1994

LECTURES GIVEN

- 2023   "The Physics of Collision Reconstruction and Human Factors"; Criminal Defense Attorneys of Michigan, Kalamazoo, MI

- 2023   "Fundamentals of Physics and Collision Investigation"; High School Physics Program – Cudahy, WI

- 2023   "The Physics of Collision Reconstruction and Human Factors"; CDAM Summer Conference – Kalamazoo, MI

- 2023   "The Physics of Collision Reconstruction and Human Factors"; NCDD Winter Session – Iowa City, IA

- 2023   "Fundamentals of Physics and Collision Investigation"; Presentation to Students in the AP High School Physics Program – Cudahy, WI

- 2023   "The Physics of Collision Reconstruction and Human Factors"; NCDD Winter Session – San Diego, CA

- 2023   "Fundamentals of Physics and Collision Investigation"; 11 Presentations to all Junior-Level Students in High School Physics Programs – Pewaukee, WI

- 2022   "Forensic Analysis of Visibility, What You See is Not What You Get"; NCDD/NACDL Joint Fall Conference – Las Vegas, NV

- 2022   "Electronic Data Recorders, Not the Smoking Gun"; NCDD/NACDL Joint Fall Conference – Las Vegas, NV

- 2022   "Forensic Visibility Analysis & Nighttime Mapping Techniques"; MATAI Sponsored Training – Green Bay, WI

- 2021   "Fundamentals of Physics and Collision Investigation"; 11 Presentations to all Junior-Level Students in High School Physics Programs – Pewaukee, WI

- 2021   "Sight Distance & Visual Concepts"; MATAI Conference – Des Moines, IA

- 2019   "Understanding the Interplay Between the Attorney and the Expert"; Wisconsin Association of Justice, Milwaukee, WI

- 2019 "Human Factors and Visibility in Collision Related Cases"; Iowa Association of Justice Annual Conference, Coralville, IA

- 2019   "Understanding the Interplay Between the Attorney and the Expert"; Criminal Defense Attorneys of Michigan annual conference, Detroit, MI

- 2018   "Human Factors and Visibility: Motorcycles, Pedestrians, and Concepts"; MATAI Conference – Des Moines, IA

- 2017   "Forensic Analysis of Accident Cases"; NCDD/NACDL Joint Fall Conference – Las Vegas, NV

- 2017   "Accident Reconstruction"; NCDD/NACDL Joint Fall Conference "The Rockstars of DUI Defense" – Las Vegas, NV

- 2017   "Electronic Data Recorders {Black Boxes, Are They the "Smoking Gun?"}"; NCDD Summer Session – Harvard University Law School, Cambridge, MA

- 2017   "Forensic Aspects of Driver Response"; NCDD Summer Session – Harvard University Law School, Cambridge, MA

- 2013   "Visibility and Affirmative Defense Arguments"; Wisconsin DUI Defense Seminar; Elkhart Lake, WI

- 2012   "Forensic Visibility and Affirmative Defense"; Criminal Defense Attorneys of Michigan annual conference; Traverse City, MI

- 2012   "Collision Reconstruction in the Insurance Industry"; Wisconsin River Valley Association; Wisconsin Rapids, WI

- 2011 to 2014   Certified Trainer for ARAS 360 & ARAS HD; Kamloops, BC

- 2010   Special Problems in Collision Reconstruction; Wisconsin River Valley Association; Wisconsin Rapids, WI

- 2009   Rotational Analysis and Related Applications in Collision Reconstruction; Crashteams Conference; Puerto Vallarta, Mexico

- 2008   Advanced Animation Techniques; Visual Statement Conference; Puerto Vallarta, Mexico

- 2008   Hi-Speed Video and Its Application in Collision Reconstruction Testing; IATAI Annual Conference; Bloomington, IL

- 2007   Animation for Collision Reconstruction; Waukesha County Prosecutors In-Service; Waukesha, WI

- 2007   Animation for Collision Reconstruction; UW Wisconsin State Prosecutors Conference; Appleton, WI

- 2005 to 2010   Certified Trainer for Visual Statement Software; Kamloops, BC

PROFESSIONAL ASSOCIATIONS

- Society of Automotive Engineering (SAE), 2017 to present

- The Illuminating Engineering Society (IES), 2013 to present

- American Railway Engineering and Maintenance-of-Way Association (AREMA), 2020 to present

- Golden Key International Honors Society, 2013 to present

- The Accreditation Commission for Traffic Collision Reconstructionists, member (ACTAR) #1913; Current and in good standing – (Member of the ACTAR Governing Board of Directors 2008-2012)

    o ACTAR Theory Test Development Committee Chairman, 2009 to 2012

- National Association of Professional Accident Reconstruction Specialists (NAPARS); 2008 to present

- Midwest Association of Technical Accident Investigators (MATAI); 2008 to present

- Illinois Association of Technical Accident Investigators (IATAI); 2006 – 2014

    o Served two terms as Secretary, 2008 – 2012

MATERIALS AUTHORED AND/OR PUBLISHED

- "Forensic Visibility Analysis and Human Factors Considerations – A Guide to the Forensic Analysis of Driver Performance"; 2022

- "EDR Investigation and Analysis – Understanding Their Real-World Use"; 2022

- "*An Attorney's Guide to Accident Investigation*"; 2017, 2022

- NESCI's Arizona DUI Defense – Fifth Edition, 2023, Lawyers and Judges Publishing; Contributing Author; ISBN: 978-1-936360-92-5

- Kansas DUI Defense: The Law and Practice, 2022, Lawyers and Judges Publishing; Contributing Author; ISBN: 978-1-936360-65-9

- Alabama DUI Defense – Fifth Edition, 2021, Lawyers and Judges Publishing; Contributing Author; ISBN: 978-1-936360-69-7

- NESCI's Arizona DUI Defense – Fifth Edition, 2018, Lawyers and Judges Publishing; Contributing Author; ISBN: 978-1-936360-90-1

- Texas DWI Defense – Second Edition, 2018, Lawyers and Judges Publishing; Contributing Author; ISBN: 978-1-936360-64-2

- "*Forensic Analysis of Driver Performance*"; 2017