

Curriculum Vitae

Chris J. Medwell, P.E.

Profession: Mr. Medwell is a professional engineer specializing in the investigation and reconstruction of motor vehicle collisions. He has considerable experience with leading edge technology in the field, including tractor-trailer and automobile EDR “black box” data retrieval systems, robust 3-dimensional collision reconstruction and simulation programs. Mr. Medwell has both a mechanical and a civil engineering background that gives him insight into both the motor vehicle and the roadway design features as factors in collision dynamics and causation. Mr. Medwell also applies his expertise to accidents involving industrial machinery, such as forklift trucks, mobile lift equipment, and construction vehicles.

Testimony: Mr. Medwell has been qualified as an expert in more than 50 trials and has testified more than 50 times in depositions.

Licensure: Professional Engineer, State of Florida, #70343
Professional Engineer, State of Alabama, #29499
Professional Engineer, State of Mississippi, #19668
Professional Engineer, State of Louisiana, #40232
Professional Engineer, Province of Ontario (Canada), #90259102

Certification: ASE Certified Automobile Technician (brakes, suspension, and steering) #ASE-2074-9004
FAA Certified Remote Drone Pilot – Certificate # 4577825

Education: *The University of Waterloo, Waterloo, Ontario, Canada*
1977 to 1982 - Bachelor of Applied Science in Mechanical Engineering

Experience: *Bloomberg Consulting - Pensacola, FL*
2006 to present – Senior Consultant, Accident Reconstruction

HRYCAY Consulting Engineers Inc., previously Becker Transportation Safety or BTS Consulting Engineers - Windsor, Ontario, Canada
1989 to 2006 - Investigative Engineer, Motor Vehicle Accident Group

Ford Motor Company of Canada - Oakville, Ontario, Canada
1987 to 1988 - Dealer Operations Manager, Atlantic Region
1983 to 1987 - Zone Service Manager, Atlantic Region
1982 to 1983 – Warranty Claims, Service Engineering, Service Hotline

Transport Canada - Ottawa, Ontario, Canada
1979 - Department of Road Safety



Professional Associations:

- ◆ Alabama Board of Professional Engineers & Land Surveyors (BELS)
- ◆ American Society of Civil Engineers (ASCE)
- ◆ Florida Board of Professional Engineers (FPBE)
- ◆ Louisiana Professional Engineering & Land Surveying Board (LAPELS)
- ◆ Mississippi Board of Licensure for Professional Engineers & Surveyors (MBLPES)
- ◆ Professional Engineers Ontario (PEO)
- ◆ Society of Automotive Engineers (SAE)

Professional Development:

Since 1989, Mr. Medwell has analyzed hundreds of SAE technical papers, crash tests, and other leading-edge research in the field of engineering and accident reconstruction. In 2007, Mr. Medwell took and passed both the Fundamentals of Engineering (FE) and the Principles and Practice of Engineering (PE) examinations, required for licensure as a Professional Engineer in the USA. For the PE exam, Mr. Medwell chose to take the Civil Engineering Transportation specialty, which covers such topics as Transportation Planning, Traffic Analysis, Traffic Safety, and Roadway and Roadside Design.

- ◆ 2021 Annual Joint Conference, *National Association of Professional Accident Reconstruction Specialists*, Ocean City MD 10/2021
- ◆ Unmanned Aerial Systems – Part 107 Class, *Forensic Mapping Solutions*, Ocean City MD 10/2021
- ◆ “Mack / Volvo Forensic Imaging Training - Hands on training as an Authorized User of the software tools for imaging Mack & Volvo event data recorders and the standardized reporting of the data. *DELTA |v|*, Charlotte, NC, 9/2021
- ◆ “EDR Summit”, *Crash Data Group*, Houston, TX, 3/2020
- ◆ “Advanced Photogrammetry for Accident Reconstruction”, *Lightpoint Scientific LLC*, Orlando FL, 11/2019
- ◆ “Virtual Crash Simulation Software”, *vCRASH Academy & Forensic Training Group*, Sandy Springs, GA, 10/2019
- ◆ “Drone Mapping: Ground and Aerial Measurements”, *Laser Technology Inc.*, 2/2019
- ◆ “EDR in Traffic Crash Reconstruction: Update & Advanced Analysis Techniques”, *Ruth Consulting*, 4/2018
- ◆ “Forklift Training: More than just the OSHA Regulation”, *JJ Keller*, 4/2018
- ◆ “Critical Steps in Accident Prevention & Response”, *JJ Keller*, 4/2018
- ◆ “Regulatory & Warning Signs”, *ASCE*, 12/2017
- ◆ “Traffic Signing for Horizontal Curves”, *ASCE*, 12/2017
- ◆ “FARO Reality”, *FARO*, 12/2016
- ◆ “Pedestrian Collision Reconstruction”, *Toronto Police College*, Toronto, ON, 10/2016
- ◆ “World Reconstruction Exposition 2016”, *NAPARS*, Orlando, FL, 5/2016

- ◆ “Work Zone Temporary Traffic Control”, *ASCE*, 8/2015
- ◆ “Faro Focus 3D Scene & Laser Scanner”, *FARO Technologies*, Orlando, FL, 2/2015
- ◆ “CDR User’s Summit” and “Train the Trainer”, *Collision Safety Institute*, Houston, TX, 1/2014
- ◆ “Driver Distraction from Electronic Devices”, *SAE*, 4/2013
- ◆ “Advanced Computer Diagramming”, *Aras 360*, 1/2013
- ◆ “Heavy Vehicle ECM Data Use in Crash Reconstruction”, *Institute of Police Technology and Management*, Jacksonville, FL, 5/2012
- ◆ “REC-TEC Truck 2011 Advanced Commercial Vehicle Program”, *Michigan State University College of Engineering*, New Orleans, LA, 3/2011
- ◆ “Heavy Vehicle Crash Reconstruction”, *National Association of Professional Accident Reconstruction Specialists*, Ocean City, MD, 10/2009
- ◆ “Crash Data Retrieval (CDR) Data Analyst Certification” (Vehicle “Black Box” Systems), *Collision Safety Institute*, New Orleans, LA, 8/2009
- ◆ “National Seminar on Fire Analysis Litigation”, *National Association of Fire Investigators*, Sarasota, FL, 8/2008
- ◆ “Vehicle Fire Investigations – Protecting and Preserving Your Evidence”, *Florida Advisory Committee on Arson Prevention*, Tallahassee, FL, 6/2008
- ◆ “Highway Vehicle EDR Symposium”, *Society of Automotive Engineers (SAE)*, Ashburn, VA, 9/2007
- ◆ “Cummins INSITE 6 Qualification”, *Cummins Mid-South L.L.C.*, Morgan City, LA, 6/2007
- ◆ “Human Factors for Traffic Accident Reconstruction”, *Accident Dynamics Research Center*, University of Massachusetts, Amherst, MA, 6/2007
- ◆ “REC-TEC Accident Reconstruction Software Training”, *IPTM*, Jacksonville, FL, 8/2006
- ◆ “Caterpillar Engine Control Modules, Data Extraction”, *Thompson Power Systems*, Birmingham, AL, 8/2006
- ◆ “Crash Data Retrieval (CDR) Data Analyst Certification” (Vehicle “Black Box” Systems), *Collision Safety Institute*, Clinton Township, MI, 3/2006
- ◆ “Accident Reconstruction,” 2005 World Congress and Exhibition, *SAE Detroit*, Michigan, 4/2005
- ◆ “DDEC Reports/Data Extrication,” *Detroit Diesel Training Center*, Redford, Michigan, 12/2004
- ◆ “Safety, Braking, Steering,” *SAE 2004 Commercial Vehicle Engineering Congress and Exhibition*, Chicago, Illinois, 10/2004
- ◆ “Motor Vehicle Theft & Fire Investigation,” *Michigan Arson Prevention Committee*, Portland, Michigan, 6/2004
- ◆ “Motor Vehicle Theft & Fire Investigation”, *Michigan Arson Prevention Committee*, Detroit, Michigan, 6/2003
- ◆ “Accident Reconstruction,” *SAE 2003 International Congress and Exposition*, Detroit, Michigan. 3/2003
- ◆ “Hands on Training HVE- 3D,” *Engineering Dynamics Corporation*, Windsor, Ontario, 7/2002

- ◆ “Crash Data Retrieval (CDR) Operator’s Certification Course,” *Collision Safety Institute*, Toronto, Ontario, 6/2002
- ◆ “Accident Reconstruction,” *SAE 2002 International Congress and Exposition*, Detroit, Michigan, 3/2002
- ◆ “Braking Performance of Heavy Commercial Vehicles,” *Richard Radlinski*, at International Truck Assembly Plant, Chatham, Ontario, 6/2001
- ◆ “Electronic Engine Controls & Accident Reconstruction,” *BTS Consulting Engineers*, Windsor, Ontario, 6/ 2001
- ◆ “Traffic Control in Survey Zones,” *BTS Consulting Engineers*, Windsor, Ontario, 2/2001
- ◆ “Brakes/ABS Braking Systems,” *Snap-On Tools Training Center*, Auburn Hills, Michigan, 4/2000
- ◆ “HVE Forum,” *Engineering Dynamics Corporation*, Atlanta, Georgia, 4/1999
- ◆ “Fire Investigation/Arson Task Force Seminar,” *International Association of Arson Investigators (Ontario Chapter)*, London, Ontario, 10/1998
- ◆ “NFPA 921 Fire & Explosion Investigation,” *International Association of Arson Investigators (Ontario Chapter)*, Burlington, Ontario, 9/1997
- ◆ “Accident Reconstruction,” *SAE 1997 International Congress and Exposition*, Detroit, Michigan, 2/1997
- ◆ “Accident Reconstruction,” *SAE 1996 International Congress and Exposition*, Detroit, Michigan, 2/1996
- ◆ “Crash Tests & Heavy Truck Skid Tests,” *Transportation Research Centre*, East Liberty, Ohio, 10/1995
- ◆ “Vehicle Fire/Theft Investigation,” *Criminal Justice Training Center, Macomb Community College*, Macomb County, Michigan, 7/1995
- ◆ “Human Factors in Traffic Collisions,” *Canadian Association of Technical Accident Investigators and Reconstructionists (CATAIR)*, Mississauga, Ontario, 8/1994
- ◆ “Emergency Collision Avoidance”, *Labatt’s Test Track*, Mississauga, Ontario, 8/1994
- ◆ “Air Brake Endorsement,” *St. Clair College*, Windsor, Ontario, 5/1994
- ◆ “Accident Reconstruction - Technology and Animation IV,” *SAE 1994 International Congress and Exposition*, Detroit, Michigan, 3/1994
- ◆ “Vehicle Fire/Theft Investigation,” *Criminal Justice Training Center, Macomb Community College*, Macomb County, Michigan, 7/1993
- ◆ “Accident Reconstruction - Technology and Animation III,” *SAE 1993 International Congress and Exposition*, Detroit, Michigan, 3/1993
- ◆ “BH₂VK Crash Testing Project,” *Mobility Systems Inc.*, San Bernardino, California, 8/1992
- ◆ “Safety,” *SAE 1992 Future Transportation Technology Conference and Exposition*, Costa Mesa, California, 8/1992
- ◆ “40th Annual Seminar,” *International Association of Auto Theft Investigators, Inc.*, Toronto, Ontario, 8/1992
- ◆ “Automotive Electrical Systems Servicing,” *Oakland Community College*, Auburn Hills, Michigan, Winter Term/1992

- ◆ “Accident Reconstruction - Technology and Animation II,” *SAE 1992 International Congress and Exposition, Detroit, Michigan, 2/1992*
- ◆ “Fire Investigation Seminar,” *International Association of Arson Investigators, Inc. (Ontario Chapter), Windsor, Ontario, 6/1991*
- ◆ “Front Suspension and Steering Service,” *Oakland Community College, Auburn Hills, Michigan, Winter Term/1991*
- ◆ “Technical Fundamentals for the Fire Investigator,” *University of Wisconsin, Madison, Wisconsin, 4/1991*
- ◆ “Accident Reconstruction: Technology and Animation,” *SAE 1991 International Congress and Exposition, Detroit, Michigan, 2/1991*
- ◆ “Brake System Service,” *Oakland Community College, Auburn Hills, Michigan, Fall Term/1990*
- ◆ “Accident Reconstruction” and “Vehicle Crashworthiness and Occupant Protection in Frontal Collisions,” *SAE 1990 International Congress and Exposition, Detroit, Michigan, 2/1990*
- ◆ While employed with Ford, Mr. Medwell regularly attended short courses and seminars for training in servicing and diagnostic procedures for various gasoline and diesel engines, drive train, steering, suspension and braking systems, electronic engine control systems, anti-lock brake systems, and electronic fuel injection. Mr. Medwell also undertook training in Basic Service Management and Dealership Accounting Practices.

Presentations:

- ◆ “What you need to know about Event Data Recorders (EDR) or Black Boxes”, *Mobile Criminal Defense Attorneys Association, Mobile, AL (April 2016)*
- ◆ “FMCSA Hours of Service Regulations”, *National Commercial Truck Subrogation Strategies Summit*, Uncasville, CT (December 2013)
- ◆ “Subrogating Claims Using Event Data Recorders (Black Boxes)”, *National Automobile Subrogation Strategies Summit*, Uncasville, CT (September 2013)
- ◆ “Brake Maintenance, Overloading and Securement of Heavy Trucks”, *National Commercial Truck Subrogation Strategies Summit*, Uncasville, CT (December 2012)
- ◆ “Commercial Vehicle Accident Reconstruction”, *Developments in Truck Accident Litigation*, Mississippi College School of Law, Jackson, MS (January 2012)
- ◆ “Accident Reconstruction I and II”, “Truck Black Box Investigations”, *FALL Professional Development Conference*, Daytona Beach, FL (May 2007)
- ◆ “Heavy Truck Accident Reconstruction”, *Old Republic Insurance Conference*, Ontario, Canada (October 2000)
- ◆ “Motor Vehicle Accident Reconstruction” *PACRA*, Windsor, Canada (March 1994)
- ◆ “Motor Vehicle Accident Investigations and Reconstruction”, *Allstate Insurance Adjusters Conference*, Canton, MI (April 1993)

Publications:

- ◆ *“Unlocking the Black Box”*, American Bar Association, Committee News (Fall 2012)
- ◆ *“Motorcycle Slide to Stop Testing”*, SAE Paper #970963, 1997 SAE International Conference
- ◆ *“Verifying EDR Data: From a Ram ProMaster 1500 Van Collision”*, Collision Magazine, Volume 16: Issue 1, 2022
- ◆ *“Case Analysis Solution: Discovering and Explaining a CDR Data Anomaly”*, Collision Magazine, Volume 16: Issue 1, 2022
- ◆ *“Development of a Test Procedure for Setting Non-Deployment (ND) Events”*, Collision Magazine, Volume 16: Issue 1, 2022