

**WADE BARTLETT**  
Curriculum Vitae – January 2012

- SUMMARY** Mechanical engineer specializing in the analysis of motorcycle, heavy truck, and passenger car crashes, evaluation of automobile event data recorders, mechanical examinations and failure analysis of vehicles and machinery, stress analysis, and mechanical testing of materials and components.
- EDUCATION** MS Mechanical Engineering, University of New Hampshire, Durham NH, 1994  
*Program emphasis: solid mechanics, material behavior, numeric modelling*  
BS Mechanical Engineering, University of New Hampshire, Durham NH, 1989  
graduated *cum laude*, with a Minor in Materials Science
- EMPLOYMENT** Consulting Engineer, MFES, LLC, Jan 96 - Present  
Sworn Police Officer, Town of Middleton, NH, 2003-Present  
Adjunct Faculty, IPTM, University of North Florida, 2002 - Present  
Mechanical Engineer, Forensic Technologies Int'l., Annapolis MD, 1994 - 1996  
Mechanical Engineer, New Hampshire Materials Lab, Dover NH, 1989 - 1994  
Motorcycle Skills Instructor, State of New Hampshire, 1991 – 2002
- CERTIFICATIONS** Licensed Professional Engineer, State of New Hampshire, since 1995  
Traffic Accident Reconstructionist, ACTAR, since 2002  
Master Automobile Technician, ASE, 1996-2007  
Master Medium/Heavy Truck Technician, ASE, 1997-2007  
Certified CDR Tool User/Technician/Analyst, Since 2000  
Motorcycle Skills Instructor, Motorcycle Safety Foundation, 1991-2002  
Licensed Motorcycle Roadracer, CCS, 1998-2008  
Certified Commercial Brake Inspector/Adjuster, NHMTA, 2000  
Firearms Instructor, NHPST 2003-2009, NRA since 2003
- MEMBERSHIPS** Society of Automotive Engineers, 1994-present  
Crash Data Collection and Analysis Committee, 2012  
Accident Investigation & Reconstruction Practices Committee, 1996-2011  
Transaction Selection Committee member, 1996-2006  
Impact and Rollover Test Standards Committee, 1997-2009  
National Council of Examiners for Engineers and Surveyors, 1999-present  
Mechanical Systems & Materials depth exam subcommittee  
Belknap & Strafford Regional Crash Investigation Teams, 2003-present  
NAPARS, since 2004 (board of directors since 2008)  
ASME, SOAR, NYSTARS

***CLASSES TAUGHT***

Advanced Motorcycle Crash Reconstruction, 1-week class, 7 times 2006-2011, WA ME OH WI ON  
Motorcycle Crash Investigation, 1-week IPTM class, 2003, 2004, 2008  
Conducting & Validating Vehicle Testing, 2-day IPTM class, IL Sep 2008  
Commercial Motor Vehicle Crash Investigation, 1-week IPTM class, 2005  
Traffic Crash Reconstruction, 2-week IPTM class, twice in 2002

***INVITED LECTURES***

Crush and Momentum in Motorcycle Crash Analysis, IPTM Special Problems, April 2011  
Sensitivity and Uncertainty in Crash Analysis, PSP Conference, PA 2010  
Heavy Truck Braking Evaluation, NAPARS Joint Conference, MD 2009  
SUVs and Critical Speed Yaw Analysis, ARC/CSI Conference, NV 2009  
Motorcycle Braking and Crush Analysis, SATAI Conference, NV 2009  
CSY Analysis in Unusual Situations, PSP Reconstruction Seminar 2008, NJARS Joint Conference 2008  
Putting a Forensic Engineer on your Case, Vermont Trial Lawyers Assoc CLE Program, Oct 2007  
Automotive Technology & Crash Reconstruction, MTL CLE Program, Portland ME, Sep 2006  
Motorcycle & Automotive Technology Update, IATAI Annual Conference, Bloomington IN, Sep 2006  
Critical Speed Yaw Analysis on Various Surfaces, Maine State Police In-Service, Augusta ME, Sep 2006  
Heavy Truck Braking Analysis, Pennsylvania State Police Reconstruction Seminar, 2006  
Reconstruction of CMV crashes, NAPARS conference, Augusta ME, May 2006  
Bobtail Tractor and TT Unit Collisions with Stationary Vehicles, IPTM Special Problems, FL, 2006  
Critical Speed Yaw Analysis, SAE Accident Reconstruction Symposium, Ventura CA, Nov. 2005  
Momentum Vector Diagramming, Pennsylvania State Police Reconstruction Seminar, 2005  
Introduction to "Black Box" technology,  
Commonwealth Auto Reinsurers Seminar, May 2004  
Safe Driving Summit, State of NH, Nov 2004  
Critical Speed Yaw Testing and Literature Review, IPTM Special Problems, March 2004  
Motorcycle Drop/Drag Testing and Analysis, IPTM Special Problems, March 2003  
Vehicle Sensors and Technology, IPTM Special Problems, March 2003  
Motorcycle Crash Testing/Results, IPTM Special Problems, March 2002  
So This is What the Hurt Report was Talking About, Mass. Rider Ed. Program Update, 2002  
Vehicle Mechanical Failures, Gulfstream Technical Recon. Society, Palm Beach FL, 2001  
Forensic Vehicle Considerations for Initial Investigators, presented six times 2000-2003

**PROFESSIONAL DEVELOPMENT**

CDR User's Conference, Dallas TX, Feb.2006, Houston TX Feb 2007, 2008, 2012  
Geothermal Systems, Halfmoon Seminars, Manchester NH, August 2011  
CDR Technician/Analyst class, CDR-Trainers, Stratham NH, June 2011  
Society of Automotive Engineers Annual Congress, Detroit MI, 1996, 1997, 2000-2008, 2010, 2011  
Special Problems in Accident Reconstruction, IPTM, Jacksonville FL, 2001-2007, 2011  
National Crash Analysis Center Conference, Ashland VA, October 2010  
Failure Analysis Methods, SAE, May 2010  
Statistical Analysis of Time Dependent Failures, SAE, May 2010  
AR-15 Comprehensive Armorer Course, Weapons System Training Council, April 2010  
Using Excel for Crash Reconstruction, Millersville MD, Feb 2010  
Joint Reconstruction Conference, NJ Oct 2008, MD Oct 2009  
9<sup>th</sup> Annual International conference ITAI/EVU, Hinckley Island, England, 2009  
ARC/CSI Crash Conference, Las Vegas NV, June 2006, 2007, 2009  
Bosch CDR Technician/Analyst, Mar 2008, Feb 2009  
PA State Police Accident Reconstruction Seminar, 2003-2006, 2008  
IATAI Annual Conference, Bloomington IN, Sep 2006, 2008  
SAE Highway Vehicle Event Data Recorder Symposium, Ashburn VA, June 2004, Sep 2007  
CMV Collision Reconstruction, NAPARS, Augusta ME, May 2006  
SAE Accident Reconstruction Symposium, Ventura CA, Nov 2005  
South Carolina Accident Reconstructionists, annual conference July 2005  
PE-Update Seminar, ME Society of Professional Engineers, Portland ME, Feb 2005  
NH Safe Driving Summit, Merrimack NH, Dec 2004  
Vehicle Autopsy, NYSTARS, Albany NY, 2003  
Commercial Vehicle AI/AR, IPTM June 2003  
Vetronix Crash Data Retrieval Seminar, Santa Barbara CA 2000, Baltimore MD, 2002  
AIRIL '01, Vancouver Canada, 2001  
Heavy Truck Suspensions, NHMTA / Fleet Pro, 2001  
Summer Training Session, Gulfstream Tech. Recon. Soc., West Palm Beach FL, 2001  
World Reconstruction Exposition, College Station TX, 2000  
Air Foundations, NHMTA / Fleet Pro, 2000  
Front End Repair Seminar, Robbins Auto & Moog, 1999  
Advanced Electric Systems Service Clinic, Robbins Auto and AC Delco, 1999  
State of the Art in Reconstruction, IAARS, 1998  
Vehicle Damage & Energy Relationship in Collision Reconstruction, TEEEX, 1998  
OBD II Clinic, Robbins Auto & AC Delco, 1998  
Automatic Transmission Clinic, Robbins Auto & AC Delco, 1998  
Penguin Motorcycle Roadracing School, NHIS, Loudon NH, 1997  
Robust Engineering, ASME Seminar, 1995  
Pole Side Impact & Heavy Truck Braking Performance, SAE, 1995  
Heavy Truck Mechanics and Dynamics, University of Michigan, 1995  
Fuel and Emissions Seminar, Robbins Auto & AC Delco, 1994  
Mag. Particle Inspection / Dye Penetrant Seminars, Magnaflux Corporation, 1994  
Power Venter Design, Installation, and Troubleshooting, Fields Controls Co, 1994  
Clutch Replacement and Repair, Robbins Auto & Arrow Products, 1993

**PUBLICATIONS**

- Accuracy of Event Data in the 2010 and 2011 Toyota Camry during Steady State and Braking Conditions, Ruth, Bartlett, Daily, **SAE** 2012-01-0999
- Estimating Motorcycle Acceleration Profiles, **Collision** 6(1), 2011
- Lean Angle Selection by Motorcycle Riders, Bartlett, Baxter, Wright, **ARJ** 21(2) 29-30
- Braking Rates for Students in a Motorcycle Training Program, Bartlett & Greear, **ARJ** 20(6), Nov/Dec 2010
- Motorcycle Rider Glance and Stopping Behavior at Intersections, Muttart, Peck, Guderian, Bartlett, Ton, Kauderer, Fisher, Manning, **Transportation Research Board** Paper 11-0721
- Cone Of Departure: A Good Idea, But Not A Law, Bartlett and Schmidt, **Collision** 5(2), 2010
- Braking on Dry Pavement and Gravel With and Without ABS, Bartlett & Wright, **SAE** 2010-01-0066
- Yaw Tests on Grass and Gravel, Proceedings, *1<sup>st</sup> joint ITAI-EVU Conference, Hinckley UK, 2009*
- Motorcycle Crush Analysis, **ARJ** 19(2), Mar/Apr 2009
- Skid Testing on Snowy Paved Roadways, **ARJ** 19(1), Jan/Feb 2009
- Monte Carlo Analysis of Motorcycle/Automobile Collision, Bartlett & Craig, **ARJ** 18(6), Nov/Dec 2008, pg 44
- CSY Tests w/ ABS & ESC on Pavement, Gravel, and Grass, Bartlett & Wright, **ARJ** 18(3), May/June 2008
- Getting Data from Destroyed SDMs: Transferring EEPROMS Between Modules, **Collision** 3(1), 2008 pg 28
- Monte Carlo Analysis for Accident Reconstruction, **AIQ** #49, Winter 2008, pg 19-23
- EDR Durability and 49CFR563 Survivability Requirements, **Collision** 2(1), 2007 pg.64
- Motorcycle Slide-to-Stop Tests: IPTM Data thru 2006, Bartlett, Baxter, Robar, **AIQ** #46, Spring 2007
- Motorcycle Braking Tests: IPTM Data thru 2006, Bartlett, Baxter, Robar, **ARJ** 17(4), Jul/Aug 2007
- Calculating Deceleration Rates for S-Cam Air-Braked Heavy Trucks Equipped with Anti-Lock Brake Systems, 2007 SAE Transactions, **Journal of Commercial Vehicles**, 2007-01-0714
- Motorcycle Sliding Coefficient of Friction Tests, McNally & Bartlett, **ARJ** 17(2), March/April 2007
- Contribution of a Laterally Displaced Vehicle to the Post-Impact Deceleration of a Heavy Truck, Bartlett, Brill, Wright, **Collision** 1(2), 2006
- Experimental Determination of Translational Acceleration Values for a Spinning Vehicle, Masory, LeGall, Bartlett, Wright; Proceedings, 2006 **FCRAR**, May 2006
- Comparison of Drag Sled and Skidding Vehicle Drag Factors on Dry Roadways, Bartlett, Baxter, Livesay, Schmidt, Stanard, Wright; 2006 **SAE Transactions – Mechanical**, 2006-01-1398
- Validation of the Circular Trajectory Assumption in Critical Speed, Masory, Delmas, Wright, Bartlett; SAE 2005-01-1189
- Calculation of Heavy Truck Deceleration Based on Air Pressure Rise Time and Brake Adjustment, 2004 SAE Transactions, **Journal of Commercial Vehicles**, 2004-01-2632
- Emergency Response RWD v. FWD, Bartlett and Wright; **Police Fleet Manager**, Vol.2, No.2, Summer 2003
- Data Extraction from Sensory Data Obtained During Driving in Closed Course, Masory, Benoit, Wright, Bartlett, Proceedings, *2003 Florida Conference on the Recent Advances in Robotics*, May 2003
- Conducting Monte Carlo Analyses with Spreadsheet Programs, 2003 **SAE Transactions**, 2003-01-0487
- Evaluating Uncertainty in Accident Reconstruction with Finite Differences, Bartlett and Fonda, **2003 SAE Transactions**, 2003-01-0489
- Motorcycle Speed Estimates Using Conservation of Linear and Rotational Momentum, McNally, Bartlett; Presented at IPTM Special Problems, April 2002
- Protecting Yourself After the Accident, **Motorcycle Consumer News**, February 2002, 33(2), pg. 28

***PUBLICATIONS (continued)***

Accuracy of Vehicle Speed Estimates by Stationary Witnesses, Bartlett, Wright, Brach, Baxter, Schmidt, Masory, ***IMPACT***, Journal of the ITAI, Kent, UK, August 2002

Quantifying the Uncertainty in Various Measurement Tasks Common to Accident Reconstruction, Bartlett, Wright, Masory, Brach, Baxter, Schmidt, Stanard, SAE Transactions, ***Journal of Passenger Cars – Mechanical***, 2002-01-0546

Interpretation of Motorcycle Rear-Wheel Skidmarks, Proceedings, *Fourth International Conference on Accident Investigation, Reconstruction, Interpretation, and the Law*, Vancouver BC, Canada, August 2001

Driver Abilities in Closed-Course Testing, Bartlett, Masory, Wright, 2000 ***SAE Transactions***, 2000-01-0179

Forensic Evaluation of Relative Sideswipe Speeds, Bartlett and Hochgraf, Proceedings, *Canadian Multidisciplinary Road Safety Conference XI*; Halifax Nova Scotia, Canada, May 1999

Using Strap Strength To Estimate A Truck's Speed Around A Curve

Bartlett and Hochgraf; Proceedings, *CMRSC XI*, Halifax Nova Scotia, Canada, May 1999

Experimental and Numerical Investigation of Elastic, Plastic, and Creep Response of a Polymeric Clip, Bartlett and Sherwood, Proceedings, *51<sup>st</sup> mtg. Soc. for Machinery Failure Prevention Tech.*, Herndon VA, 1997

Passenger Vehicle Braking with a Disabled Vacuum Power Booster, 1997 ***SAE Transactions***, 970946

***End.***

NOT FOR DISCLOSURE