Curtis Beloy PE, DFE
PRINCIPAL MECHANICAL ENGINEER

4 M O T O
Forensic Vehicle Engineers

FORENSIC ENGINEERING EXPERIENCE

4Moto Engineers LLC Cottage Grove, WI
Principal Engineer/ Co-Owner (2018-present)

Crane Engineering/ Safety Engineering Associates Madison, WI
Consulting Mechanical Engineer (2015-2018)

DJS Associates, Inc. Abington, PA
Collision Reconstruction Engineer (2008-2015)

- Investigation and analysis of incidents involving all types of vehicles and mechanical equipment
- Product defect and design evaluations of motorcycles, ATVs, powersport, and other recreational vehicles.
- Photogrammetry and video evidence analysis
- Production of written reports, demonstrative exhibits, and expert testimony
- Independent research

VEHICLE ENGINEERING EXPERIENCE

Donaldson Company, Inc. Bloomington, MN
Lead Applications Engineer (2007)

- Design and development of engine fluid filtration products for cars, trucks, and motorcycles

Bel-Ray Company, Inc. Farmingdale, NJ
Product Engineer (2004-2006)

- R&D testing of lubricants and service products for motorcycles, ATVs, and powersport vehicles

INSTRUCTIONAL EXPERIENCE

Blackhawk Technical College Janesville, WI
Adjunct Physics Instructor (2019)

University of Wisconsin Children's Hospital Madison, WI
AP STEM instructor (2017-2020)

Minnesota State University Mankato, MN
Teaching Assistant, Mechanical Engineering (2003-2004)

EDUCATION

Master of Science, Mechanical Engineering
Minnesota State University, Mankato (2004)

Bachelor of Science, Mechanical Engineering
Magna Cum Laude
Minnesota State University, Mankato (2003)

LICENSURE AND CERTIFICATIONS

Licensed Professional Engineer
Wisconsin, #44326-6

Board-Certified Diplomate in Forensic Engineering (DFE),
Counsel of Engineering & Scientific Specialty Boards

Technician and Analyst, BOSCH Crash Data Retrieval
System (CDR)

FAA Certified UAS Remote Pilot

PROFESSIONAL AFFILIATIONS

Society of Automotive Engineers (SAE)

National Society of Professional Engineers (NSPE)

National Academy of Forensic Engineers (NAFE)

National Association of Professional Accident
Reconstruction Specialists (NAPARS)

American Motorcyclist Association (AMA), life-member

VEHICLE HISTORY

Automotive mechanic

Racing and performance driving

Motorcycle, ATV, snowmobile, and personal watercraft
operation and dealership experience

PUBLICATION

Webb, Beloy, Lubricant Base Oil Effects on Motorcycle
Engine Power, SAE Technical Paper 2008-32-0002

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CONTINUING EDUCATION INCLUDES:

International Forensic Photography Symposium, Ai2-3D, Toronto, Ontario, Canada

Nighttime Crash Scene Investigation, National Association of Professional Accident Reconstruction Specialists

Applying Human Factors Research- Insitute of Traffic Accident Investigators (ITAI)

Heavy Vehicle Event Data Recorders- Update Course, National Association of Professional Accident Reconstruction Specialists

EDR in Traffic Crash Reconstruction- Update Course, National Association of Professional Accident Reconstruction Specialists

Accident Reconstruction Digital Summits, Society of Automotive Engineers

Monte Carlo Analysis in Accident Reconstruction, National Association of Professional Accident Reconstruction Specialists

Photogrammetry and Analysis of Digital Media, Society of Automotive Engineers, Troy, MI

Video Evidence Analysis Symposium, Input-ACE, Spokane, WA

Methods for Determining Driver's Perception and Response, National Association of Professional Accident Reconstruction Specialists

World Conference and Crash Reconstruction Technical Sessions, Society of Automotive Engineers, Detroit, MI

Event Data Recorder Update Course, Rick Ruth, P.E., Society of Automotive Engineers

Applied Vehicle Dynamics, James Walker, P.E., Society of Automotive Engineers, Greer, SC

Engineering Ethics (multiple), NSPE

Off-Road Vehicle Dynamics, Safety Engineering Associates, Kris Kubly, PE, Madison, WI

ATV RiderCourse, ATV Safety Institute, DeForest, WI

Event Data Recorder use in Traffic Crash Reconstruction, Ruth Consulting, Abington, PA

Motorcycle Technical Steering Committee Meetings, Society of Automotive Engineers

Unique Aspects of Motorcycle Claims- National Association of Subrogation Professionals presentation, Las Vegas, NV

Accident Reconstruction and Advanced Driver Assistance Systems (ADAS), Society of Automotive Engineers

Video Analysis, Photogrammetry, and sUAS, Society of Automotive Engineers

Finite Element Analysis and Topological Optimization, Society of Automotive Engineers

Camera tracking foundation Course, PF-Track

GPS Technology in Accident Reconstruction, National Association of Subrogation Professionals presentation, Abington, PA

Drone Surveying and Aquiring Assets using ReCap and 3DS Max, Autodesk University

Vehicle Dynamics for Crash Reconstruction, National Association of Professional Accident Reconstruction Specialists

Products Liability Conference, University of Wisconsin Madison, WI

California Superbike School, Virginia International Raceway (VIR), Alton, VA

Motor Vehicle and Motorcycle Safety Inspection Training, Pennylvania Department of Transportation, Ambler, PA

Motorcycle Safety Foundation (MSF) RiderCourses, Basic and Advanced Courses

3D Laser Scanning use in Crash Reconstruction, National Academy of Forensic Engineers presentation (NAFE)

National Crash Analysis Conference, National Crash Analysis Center, George Washington University, Washington, DC

PC-Crash Simulation Software Training Workshop, MEA Forensics, Las Vegas, NV

Bosch CDR Technician and Data Analyst Certification Training, Egg Harbor, NJ

Small Engine Technology Conference, Society of Automotive Engineers, Milwaukee, WI

National Academy of Forensic Engineers (NAFE) Conference, Las Vegas, NV

Vehicle Speed from Audio Recordings, National Association of Professional Accident Reconstruction Specialists

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