

*Curriculum Vitae of Trampoline Expert***MICHAEL "TROY" RICHARDSON**

Momentum Engineering, LLC

733 North Sage Creek Circle

Washington, Utah, 84780

Phone: (435) 272-2389

troy@trampolineexperts.com**SYNOPSIS**

Michael "Troy" Richardson is the President of Momentum Engineering, L.L.C. His experience, patents, and education elevated Mr. Richardson's in-depth understanding, and assisting in developing the industry standards against renowned experts in trampoline cases has proven he is a formidable opponent providing successful outcomes. Mr. Richardson has helped in several dozen advantageous cases since his first inquiry in 2009. Mr. Richardson has dozens of discovery questions produce favorable reports, affidavits, and depositions. He benefits his clients by utilizing a comprehensive understanding of ASTM and additional regulatory standards applicable.

For over five years, Mr. Richardson has offered his engineering knowledge and understanding to vote and or suggestions in several of the amusement ride and device standards, including the American Society for Testing and Materials, including (ASTM) F2970. The F2970 standard is for designing, installing, operating, maintaining, and inspecting trampoline courts. Mr. Richardson is an athlete who owned, managed, and was a trainer at his Fitness Gymnasium. He is on two committees, ASTM F24 Adventure Rides and ASTM F15 Consumer Products, to improve over 100 industry standards. As a Qualified Auditor/Instructor 3rd Party Trainer Aerial Adventure Parks, Challenge Courses, Canopy Tours, and Ziplines, he has improved safety when hired.

His expert services include audits, inspections, engineering design, modeling, simulations, animations, and prototypes to prepare declarations that convey his opinions concisely. Mr. Richardson opines on human factors, operations, inspection & training failures, trampoline parks, challenge courses, ziplines, & product liability. He has 100's of standards from; the American Society of Mechanical Engineers, the International Association of Trampoline Parks, the Association for Challenge Course Technology, ASTM F24 & F15, and the PRCA.

Mr. Richardson is a renowned expert witness. His engineering and expert practice has accelerated to nearly 50 cases in the last five years. He has provided additional evidence and testimony for accidents located in, Alaska, Arizona, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Idaho, Iowa, Maine, Maryland, Massachusetts, Minnesota, Missouri, Montana, New Mexico, New Jersey, New York, Nevada, Oregon, Pennsylvania, Puerto Rico, Tennessee, Texas, Utah, Washington, Washington, D.C. area, and in Mazatlán, Mexico.

EDUCATION

P.A. Acceptance by the United States Patent and Enrollment to take the Patent Bar exam

G.S. Advanced Physics, Brigham Young University, Graduate Studies (G.S.) 2015 thru 2019

Pertinent courses: *Newtonian and Statistical Mechanics; Work, Energy, and Momentum,*

B.S. Engineering Design and Technology, Southern Utah University, 2014 Relevant classes: *Civil, Electrical, and*

Mechanical Engineering, Multiple CAD courses, Civil Design, Mechanics Statics, Dynamics, Calculus, Engineering Design, CATIA, Physics and Architectural Design, Physics Fitness related

- C.E. Design Engineering and Graphics, Utah Valley University, 2010-2012 continuing education (C.E.)
Pertinent courses: *Calculus-Based Physics, 3D Architectural Modeling, Descriptive Geometry, Advanced Mechanical CAD Civil Design, Strength of Materials, and Physics I & II with labs*
- A.S. Machine Tooling, Utah Valley State College, two-year Vocation Degree, 1994
Pertinent courses: *Machining I & II, Advanced Welding, Machine Tool & Die, C.N.C., Trigonometry*
- C.E.M. Certified Energy Manager, Las Vegas, NV, with the Association Energy Engineers Course, 2011
Course Description: A CEM is a *Systems integrator for electrical, mechanical, process & building infrastructure, analyzing the optimum solutions to reduce energy consumption*

PROFESSIONAL AFFILIATIONS & AWARDS

- 2021 Headrush Technologies zipSTOP Certification in the eddy-current technology from TrueBLUE
- 2021 Preparing for the USPTO Patent Bar exam in April
- 2019 Advisory and a voting member of Advisory Committee within ASTM F15 Consumer Products
(F15) *Toys, Playground Equipment, Fall Standards, the jurisdiction of over 100 standards*
- 2018 Joined the International Association of Trampoline Parks
- 2018 Advisory and voting member of both ASTM F24 & sub-group AAC Task Group F2959 (AAC)
Aerial Adventure Courses, Ziplines, Adventure Parks
- 2018 Advisory Committee within ASTM F24 with 19 Amusement Ride standards, *Membership of approximately 800 members (F2970) Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection, and Major Modification of Trampoline Courts*
- 2017 Nominated to the Board of Directors of PRCA/ANSI
(PRCA) *the Professional Ropes Course Association*
(ANSI) *the American National Standards Institute*
- 2016 3rd-Party Trainer for Challenge Courses & Ziplines with PRCA/ANSI for three years
- 2015 Established an Engineering and Prototyping company Momentum Engineering, LLC
- 2014 Appointed to be on the advisory board of ASTM F24
- 2014 Joined and became a member of PRCA/ANSI and ASTM F24
- 2013- 14 Attained 'Walter Maxwell Gibson Scholarship', College of Science & Engineering
- 2012 Won Gold Medals in 'Engineering Design & Technology' in both Utah & National Skills U.S.A.
- 2012 Achieved top honors and won the gold medal in 'Resume and Interview' Skills Day U.S.A.
- 2009-10 Owned/Operated/Trained at a Public Sports and Fitness Gymnasium in Payson, Utah
- 1998- 04 Attained licensure for A.A. Machining & Welding, Inc as a Steel Erection Sub-Contractor
- 1998-14 Certified A.A. Machining & Welding with National Board of Boilers and Pressure Vessels
Obtained and retained 'R' Stamp through accreditation a company he started in 1995

U.S. PATENTS

- Published 2018 [Granted Nov. 2019](#) 'Passive Braking Trolley'
- Published 2010 [Granted Apr. 2013](#) 'Trolley for Downhill Zip Line Thrill Ride.'
- Published 2002 [Granted Oct. 2003](#) 'Downhill Zip Line Thrill Ride System'

PUBLICATIONS

- Bush Law Firm, Rex Bush, Esq. & Michael Troy Richardson. ["Zipline Injuries on the Rise."](#) H.G. ORG, LLC.
Winter 2017 Utah Trial Journal