

Brian C. Grieser, P.E., C.P.S.M., CSP, CPE

Practice Leader

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Background

Mr. Brian Grieser holds a bachelor's degree in Naval Architecture and Marine Engineering and a master's degree in Industrial and Operations Engineering from the University of Michigan.

Mr. Grieser has extensive experience in conducting evaluations in a wide range of product, occupational, and premises projects involving litigation as well as proactive consulting. His assessments have included walkway slip resistance; recreational boat design; watercraft occupant safety; towed watersports safety; time and motion studies; work sampling; human vibration and acceleration exposure; sound measurement and analysis; and human movement, climbing, and stability analysis.

Mr. Grieser is a member of several professional societies including the Human Factors and Ergonomics Society, ASTM International, the Society of Naval Architects and Marine Engineers, the American Boat and Yacht Council, and USA Water Ski & Wake Sports. Mr. Grieser has authored publications addressing recreational boat design and occupant protection, premises safety and slip resistance assessments, time study, human vibration and shock, hazard analysis, and warnings.

Standards Committee Membership

- ASTM F13 (Pedestrian/Walkway Safety and Footwear)
- ASTM F15 (Consumer Products)
- ASTM F15.03 (Safety Standards for Bathtubs and Shower Structures)
- ASTM F25 (Ships and Marine Technology)
- ASTM F27 (Snow and Water Sports)

Professional Experience

• Rimkus 2021 – Present

Practice Leader

Projects involving experimentation, instrumentation, technical writing and literature, and standards review. Accident investigation and reconstruction as well as forensic time and motion study and work sampling. Evaluation of prototype and existing product and workplace designs with respect to ergonomics, safety, usability, and performance and evaluation of/research leading to the promulgation of safety standards.



Applied Safety and Ergonomics, Inc.

1998 - 2021

· Senior Consultant

Projects have involved experimentation, instrumentation, technical writing and literature, standards review, accident investigation and reconstruction, as well as forensic time and motion study and work sampling. Evaluated prototype and existing product and workplace designs with respect to ergonomics, safety, usability, and performance and evaluation of/research leading to the promulgation of safety standards. Conducted research in boat occupant protection.

• Miller Engineering, Inc.

1994 - 1998

· Research Engineer

Projects involving experimentation, instrumentation, technical writing, and literature and standards review. Accident investigation and reconstruction. Evaluation of prototype and existing product and workplace designs with respect to ergonomics, safety, usability, and performance and evaluation of/research leading to the promulgation of safety standards. Research in boat occupant protection.

Three Rivers Industries/Hydrodyne Boat Company

1990 - 1993

Naval Architect/Marine Engineer Intern
 Designed and constructed a clear-bottomed prototype boat as the primary experimentation tool for cooperative planing hull research with the University of Michigan. Designed a hull vibration absorption system standard on all models and featured in the company's marketing campaign. Also involved in the empirical planing hull design process. Assisted in all phases of powerboat construction from plug and mold.

building and maintenance to rigging. Helped compose a plant-wide standard operating procedure.

Education

- M.S.E. Industrial and Operations Engineering: University of Michigan, Ann Arbor (1997)
- B.S.E. Naval Architecture and Marine Engineering: University of Michigan, Ann Arbor (1994)

Professional Registration and Certifications

- Professional Engineer (P.E.): Michigan License #44387
- Certified Product Safety Manager (CPSM)
- Certified Safety Professional (CSP)
- Certified Professional Ergonomist (CPE)
- Certified XL Tribometrist (CXLT)

Selected Continuing Education

- National Boating Accident Investigation and Analysis Course, Level 1 Comprehensive, National Association of State Boating Law Administrators (NASBLA).
- USA Water Ski & Wake Sports Level 1 Instructor Course.
- EXCEL TRIBOMETERS, LLC, Certified XL Tribometrist Certification Program, Baltimore, MD.
- Ergonomics of Occupational Hand-Arm & Whole-Body Vibration in Industry (NIOSH 596).
- "Human Performance" (Psychology 746), University of Michigan, Ann Arbor, MI.
- "Accidents: From the Scene to Trial", American Boat & Yacht Council, Chicago, IL.



Professional Associations

- Human Factors and Ergonomics Society (HFES): Member, Reviewer for Annual Meeting Proceedings
- ASTM International: Member
- Institute of Industrial and Systems Engineers (IISE): Senior Member
- International Code Council (ICC): Member (2002 2016)
- Society of Naval Architects and Marine Engineers (SNAME): Associate Member
- American Boat and Yacht Council (ABYC): Member
- USA Water Ski & Wake Sports: Active Member, Level 1 Instructor, Past National Competitor, and Regular Judge

Publications

- Hybart, R. L., Grieser, B., Figueroa, R., and Zendler, J. (2024). Assessing Risk Factors for Ankle and Knee Injury: Comparison of Basketball Court Slip Resistance Measurements from Common Slip Meters. American Society of Biomechanics Annual Meeting. Madison, WI. Aug. 5-8, 2024.
- Shah, R.J. and Grieser, B.C. (2019). Human factors and safety perspectives on the evolving rules for use
 of dockless e-scooters. Poster presentation at the 10th International Conference on Applied Human Factors
 and Ergonomics. Washington, D.C. July 26, 2019.
- Grieser, B.C. (2018). Study of Slip/Trip/Fall Hazards at a Midwestern Urban Hospital Campus. Proceedings of the Human Factors and Ergonomics Society 2018 Annual Meeting. Philadelphia, PA. Oct. 1-5, 2018.
- Grieser, B.C. and Frantz, J.P. (2018). Slip Resistance Assessment of Common Shoe Sole Materials on Selected Floor Surfaces. Proceedings of the Human Factors and Ergonomics Society 2018 Annual Meeting. Philadelphia, PA. Oct. 1-5, 2018.
- Grieser, B.C. and Frantz, J.P. (2016). Effects of Paint on Slip Resistance of Concrete and Wood Surfaces.
 Proceedings of the XXVIIIth Annual Occupational Ergonomics and Safety Conference. Chicago, IL. June 9-10, 2016.
- Grieser, B.C. and Frantz, J.P. (2016). Comparison of Floor Surface Slip Test Results from the English XL and BOT-3000E Tribometers. Proceedings of the XXVIIIth Annual Occupational Ergonomics and Safety Conference. Chicago, IL. June 9-10, 2016.
- Adams, P.S. and Grieser B.C. (2014). Workforce Health and Safety: Prevention Through Design. Water Research Foundation. Denver, Colorado.
- Grieser, B.C. and Fuller, H.J.A. (2013). Lumbar Impact Forces in Seated and Standing Activities of Daily Living. Proceedings of the XXV Annual Occupational Ergonomics and Safety Conference. Atlanta, Georgia. June 6-7, 2013.
- Adams, P.S., Grieser B.C., Mullins, M., and Guo, W. (2012). Methods for Measuring Task Times with Emphasis on Discreet Observations. Proceedings of the XV Annual Applied Ergonomics Conference. Nashville, Tennessee.
- Young, S.L., Shaver, E.F., Grieser, B.C. and Hall, S.M. (2006). **Hazard Analysis as Part of the Safety Information Development Process.** In Wogalter, M.S. (Ed.), Handbook of Warnings, pp. 431-436, Lawrence Erlbaum Associates, Mahwah, NJ.
- Young, S.L., Rhoades, T.P., Frantz, J.P., Isaacson, J.J., and Grieser, B.C. (2004). **Revision of Labeling and Classification for Personal Flotation Devices (PFDs).** Prepared for the United States Coast Guard.
- Grieser, B.C., Rhoades, T.P. and Shah, R.J. (2002). Slip Resistance: Field Measurements Using Two Modern Slipmeters, Professional Safety. Des Plaines, IL: American Society of Safety Engineers.



- Grieser, B.C. and Miller, J.M. (1998). Marine Carbon Monoxide Detectors: Technology and Design. (1998).
 First draft to American Boat & Yacht Council, October.
- Miller, J.M. and Grieser B.C. (1998). **Bowrider Backrest Height Variables: An Experimental and Simulation Study, Part II.** Occupant Protection Study (Phase 3), NTIS PB99-118101INF.
- Miller, J.M. and Grieser B.C. (1998). **Boat Handhold Placement.** Occupant Protection Study (Phase 3), NTIS PB99-118101INF.
- Miller, J.M. and Grieser B.C. (1998). **Boat Boarding Ladder Placement.** Occupant Protection Study (Phase 3), NTIS PB99-118101INF.
- Miller, J.M., Grieser B.C., and Clark, D.R. (1996). Bowrider Backrest Height Variables: An Experimental and Simulation Study. Occupant Protection Study (Phase 2), DOTCG Grant No. 130202, NTIS PB96 195839XSP.
- Miller, J.M., Grieser B.C., and Clark, D.R. (1996). Experimental Determination of Lateral Boat Accelerations during Turns at Bow Seat versus Stern Seat Locations. Occupant Protection Study (Phase 2), DOTCG Grant No. 130202, NTIS PB96 195839XSP.
- Miller, J.M., Grieser B.C., and Clark, D.R. (1996). Analysis of Designs and Principles of Movement Transition Intended for Boat Handholds and Boarding Ladders: Principles and Examples. (1996). Occupant Protection Study (Phase 2), DOTCG Grant No. 130202, NTIS PB96 195839XSP.
- Miller, J.M., Main, B.W., Iqball, C.S., and Grieser B.C. (1994). Occupant Protection in Recreational Boating.
 Occupant Protection Study (Phase 1), Final Report to American Boat and Yacht Council.

Presentations

- Premise Safety/Fall Prevention Management. University of Michigan. Department of Industrial and Operations Engineering. IOE 438: Occupational Safety Management. 2008, 2009, 2011 2018, 2021-2024.
- Time Study and Work Sampling Techniques to Address Evolving Workplace Issues. University of Michigan. Department of Industrial and Operations Engineering. IOE 836: Seminar in Human Performance. 2018; IOE 438: Occupational Safety Management. 2021, 2023-2024.
- Grieser, B.C. and Hirota, K. (2022) **Watch Your Step: Expert Analysis in Premises Liability Cases.**Presentation at Wisconsin Defense Counsel 2022 Spring Conference. Kohler, WI, April 7-8, 2022.
- **PFD Labeling Project.** Presentation to Prevention Through People Subcommittee. National Boating Safety Advisory Council. Clearwater Beach, Florida. October 21, 2000.