



2026 SAAMI Ballistics Conference

September 15 - 17, 2026
Baltimore, Maryland

Tuesday, September 15

- 8:30 am – 8:45 am *Welcome/Introduction* – Joe Bartozzi, President and CEO of SAAMI
- 8:45 am – 9:15 am *Using High-Speed Cameras for Advanced Ballistics Applications* –Matthew Vayner, Phantom/Ametek
- 9:15 am – 9:45 am Break - sponsored by **Workpartners**
- 9:45 am – 11:00 am *Propellants 101 – An Introduction to Propellant Technology and Selection* – Alan Serven, SAAMI
- 11:00 am – 12:00 pm *Sensors for Firearm Dynamics & Suppressor Testing* – Bob Metz, PCB Piezotronics
- 12:00 pm – 1:00 pm Lunch - sponsored by **U.S. Element Space & Defense**
- 1:00 pm – 2:00 pm *Legal Considerations in Data Collection & Retention* – Tim Lachance, SAAMI
- 2:00 pm – 2:30 pm Break - sponsored by TBD
- 2:30 pm – 5:00 pm *Ballistic Pressure Sensor User's Training* – Bob Metz, PCB Piezotronics
Part 1- Sensor Theory & Measurement Introduction
Part 2 – Ballistic Pressure Sensors & Operational Procedures
Part 3 – Conformal Measurements: Troubleshooting and Sensor Cleaning
- 5:30 pm – 7:00 pm Reception - sponsored by **PCB Piezotronics**
-

Wednesday, September 16

- 8:30 am – 9:30 am *UMPIRE - Integrated Measurement for Ballistics and Firearm Dynamics* – Mitch Anderson, Ph.D., Bighorn Kinetics
- 9:30 am – 10:30 am *Practical Measurements – Ballistics & Firearm Dynamics* - John Miller, DEWESoft
- 10:30 am – 11:00 am Break - sponsored by **Bighorn Kinetics**
- 11:00 am – 12:00 pm *Challenges in Measuring Next Generation Ammunition Designs* – Stephen Braxton, Kistler Instrument Corp.
- 12:00 pm – 1:00 pm Lunch - sponsored by **Oehler Research**
- 1:00 pm – 2:00 pm *OSHA is Coming. Now what?* – Dale Krupinski, Owner, On Target Safety Academy
- 2:00 pm – 3:00 pm *The FBI Terminal Ballistic Test Method* – Bufford Boone, FBI (ret.)
- 3:00 pm – 3:30 pm Break
- 3:30 pm – 4:15 pm *Oehler Research Ballistic DAQ System Overview* – Gary Stafford, Oehler Research
- 4:15 pm – 5:00 pm *Ballistic Pressure Sensor Calibration* – Mike Mains, The Modal Shop
- 5:30 pm – 7:00 pm Reception - sponsored by **DEWESoft**
-

Thursday, September 17

The off-site events for this year's conference will be held at the testing facility of Element U.S. Space & Defense (formerly National Testing Services [NTS]) in Belcamp, Maryland. We will be getting a tour of their facility and to participate in hands-on demonstration of the Modal Shop's piezoelectric pressure gauge calibrator and see the UMPIRE system in use along with some of DEWESoft's product offerings.

8:30 am – 9:00 am Shuttle bus leaves for **Element**.

12:00 pm – 1:00 pm Lunch - sponsored by **Kistler Instrument Corp.**

2:30 pm - 3:00 pm Shuttle bus return to the hotel.

Special thanks to the sponsors of the 2026 SAAMI Ballistics Conference:

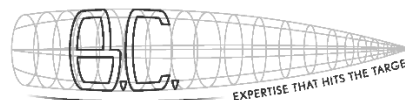
GOLD Level Sponsors:



SILVER Level Sponsors:



Bronze Level Sponsors:



Bachstein Consulting



PRESENTERS *(Alphabetically)*

Mitch Anderson, Ph.D., Bighorn Kinetics – Mitch is a founder and lead engineer at Bighorn Kinetics, a company focused on the development and commercialization of advanced firearms research and development equipment and test methodologies. He earned his PhD in Mechanical Engineering from the University of Wyoming in 2024 and currently serves as a research professional at the Colorado School of Mines in Golden, Colorado. Over the past two years, Mitch has played a key role in a U.S. Army sponsored program focused on evaluating the performance of crew served machine guns, including the M249, M240, and M2. This effort involves the design and development of an advanced test fixture capable of replicating weapon firing mechanics with greater repeatability than traditional human in the loop testing, while generating objective, quantitative performance data. Through this work, Mitch has contributed to the advancement of testing methodologies that improve the consistency and fidelity of weapon system evaluation. Bighorn Kinetics is positioned to transition these technologies and methodologies into the commercial sector, providing enhanced testing capabilities for industry partners.

Stephen Braxton, Kistler Instrument Corp. – Stephen serves as the North America High Speed Dynamics Lead and Southeast Manager for Kistler. He holds a Bachelor of Science degree in Physics. Stephen has over 27 years of experience in the Test and Measurement industry with a focus on Defense, Space, and Aerospace applications.

Dale Krupinski, On Target Safety Academy – Dale brings more than 25 years of experience in recognizing, evaluating, and controlling workplace safety and health hazards. Over the past decade, he has specialized in assisting the shooting sports industry with OSHA compliance, focusing on lead dust, noise, and other occupational hazards. He previously served as a Compliance Safety and Health Officer and as an industrial hygienist in the National Office of the Occupational Safety and Health Administration. Dale is a board-certified industrial hygienist, certified safety professional, and OSHA Authorized Outreach Trainer. He serves on the Compliance Consultant Team for the National Shooting Sports Foundation, on the Advisory Board of the National Law Enforcement Firearms Instructors Association and has been a featured speaker at the NRA Range Development and Operations Conference. He founded On Target Safety Academy to provide practical safety training and technical assistance to the shooting sports industry.

Tim Lachance, SAAMI – Tim J. Lachance is the General Counsel for the Sporting Arms & Ammunition Manufacturers' Institute and the Assistant General Counsel for the National Shooting Sports Foundation, where he primarily handles corporate, contract, regulatory, and compliance matters for both organizations. Prior to joining NSSF/SAAMI, Tim served as Assistant General Counsel for SIG SAUER, Inc., where he managed litigation, contract, trademark, and other corporate matters for the organization, including spearheading the organization's regulatory comment activity and providing legal guidance on all ATF compliance issues. Tim earned his B.A. in Linguistics and Justice Studies from the University of New Hampshire, and his J.D. from the University of New Hampshire School of Law. He is admitted to practice in the states of New Hampshire and Connecticut, and the U.S. District Court for the District of New Hampshire.

Mike Mains, The Modal Shop (TMS) – Mike a Product Specialist, Software and Mechanical Engineer at The Modal Shop (TMS). Prior to joining TMS in 2022, he was an Associate Professor at the University of Cincinnati and Faculty Advisor for Bearcat Motorsports, which is the organization for the University of



Cincinnati's Formula FSAE and SAE Baja teams. Prior to joining the UC in 2019, he spent 14 years as a Senior Software Developer at Brüel & Kjær. Mike has worked with TMS's Structural Test Products, Calibration Systems and, more recently, support of TMS's Nondestructive Testing Systems. One of his major areas of focus since joining TMS has been the Ultra-High Pressure Calibration system that supports the SAAMI "standard" test method for conformal ballistics pressure measurements.

Bob Metz, PCB Piezotronics – Bob Metz has been with PCB Piezotronics for over 21 years and is currently their Director of Product Management. He holds a Bachelor of Science degree in Aeronautical and Astronautical Engineering from The Ohio State University and a Master of Business Administration from the State University of New York. Bob has been an instrumentation engineer for over 30 years, focusing on acoustic, force, pressure and vibration measurement using piezoelectric and piezoresistive sensor technologies.

John Miller, PE, DEWESoft, LLC – John holds a bachelor's degree from South Dakota State University and a master's from the University of Minnesota. John started his professional career as a test engineer for a consulting firm, Braun Intertec, in Bloomington, Minnesota where he was responsible for an array of instrumentation projects ranging from designing and implementing large-scale bridge monitoring systems to conducting various dynamic measurements of blast events, amusement park failures, etc. After being a test engineer and an avid user of various data acquisition systems, John joined DEWESoft in 2016. John is the VP of Engineering for DEWESoft and works directly with most large manufacturers in the Aerospace, Automotive, and Defense industries assisting test engineers in making successful measurements and helping steer DEWESoft's future development to account for industry innovation and evolution.

Eric Rosenberg, Workpartners – Eric is the Director of Integrated Data Science at Workpartners, where he leads the development of analytics that integrate health plan, leave, absence and disability data to support compliance, workforce risk oversight, and benefit decision-making that stands up to regulatory scrutiny. His work focuses on translating complex, multi-source data into practical, defensible insights for employers in manufacturing and other safety-sensitive industries with focus on occupational exposure, chronic disease, and emerging benefit trends.

Alan Serven, Sporting Arms & Ammunition Manufacturer's Institute (SAAMI) – Prior to joining SAAMI in May 2021, Alan spent 13 years with Hercules Powder (now Northrop-Grumman/Alliant Powder) at their manufacturing plant in Kenvil, New Jersey. During that time, he held a variety of positions in smokeless propellant manufacturing supervision, product development & technical support, and Quality Assurance, including supervising the ballistics test laboratory. In 1995, Alan joined Remington Arms at their ammunition plant in Lonoke, Arkansas where for 18 years he managed Quality Assurance & ballistics testing, new ammunition product development, primer manufacturing and explosives safety. In 2017, he moved to the firearms division in the position of Director, Long Gun Product Development. In 2021 he moved back to the ammunition division. After 25+ years at Remington Alan joined SAAMI as the Senior Director of Technical Affairs. Alan holds a Bachelor of Chemical Engineering degree from Villanova University.

Gary Stafford, Oehler Research, Inc. – With a degree in Electrical Engineering from the University of Kansas, Gary joined Oehler Research in 2009. Prior to joining Oehler, Gary specialized in nuclear gauges and elemental analysis, being involved in product definition and design through production, sales, calibration, and maintenance. Since joining Oehler, Gary has mastered the field of ballistic instrumentation including



computers and the science and art of analog circuits. This experience and familiarity of the challenges of ballistic instrumentation suits him well in supporting existing instruments and the design of future instruments.

Matthew Vayner, Phantom/Ametek – Matthew is a Field Applications Engineer with Vision Research specializing in optics, spectroscopy, and high-speed imaging. He earned a Ph.D. in Physics from the City University of New York (CUNY) and subsequently conducted postdoctoral research at Nokia Bell Labs. This research background provides a strong foundation in experimental physics and optical measurement techniques. In his current role, Matthew applies this expertise to advanced high-speed imaging challenges, including optical system design, remote and telecentric imaging, and high-speed UV/visible spectroscopy. Matthew works closely with researchers and engineers to develop imaging approaches for demanding scientific and industrial applications where conventional imaging techniques may be limited by speed, light levels, or experimental geometry.

About SAAMI – The Sporting Arms and Ammunition Manufacturers' Institute, SAAMI, founded in 1926 at the request of the federal government, is dedicated to creating and promulgating technical and performance standards for firearms, ammunition, and components, and is committed to being the preeminent global resource for the safe and responsible design, manufacture, transportation, storage, and use of these products.