The Mid-Atlantic Region and Maryland Section hosted a two-day event from April 9-10, 2014. The first day was a Measurement Uncertainty Development Process training event conducted by Dilip Shah and the second day was a meeting discussing a variety of measurement topics. Both days were well attended and a lot of good discussion was generated.

The meeting was hosted by Alliant Techsystems (ATK) Tactical Propulsion and Control Division at the Allegany Ballistics Laboratory (ABL) located in Rocket Center, West Virginia. ABL is a diverse industrial complex employing some 1,100 people across 1,628 acres. The facility is a member of the Federal Laboratory Consortium and is operated by ATK under contract with the Naval Sea Systems Command (NAVSEA).

ABL was established in 1944 on the site of a former ammunitions plant on land owned by the Army. After World War II, the plant was transferred to the Office of Scientific Research and Development and was involved in building propulsion devices and engines for the solid-rocket industry. Later in the decade, ownership of ABL was transferred to the Navy office of Naval Sea Systems Command. In 1956, when it was producing Altair rocket stages for Vanguard rockets, ABL was “a subsidiary of the Navy operated by the Hercules Powder Company.” The Navy now contracts out operation of the facility to ATK.

The second day opened with Jim Tedesco, Director of Mission Assurance with ATK, who gave an overview of the diverse operations at the facility. ATK production capabilities at ABL include tactical missile propulsion and warheads; metals, munitions and composites and fuze and electronic integration.

Dilip Shah from E=MC3 Solutions then gave an excellent presentation on the preparation for an ANS/ISO/IEC 17025 assessment. This topic generated a lot of great discussion as there were many organizations in attendance that are accredited or were looking to become accredited to the standard.

Henry Zumbrun from Morehouse Instrument Co., Inc. gave a presentation on errors in force and torque measurement. The presentation was very interesting and provided insight on common pitfalls to avoid when making these critical measurements.

Lastly, Chris Damson from ATK gave a sobering talk about the back torque issues that were discovered at ATK production. In 2006, an ATK operator noticed that the torque wrench he had just used to torque a bolt rotated in the counter-clockwise direction after the proper torque had been achieved. When the operator inspected the torqued bolt, he found that it was loose and could be unscrewed by hand. Stimulating discussion followed the presentation on this intriguing issue.

The meeting culminated with a tour of the ATK calibration facility.

Special thanks to ATK for hosting and to all the presenters for their excellent presentations. Also, very special thanks to Mr. Phil Smith who helped arrange and conduct the meeting.