



Exploring Soldier Lethality, Protection and Performance Optimization at Natick

By NSRDEC Public Affairs

Brigadier General David M. Hodne, the commandant of United States Army Infantry School at the Army Maneuver Center of Excellence, Ft. Benning, Georgia, recently visited the Natick Soldier Systems Center in Natick, Mass. to learn more about recent efforts in technology development and human performance optimization.

Brig. Gen. Hodne is also dual-hatted as the director of the Soldier Lethality Cross Functional Team focusing on narrowing the capability gaps that affect Soldiers - especially the 100,000 close-combat soldiers who close with, engage and destroy the enemy.

The visit was hosted by Mr. Doug Tamilio, director of the US Army Research, Development and Engineering Command Soldier Center and covered a wide range of technologies and capabilities developed through Army science and engineering efforts to optimize soldier/squad performance and develop modern equipment to increase soldier readiness and lethality.

"It is crucial that we, as a technology developing organization, develop and maintain strong and lasting relationships with Army leadership to demonstrate how our work aligns and supports the priorities of the Chief of Staff of the Army and the Soldier Lethality Cross Functional Team," Tamilio said of the visit.

While at Natick Brig. Gen. Hodne received updates on the Natick Soldier Research, Development and Engineering Center's work in the areas of biomechanics and soldier performance efforts that enhance mobility and lethality, as well as the Squad Performance Model, a critical component of the Soldier Lethality Rating being developed as a product of the recent Monitoring and Assessing Soldier Tactical Readiness and Effectiveness, or MASTR-E study conducted at Fort Bragg. The MASTR-E study looks to identify the human dimension 'x-factors' that reliably account for sustained dismounted Soldier and Squad performance.

Brig. Gen. Hodne also met with representatives from NSRDEC's other efforts in the areas of precision aerial delivery of cargo, personnel and airdrop safety, the Soldier Borne Sensor and its interface and integration capabilities

as well as the latest developments in combat rations and performance nutrition. While trying a coconut performance nutrition bar developed by the Combat Feeding Directorate, Hodne said "That's very good, that's lunch."

The visit also included an introduction to the US Army Research Institute of Environmental Medicine, also located at Natick and a critical partner in the development of a number of performance optimization technologies and programs.

One of those specialized efforts is the Human Research Volunteer program where Soldiers right out of their initial and advanced individual training volunteer to come to Natick for 90 to 120 days to serve as subjects in USARIEM's and NSRDEC's tests, studies and evaluations.

Brig. Gen. Hodne met with the HRV Soldiers and thanked them for their service and commitment to making the Army more lethal. "Soldier lethality is really important and I really appreciate everything you are doing, and when you are a sergeant major and you look back twenty or thirty years from now you'll realize you did important things for our Army, and I appreciate that and want to shake your hands."

As commandant of the Infantry School and the director of the Soldier lethality Cross Functional Team, Brig. Gen. Hodne was also very interested in NSRDEC's developments in footwear, camouflage, and load carriage. While being briefed on the latest load carriage innovation, the new MOLLE 4000 rucksack, Brig. Gen. Hodne remarked "I wore rucksacks for 30 years and like the path forward on these load carriage efforts."

Other demonstrations included helmet and body armor technologies, vision protection equipment and a four-second burn testing of one of the Army's flame resistant uniforms. When briefed on new head protection efforts, Brig. Gen. Hodne said that he "liked the direction that the project was going."

When describing some of NSRDEC's other capabilities, Tamilio explained that "We are developing innovative material and future performance technologies for the next generation Soldier in tomorrow's multi-domain battlefield. The work that our scientists, engineers and researchers do here is critical to Soldier lethality and to the future of the Army." ■