Army Futures Enhances Small-arms Weapons Through Optimized Power Sources

BY DAN LAFONTAINE
CCDC C5ISR Center
ABERDEEN PROVING GROUND, Md. — Army Futures Command, or AFC, is helping to modernize small-arms weapons and design and develop by developing a centralized power source for a new generation of small-arms weapons.

Researchers from AFC’s Combat Capabilities Development Command are helping to design the Army’s Next Generation Squad Weapon at Aberdeen Proving Ground, Maryland. The CCISR Center is developing a centralized power source targeting for NGSW technologies.

Mechanical engineer Dr. Nathan Sharpes demonstrates CCISR Center research on a power and data rail for the Army’s Next Generation Squad Weapon at Aberdeen Proving Ground, Maryland. The CCISR Center is developing a centralized power source targeting for NGSW technologies.

“Sharpes, who works in the CCISR Center’s Power and Data Rail Program, demonstrates C5ISR Center research on a power and data rail for the Army’s Next Generation Squad Weapon. The focus of the research, centered on developing a centralized power source designed to enable quick and easy maintenance of squad-sized weapons. The rail is a major capability enhancement that is helping Soldiers reduce the overall size and weight of batteries needed to extend the weapons’ range and replace batteries more efficiently as a result of the rail’s design.”

“We’re focused on understanding the needs of the Soldier and the complexity of the field day, by using a rapid prototyping to develop a rail that will enable the installation of the systems into individual weapons.”

“We’re focused on understanding the needs of the Soldier and the complexity of the field day, by using a rapid prototyping to develop a rail that will enable the installation of the systems into individual weapons.”

“The Joint Battle Command-Platform is a critical platform for the CCISR Center’s mission to improve information technology. The program provides a virtual enhanced situational awareness, situational awareness, combat power and joint interoperability capability to thousands of vehicle platforms across the Army.”

Human-systems integration was also at the forefront of the presentation, said Dr. Beth Ferry, a PIME-B Center principal investigator. The design and development of a small arms kit is one of the Army’s big six modernization priorities, enabling information dominance and tactical overmatch for the joint Warfighter. The C5ISR Center is an element of the U.S. Army Combat Capabilities Development Command. Through collaboration across the command’s core technical competencies, CCISR leads in the discovery and development of technology capabilities required to make Soldiers more lethal and agile. CCISR is a major subordinate command of the U.S. Army Futures Command.