Autonomous vehicle to demonstrate portable battery charging for dismounted soldiers

November 2 2010

The SMSS Block 1 is the newest variant, featuring a lighter frame, upgraded sensors and better accessibility.

Lockheed Martin's Squad Mission Support System (SMSS) autonomous vehicle will demonstrate its rugged maneuverability while meeting Soldiers' needs to recharge batteries in Portable Power Excursion (PPE) tests next month at Fort Riley, KS.

The Portable Power Excursion test is part of the larger Nett Warrior program, which will use the PPE tests to collect data and form a strategy to help alleviate a Soldier's weight burden, while still providing long-lasting, reliable power critical to today's missions.

“Soldiers deserve the best possible situational awareness, communications, optics, sensors and protection, and the SMSS will help power it all and relieve their burden,” said Jim Gribschaw, director of Combat Maneuver Systems at Lockheed Martin Missiles and Fire Control. “SMSS represents much more than a portable charging station; it can carry more than half a ton of the Warfighters’ supplies and can autonomously follow the squad, allowing the Soldier to put down the remote control and focus on the fight.”

Lockheed Martin’s SMSS vehicle will cycle through three test Companies from the 1st BDE, 1 Infantry Division during the Nett Warrior excursion demonstration scheduled in November. During that time, SMSS will maneuver with Soldiers and provide two kilowatts to four kilowatts of power. With the requisite number of chargers, the SMSS is capable of charging 146 batteries within 10 hours.

In addition to six Soldier battery chargers and a complement of batteries, the SMSS will carry and power a Mobile Network Integration Kit to improve communications from the network to the platoon, as well as transport up to 600 pounds of other Soldier gear.

Nett Warrior, managed by the U.S. Army’s Product Manager Ground Soldier, is a set of Soldier-worn, battle tracking technologies that provide dismounted Soldiers with increased situational awareness, better reaction time and reduced risk of fratricide. Nett Warrior is designed for Infantry Brigade Combat Teams. A Nett Warrior-equipped Rifle platoon, along with all of its organic radio power consumers, will consume the power of 140 batteries per day. The collection of batteries required for one 24 hour mission weighs 155 pounds.

Source: Lockheed Martin