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Chemring Mine Detection System To Get U.S. Army Test

By WILLIAM MATTHEWS

British company Chemring showed its new VISOR MINI-HMDS mine detection system, a smaller version of its Husky-mounted ground-penetrating radar, on Oct. 5 at AUSA.

HMDS stands for Husky-Mounted Detection System, made by Chemring division NIITEK. The Husky-mounted system is undergoing operational testing with the U.S. Army, which is using 30 of them in Afghanistan. The Army also placed an order in July for 50 more Husky-mounted systems, which Chemring will deliver by April 2010, said Terry Marsh, vice president of NIITEK.

The smaller version is remote-controlled.

"What we decided was to take the success of that [Husky-mounted] system and miniaturize it because there are areas that are not conducive to a large vehicle but would be extremely well-suited for a smaller robotic system," Marsh said. "It performs as well or better than the large system."

Chemring first demonstrated the smaller version, which is about one-10th of the size of a Husky-mounted system and mounted on a robot that weighs about 60 pounds, with tests last month at the U.S. Army Engineer School. Operational tests in Afghanistan for between two and 10 systems are planned for early next year, Marsh said.

The Army doesn't currently "have anything like this," he said. "What they're using now is like a hand-held metal detector [to find buried mines]. This takes the man out of the loop, takes the individual out of the path of danger, and you can actually use this a lot more efficiently and quicker than you can with the hand-held system."

THE NIITEK VISOR 2500 MINI-HMDS on TALON as shown at AUSA. (SHEILA VEMMER / STAFF)

In its testing at the Army Engineer School, Chemring demonstrated that a spot inspection to detect a mine took about 10 minutes, versus one hour, 45 minutes with a hand-held system, Marsh said.

The radar is housed at the end of a long rectangle mounted on the front end of a robotic vehicle. When it detects a mine, an operator, looking at a computer screen, sees that as an anomaly in the image of the ground the system is inspecting. A cube representing a cutaway of the ground in three dimensions labels the object as a mine.

The system can detect both metal and non-metal mines, Marsh said.

Chemring has sold 21 of the full-size Husky-mounted systems to Canada, and other NATO members also are interested, Marsh said.

"This really is a game-changer, because this technology is not available in the field right now," said John Fleitz of Chemring North America. "It's giving additional capability for these soldiers to actually go out and find IEDs, and we've had very good reports from the field."

Chemring sees the smaller robotic system, which costs about $350,000, as a tool for use on patrol missions or spot inspections. Chemring had the system at AUSA mounted on a TALON robot and sees that as a good fit for the system because the Army has a lot of TALONs, Marsh said.

The Army is using the Husky-mounted system, which costs about $1 million, for route clearance ahead of convoys, he said.