

## Company Working with the Military in the Race to **Detect Hidden Hazards**



Photo from [www.niitek.com/media/NIITEK\\_HMDS.pdf](http://www.niitek.com/media/NIITEK_HMDS.pdf)

**T**hrough apple orchards in the Tangi Valley of Afghanistan, just minutes from insurgent territory, a Husky armored vehicle rolls down a road. Before it is mounted a sophisticated mine-detection system that has successfully found many buried hazards. Behind it and inside it are highly trained combat engineer soldiers.

The HMDS, or Husky–Mounted Detection System, made by Chemring Group division NIITEK, is one of 30 so far deployed in Afghanistan. Fifty more systems will deliver by April 2010. The US Army is putting them to work for route clearance for convoys, for the most part, helping to protect troops and citizens and ensure that supplies get through and infrastructure is unharmed.

Because the HMDS integrates NIITEK's high–performance VISOR™2500 Ground Penetrating Radar (GPR) system with the US Army's rugged Husky vehicle, it ensures safety for operators, as well. Its advanced real-time Automatic Target Recognition algorithms allow operators to use 3–D subsurface visualization to “see” what lies in the road in front of the vehicle. Put to test at home and on the field, NIITEK GPR sensors detect

more targets and have fewer false alarms than other commercial GPRs. “It performs extremely well,” said Terrence Marsh, Vice President of Business Development at NIITEK. “It’s been called a game-changer, but I think the important thing here is that it’s saving lives.”

Finding mines safely has been the mission of Non–Intrusive Inspection Technology, or NIITEK, part of the Chemring Group, since its establishment in 2000. NIITEK develops ever-improving sensors, software, and automatic target recognition (ATR) algorithms, integrated to deliver detection systems that are aligned, accurate, and ready for duty. These systems can be integrated into robotic or operator-driven vehicles of whatever kind are used in the field.

With the continual refinement of the systems, the company has developed ways to find buried explosive hazards, detecting metallic and non-metallic hazards. The “cat and mouse” game on the ground means mine-detection must always stay ahead of those creating explosive hazards. **AE**

*Article provided by Katy Prime, Marketing Specialist, NIITEK, Inc.*