

# Media Advisory



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**For Immediate Release**

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## **TARDEC Robots Provide Safer, High-Tech Inspection Capabilities At Border Crossings And Security Checkpoints**

*Organization To Discuss Use of Robotics at Homeland Security Conference*

DETROIT ARSENAL, WARREN, MI — Border crossings and security checkpoints have become increasingly difficult, dangerous areas for military and law enforcement personnel to patrol in today's threat-filled global arena. As the use of improvised explosive devices (IEDs) and suicide bombers has risen, the need to effectively monitor checkpoints and border crossings during military operations while keeping Soldiers out of harm's way has become increasingly challenging and made security and surveillance a top priority within the Department of Defense.

In response to this challenge, researchers and scientists at the U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC) have been focused on development and deployment of semi-autonomous robotic systems that can do everything from remotely inspecting the undercarriage of vehicles for explosives to patrolling difficult terrain for suspicious or threatening activity.

Now, organizations engaged in Homeland Security activities will have an opportunity to see and learn about TARDEC's autonomous robotic systems firsthand at the Michigan Security Network Market Leadership Conference Nov. 4 at the Hyatt Regency in Dearborn, MI.

TARDEC Associate Director of Intelligent Ground Systems, David J. Thomas, will speak during a conference panel about the benefits of using unmanned robots for border patrol and other sensitive, risky inspection operations. TARDEC will also display two autonomous robot systems, its Spector™ and Omni Directional Inspection System (ODIS) units at its booth at the conference.

The Spector™, developed in conjunction with Autonomous Solutions Inc., through a Small Business Innovation Research (SBIR) contract, is now being manufactured for use in under-vehicle inspections in Iraq and Afghanistan. ODIS, developed in partnership with the DOD Joint Robotics Office, Utah State University and Kuchera Defense Systems, also performs under-vehicle inspections to detect explosives, contraband, and radiological, chemical and biological threats. Both units were developed for military and homeland

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security applications including airport and seaport inspections, hazardous substance detection and first responder surveillance situations.

“Autonomous robotic systems like the Spector™ and ODIS offer military and civilian personnel a modular, mobile, low cost, safe alternative to conventional inspection and patrol operations,” Thomas notes. “These devices can and do save lives while providing security representatives with the most advanced detection and inspection technologies available in the ground systems arena.”

The Michigan Security Network Market Leadership Conference will provide Michigan companies with the opportunity to showcase their products and technologies with homeland security experts, meet decision makers and leadership from key federal agencies, and hear presentations on the opportunities available in cyber security, biodefense and border security sectors.

*Note: TARDEC Associate Director of Intelligent Ground Systems David J. Thomas will participate in a panel discussion on border security Nov. 4 at 12:50 p.m. at the Hyatt Regency Hotel in Dearborn as part of the Michigan Security Network Market Leadership Conference. He will be available to answer media questions after the panel discussion. The Spector™ and ODIS robot systems can be viewed at TARDEC’s conference booth.*

*Photos: Three images are available for use with this advisory. Caption information follows. To download the photos, go to <http://www.tardec.info/pressreleases/>.*

## 11\_2\_09 ODIS System

**ODIS was originally developed by TARDEC to help Soldiers screen vehicle undercarriages for explosive devices, contraband and other suspicious materials at security checkpoints in Iraq and Afghanistan. ODIS is teleoperated by Soldiers at safe standoff distances. (U.S. Army TARDEC photo by John Vala.)**

## 11\_02\_09 ODIS Vehicle Inspection

**As part of the Secret Service’s security plan, TARDEC’s ODIS system was used to screen vehicles for bombs and other threats at the 56th Presidential Inauguration activities in Washington D.C. Jan. 17-21, 2009. (U.S. Army TARDEC photo by John Vala.)**

## 11\_02\_09 Spector Robotic System

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**The Spector is an omni-directional platform designed to perform under-vehicle visual inspections for weapons, explosives, or other contraband, while keeping inspectors out of harm's way. (Photo courtesy of Autonomous Solutions, Inc.)**

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## **ABOUT TARDEC**

Headquartered at the Detroit Arsenal in Warren, MI, TARDEC is the Nation's laboratory for advanced military automotive technology and serves as the Ground Systems Integrator for all Department of Defense (DOD) manned and unmanned ground vehicle systems. With roots dating back to the World War II era, TARDEC is a full life-cycle, systems engineering support provider-of-first-choice for all DOD ground combat and combat support weapons, equipment and vehicle systems. TARDEC develops and integrates the right technology solutions to improve Current Force effectiveness and provide superior capabilities for Future Force integration. TARDEC's technical, scientific and engineering staff lead cutting-edge research and development in Ground Systems Survivability; Power and Mobility; Intelligent Ground Systems; Force Projection; and Vehicle Electronics and Architecture.

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