

## DHS tests new security measures at Logan Airport

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*High-resolution video camera provides unparalleled surveillance*

**BOSTON** – The U.S. Department of Homeland Security's Science and Technology Directorate has launched a pilot project at Boston Logan International Airport to test and demonstrate new video surveillance security technology. The Imaging System for Immersive Surveillance, or ISIS, provides unprecedented, high-resolution 360-degree camera coverage combined with video analytics software-high-tech advancements that address challenges faced by current-generation security systems.

While ISIS is designed for use in any environment where surveillance of large open areas is required, testing the system in an airport environment contributes to the Department's ongoing efforts to enhance aviation security.

DHS selected the Massachusetts Port Authority, the owner and operator of Logan Airport, to host the ISIS pilot, which is part of the DHS Wide Area Surveillance project. The Massachusetts Institute of Technology Lincoln Laboratory in Lexington, Mass., developed the technology; the WAS project is managed by the Pacific Northwest National Laboratory in Richland, Wash.

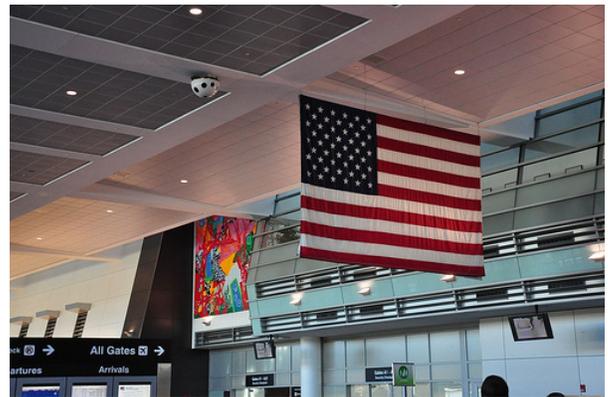
"This surveillance system provides a persistent and high-resolution 360-degree perspective of the airport terminal," said PNNL Project Manager Doug MacDonald. "The system automatically detects abnormal events and helps operators identify suspicious incidents in large, open areas with a resolution equivalent to dozens of HD television monitors."

The ISIS system features include:

- Continuous 100 megapixel video recording of the entire terminal
- Simultaneously access to the live feed for multiple analysts to retrieve digitally captured scenes at any time for forensic review without disrupting the ongoing coverage
- The ability to archive captured video



The Image System for Immersive Surveillance, or ISIS, is currently in use at Logan International Airport, providing unprecedented, high-resolution 360-degree camera coverage equivalent to dozens of HD television monitors. PNNL is managing the Wide Area Surveillance project for the Department of Homeland Security. *Photo courtesy of Bobby Ren*



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- Designation of exclusion zones, or restricted areas where people are not normally present, which can be monitored and scanned for abnormal activity or suspicious items that may have been left behind or removed.

"This is a collaborative effort to bring our nation's leading research institutions together to develop and demonstrate enhanced surveillance technologies," said DHS Program Manager Dr. John Fortune. "DHS welcomes Massport's involvement. Because of its important role in our nation's transportation infrastructure, Logan is an ideal location to conduct the evaluation."

DHS installed ISIS at Logan as a test bed to demonstrate a "proof-of-concept" system and show the utility and capability of the ISIS prototype compared to the standard CCTV systems currently in use. The pilot allows for system testing in an operational environment and evaluation by potential end users. A follow-on second generation system currently in development at Lincoln Laboratory will be considerably smaller, while offering even higher image resolution.

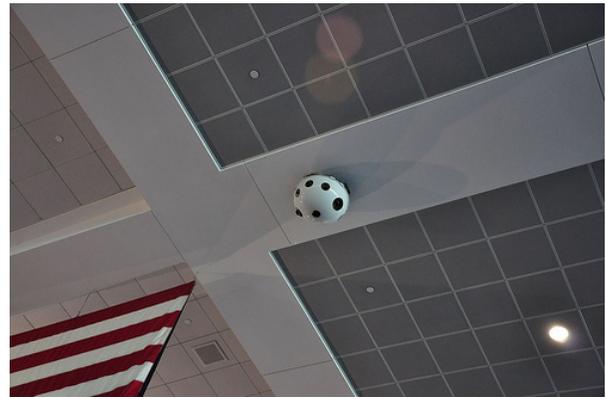
Last month, DHS Secretary Janet Napolitano received a first-hand demonstration of the ISIS technology from Fortune, lab, and airport officials while on a visit to Logan Airport.

"Massport welcomes the opportunity to help bring promising new security technologies to the point where they can be deployed throughout the country to enhance homeland security," said Director of Corporate Security for Massport, Dennis Treece. "This camera system is a great example of a locally-developed technology that can benefit from testing in a real-world, real-time operation."

The effort is part of the DHS Homeland Security Advanced Research Project Agency, a division of S&T that is designed to develop cutting-edge technologies and provide high-payoff advances in capability to the Homeland Security community. DHS has invested approximately \$3 million through HSARPA to develop this technology and install the ISIS prototype at Logan. If successful, the pilot could pave the way for use of the system in other public venues and urban areas.

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