Aviation Security Detection and Automation

As the pace of international travel increases globally, security risks are also growing. At the same time, technological capabilities have surged, enabling the security checkpoint to be reimagined. The future of aviation security is no longer disparate sensors in boxes. It is the integration of data from these security components, leveraged seamlessly to create an elevated level of security and a smooth passenger experience.

OUR APPROACH

Leidos is a global leader in security technology systems, offering a suite of fully-automated and integrated solutions for aviation security. While delivering fast, frictionless and fully-integrated solutions that secure the movement of people and commerce worldwide, Leidos is making travel safer, healthier, and more efficient through our comprehensive security detection solutions.

We enhance aviation security with integrated open-architecture solutions. These help connect devices and transition airport security from disparate management systems to a holistic security management system capable of Artificial Intelligence (AI) and Machine Learning (ML) risk assessments, real-time airport operational information, and automated control functions.

We believe the checkpoint of the future is frictionless screening, where the passenger becomes part of the security architecture. Having all the pieces that make up the security envelope in aviation security enables Leidos to partner with airports and airlines worldwide in a unique way.
OUR CAPABILITIES

Today’s security protocols are efficient and adequate, but there’s room for improvement when it comes to delivering a frictionless passenger experience. Leidos is helping to shape the continuing evolution of screening technologies with AI/ML algorithms across the airport experience. Our security detection and automation products use software-based architectures that are upgradable to meet future and emerging threats from curb to gate.

Our integrated, scalable solutions enable us to provide our current and future customers with tools that optimize their productivity and operating efficiencies, as well as deliver the best security options.

Designed to detect explosives, firearms, drugs, and other contraband, our checkpoint and checked baggage screening products incorporate a variety of proven technologies such as automated, conventional, and X-ray; safe active millimeter wave; metal detection; and energetic materials detection for trace explosives.

Leidos’ Mosaic® integration and software suite help enable seamless travel through the planning and monitoring of passenger flow from curb to gate, while delivering real-time data to decision-makers. Plus, other sophisticated networking technology reduces costs and maximizes resources for efficient security screening.

Widely deployed advanced personnel screening

The ProVision 2®, advanced personnel screening system, enhances security at checkpoints and in any secure environment. Passenger experience with the safe advanced people scanner is convenient, straightforward, and efficient, requiring only a single stationary position during a scan. Leidos’ compact millimeter-wave personnel screener is the most widely deployed, with more than 2,400 systems operational worldwide.

Cabin baggage screening

The Leidos high-performance ClearScan® cabin baggage security screener uses computed tomography technology and advanced algorithms to deliver the highest level of passenger convenience, allowing for liquids and electronics to be kept inside cabin baggage. Aviation regulatory requirements are evolving and creating challenges for traditional checkpoint screening. Smaller and emerging threats like homemade explosives (HMEs) are of increasing concern. New regulatory guidelines that include lifting restrictions for liquids in cabin baggage will greatly benefit travelers but place a greater burden on security equipment. This is all occurring in an airport environment where throughput demands are increasing, and operational budgets are under pressure. Leidos achieves a dramatic improvement in threat detection while also imparting a number of operational improvements to the passenger experience, throughput, and security.

This offers the highest level of passenger convenience, allowing for liquids and electronics to be kept in cabin baggage. High-resolution imaging assists operators in finding prohibited items and weapons quickly.

Efficient, automated tray handling system

Leidos’ leading automated tray handling system, ProPassage®, vastly reduces queue times, enhances operational efficiency, lowers staffing levels, and improves the working environment for checkpoint personnel. Combining this system with our antimicrobial trays and UV-C sanitization systems helps improve operators’ and passengers’ safety in the high-touch area of the airport checkpoint.
In addition, Leidos offers a fully-integrated suite of software products that provide a holistic view of airport checkpoint systems and deliver real-time data to increase efficiency while enhancing passenger experience and security.

**Desktop and handheld trace detection**

Drawing on its rich experience in advanced ion technologies, Leidos has numerous advancements in trace detection technology that make its systems easier to use, less costly to own, and yield better detection results than competing products. The B220 HT® is defining the new standard in trace detection. It performs simultaneous detection of a wide variety of explosives and drugs and delivers results in seconds.

**Intelligent, automated baggage handling solutions**

Leidos meets the stringent explosives detection standards of regulatory agencies worldwide and is a leader in fully integrated and automated baggage handling solutions. The MV3D® explosive detection system delivers an unbeatable combination of innovative technology, superior threat detection, reliable performance, and cost efficiency while offering high-speed performance as it securely scans up to 1,800 bags per hour. Providing a full suite of advanced technology/computed tomography (AT/CT) systems for hold baggage screening, from stand-alone to high-throughput in-line configurations, along with innovative automated solutions, delivering the highest levels of security and operational efficiencies. Leidos supplies airports from North America to Asia and everywhere in between, having installed close to 2,000 in-line, automated, high-throughput checked baggage security systems.

**PROVEN SUCCESS**

With the largest install base in 80+ countries, Leidos’ in-depth understanding of our government agencies and private security partners seeking solutions that bring together the latest in security technology with a fast, frictionless experience allow us to deliver innovative solutions that immediately provide real value, some of which include:

- The B220 – HT desktop explosives and narcotics trace detector is the only fully certified and deployed non-rad explosives trace detection. The system is Transportation Security Administration, European Civil Aviation Conference, Civil Aviation Authority China certified and the ONLY ETD procured by TSA in the last 7 years with over 8,000 systems deployed, capturing 80% of the market share.

- The TSA Tier II approved and ECAC STD 1 and 2 approved ProVision 2 millimeter wave passenger screener has been deployed broadly for primary screening and boasts approximately 85% market share, with well over 1 billion scans having been performed worldwide.

- Operational on 5 continents with over 160 deployments, the ClearScan cabin baggage explosives detection system was the first to receive ECAC EDS C3 approval and deployed the first CT technology allowing passengers to keep certain electronics and liquids in their bags, speeding check-in while maintaining significantly lower false alarm rates than traditional systems.

- ProPassage, our automated tray return system, includes over 730 installations worldwide, offering airports modernization driving efficiency / throughput / passenger experience / low touch
WHY PARTNER WITH LEIDOS
With the growing number of threats to domestic and international security, our technology has kept up with ongoing threats for more than 20 years. Leveraging a full portfolio, Leidos has more than 24,000 products deployed across 120 countries, helping customers around the globe address emerging and evolving threats. Our leading cutting-edge solutions, combined with our new algorithms for threat detection and our technology’s AI advancements, will allow us to continue to stay ahead of evolving global security needs. As a current leader in airport security, Leidos is improving air travel today by offering new solutions to its most fundamental issues: ensuring speed and convenience without compromising security.

NEXT STEP
As technology advances, the opportunities to improve security and the passenger experience grows exponentially. Leidos will continue to evolve in this critical market, linking the technologies of today to achieve a more connected tomorrow, making air travel safer, healthier, and more efficient with innovative technologies in aviation security.

FOR MORE INFORMATION
For comprehensive security detection technologies that optimize speed, seamlessness, and satisfaction, choose Leidos. Learn more at leidos.com/security-detection.