

DHS Science and Technology Directorate Transportation Security Laboratory

Expertise with contraband detection technologies

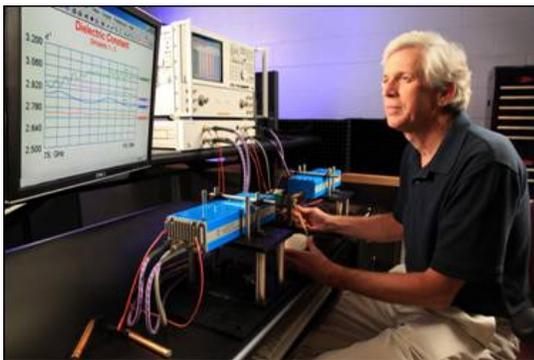
Established in 1992 at the William J. Hughes Technical Center, Atlantic City International Airport, the TSL's 12 acre secure campus includes specialized explosive storage and handling areas and a multi-laboratory infrastructure designed for test and evaluation of technology for explosives and contraband detection and blast mitigation.

Mission and Vision

The mission of the Transportation Security Laboratory (TSL) is to apply our scientific and technical acumen to advance explosives and contraband detection technologies for the field. TSL's vision is to serve as the lead scientific and technical agents for contraband detection solutions supporting the homeland security enterprise.

Impartial, Independent Oversight

TSL provides expertise, specialized facilities and test protocols necessary to develop and evaluate screening technologies. We are the only laboratory in the United States with a legislative mandate to conduct certification/qualification testing of aviation explosive detection solutions. All aviation security equipment has passed through TSL for developmental assistance, qualification and and/or certification testing.



Subject Matter Expert obtains dielectric measurements of explosives.

Subject Matter Expertise

TSL's team of physicists, chemists, engineers, research psychologists and mathematicians is internationally recognized for its unique ability to advance detection technology from conception to deployment through applied research, test and evaluation, assessment, certification and qualification testing.

Flexible Talent Pool

TSL has extensive experience with evaluation of explosive detection and mitigation technologies and associated processes. Since TSL's expert staff can be rapidly focused on an emerging threat scenario, TSL is a cost-effective resource with which to strengthen the homeland security enterprise.

Repeatable, Accredited Processes

TSL's Technology Optimization Partnerships (TOPs) process is a public-private partnership designed to expedite the maturation and deployment of technologies. TSL has 22 active cooperative research and development partnerships with industry and academia. The TOPs process helps original equipment manufacturers complete developmental testing and allows them to reduce time to market.

Vulnerability/Mitigation Capability

TSL's world famous vulnerability and mitigation experts test, analyze, and model the effect of explosions on aircraft test structures. Results from studies are used to develop and validate processes and technologies that reduce the effect of improvised explosive devices.

Certification & Qualification Test Services

TSL's Independent Test & Evaluation group provides certification/qualification tests and laboratory assessments that provide DHS components with critical detection performance information. Additionally, the Developmental Test and Evaluation group provides rigorous assessment and subject matter expertise to industry, academia and other technology developers so they may mature their systems.



Certification testing of checked bag explosive detection system.



**Homeland
Security**

Science and Technology

To learn more about the Transportation Security Laboratory, contact Susan F. Hallowell, Director, at TSLinfo@dhs.gov