

ADSA14: Development & Deployment of Fusible Technologies for the Checkpoint

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(Frank Cartwright)



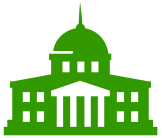
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Adapting to Evolving Aviation Security Challenges

The evolution of the threat environment demands a well-informed, highly agile, and well-networked collection of partners and stakeholders to anticipate, detect, target, and disrupt adversaries that threaten the freedom of air travel for people and commerce.

Situation



The United States and its citizens currently live in a dynamic threat environment, where our Nation continues to face adversaries at home and abroad who seek to inflict harm and defeat our aviation security measures.

Complication



The vast majority of the TSE fleet consists of legacy technology, resulting in equipment and detection capabilities becoming technically obsolescent if not replaced or upgraded. Without innovations to the checkpoint system, TSA will be unable to fulfill its goals for the future of the checkpoint and continue to implement a reactive, rather than proactive, approach to threats and technology trends.

Solution



To address today's threats and increase security effectiveness in a complex environment, TSA is focused on deploying an effective, adaptive, and flexible system of security capabilities and technologies in cooperation with internal and external stakeholders.



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TSA's Ongoing Efforts to Advance Checkpoint Security

The Transportation Security Administration (TSA) aims to achieve a shared vision among Congressional, industry, Department of Homeland Security (DHS), and TSA stakeholders to address security technology needs, deploy cutting-edge security capabilities, and increase efficiency and security effectiveness in American aviation security.

Initiatives

BIOMETRICS

TSA is exploring new technologies to enhance the authentication of passenger's identity at TSA security checkpoints

INTELLIGENT ALGORITHMS

Utilize the latest offering of cognitive computing capability to explore the potential application across the Agency's multi-layered security environment.

PRIZE COMPETITION(S)

Platform for predictive modelling and analytics competitions where companies/researchers post their data and statisticians and data miners to produce the best models

CYBERSECURITY

As TSA continues to move towards a network-connected screening environment, many IT security challenges need to be addressed proactively to ensure the security of deployed TSE

WIDEBAND

Wideband capability for AIT systems will provide improved Inspire threat detection and reduce false alarm rates

STIP ENABLEMENT

TSA is actively engaging with Industry to facilitate STIP integration and connectivity. Several proof of concepts are planned for evaluations.

3RD PARTY ALGORITHM

Design and development of a vendor neutral ATR that processes data from multiple carry-on scanners regardless of vendor or model

NEXTGEN X-RAY

Next Generation X-ray systems will provide enhanced capabilities at the checkpoint, such as automated detection, multi-dimensional visual screening, and improved image resolution on bags

DETECTION STANDARDS

TSA continues to upgrade and improve technology detection standards to address threats and increase security effectiveness in a complex environment

NON-CONTACT ETD AND MASS SPECTROMETRY

Mass spectrometry results in discrimination improvement over traditional IMS and significant false alarm reductions

Outcomes

Innovative Technologies



Increased transparency with industry stakeholders, those supporting both TSA and DHS S&T, will help guide investment decisions for future capabilities that enable TSA to adapt to evolving security threats in the most effective and efficient ways possible

Systems Architecture



A comprehensive Systems Architecture will allow TSA and OSC to proactively identify capability gaps and define targeted screening capabilities to address those gaps by enabling an integrated and modularized security screening system

Requirements Tool



A technical requirements management tool will provide a standardized and repeatable requirements management process, enhance communication amongst stakeholders during a project's lifecycle, and improve TSA ownership traceability



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Questions?



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