TSA Intermodal Division (IMD)
Airport Consultants Council (ACC) Security Capabilities Workshop

July 23-24, 2019
Through **collaborative partnerships**, Intermodal Division (IMD) continues to provide security technology recommendations and **solutions for air cargo, public areas, and critical infrastructure** by evaluating existing and developing requirements for new security technologies **to safeguard the traveling public now and in the future**.

**Guiding Documents**

IMD guides its strategic mission and focus areas are based on **the 9/11 Act**, **the FAA Reauthorization Act**, **Executive Guidance**, **the National Infrastructure Protection Plan (NIPP)**, and **the TSA Administrator’s (ADM) Intent** through 2020.

**Focus Areas**

- **Integration**
  - Consolidating knowledge and expertise from technical experts and industry partners to more effectively inform IMD’s recommendations

- **Partnerships**
  - Expanding partnerships with internal and external stakeholders to promote industry engagement and improve security technologies

- **Path Forward**
  - Recognizing and prioritizing new and emerging threats in IMD’s mission space to find innovative solutions for security technologies
Surface Security Technology (SST)
SST Overview

Mission
Evaluate advanced technologies and facilitate industry awareness to help address identified surface transportation security capability gaps.

Domains
Mass Transit  Freight Rail  Public Areas  Pipeline  Maritime  Infrastructure Protection  Highway Motor Carrier

Focus Areas
Integration
Coordinating with government agencies, technical experts, and end-users to represent a variety of stakeholders’ perspectives

Partnerships
Communicating technology testing results to stakeholders in addition to traditional test bed agreements to optimize utility of a limited budget

Path Forward
Facilitating integration of new and advanced technologies into high-risk transportation venues to address emerging threats
RCA IMD’s Security Technology Assessments Approach

IMD leverages its robust abilities in capability gap identification, scouting, technology assessment, evaluation, and implementation assistance to integrate security technologies into testbeds.

**RCA IMD Testing & Evaluation Process**

- Gap Analysis
- Needs Generation
- Scouting
- Laboratory Evaluation
- Field Pilot
- Implementation Assistance
- Op. Use

**Impacts Achieved**

- Managed over $90M of Other Transaction Agreements (OTAs) to deploy infrastructure protection technologies to airports
- Consolidated inputs from over 150 stakeholders to generate and address surface technology capability gaps
- Assessed nearly 100 advanced surface technologies in over 15 high-risk mass transit venues
- Communicated FOUO test results from over 50 technologies annually through IMD’s Sensor Catalog

RCA IMD evaluates security solutions in support of the 9/11 Act, FAA Reauthorization Act, Executive Guidance, the National Infrastructure Protection Plan (NIPP), and the TSA Administrator’s Intent.
SST coordinates with various US federal agencies and international entities through its management of working groups (WGs) and integrated project teams (IPTs) to exchange technical expertise and foster collaboration.

### IMD Transportation Research & Development WG (RDWG)

<table>
<thead>
<tr>
<th>Generates technology capability gaps to inform R&amp;D project-level requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 120 members representing over 40 entities including transportation end-users, industry experts, and federal, state, and local agencies</td>
</tr>
</tbody>
</table>

**Members**

**Functions**

- Promotes collaboration across end-users to share CONOPS and security best practices to mitigate gaps
- Addresses 13 capability gaps including the emerging Unmanned Aircraft System (UAS) threat

### Critical Infrastructure Protection IPT

<table>
<thead>
<tr>
<th>Assesses individual risk-mitigating technologies for transportation critical infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicates test results to end-users through the Sensor Catalog to inform end users about technology effectiveness</td>
</tr>
<tr>
<td>Helps provide end-user awareness to DHS grants funding opportunities that aid security preparedness</td>
</tr>
</tbody>
</table>

**Members**

**Functions**

### Detection at Range (DaR) IPT

<table>
<thead>
<tr>
<th>Identifies uses for current DaR marketplace systems through governmental collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinates across technical experts to strategize expansion of DaR technology</td>
</tr>
<tr>
<td>Helps identify proper CONOPS to align with DaR technology use</td>
</tr>
</tbody>
</table>

**Members**

**Functions**
Partnerships with End Users

IMD is introducing three new Mass Transit testing partners in FY19 to an already extensive set of surface transportation security partnerships across the United States.

Potential new FY19 MTTB partners include:

- **Atlanta**
- **Los Angeles**

Through formal Memoranda of Agreement (MOA), IMD partners with representative and higher-threat transportation venues to coordinate the installation, operation, and maintenance of TSA-sponsored test sites.

**TSA Benefits**
- Collecting end-user requirements and feedback
- Access to technology testing in live, realistic environment

**End-User Benefits**
- Exposure to next-generation security solutions
- Access to TSA expertise on suitable technologies to address end-user capability gaps

**TSA Benefits**
- Collecting end-user requirements and feedback
- Access to technology testing in live, realistic environment

**End-User Benefits**
- Exposure to next-generation security solutions
- Access to TSA expertise on suitable technologies to address end-user capability gaps
IMD’s annual Sensor Catalog facilitates industry awareness of advanced security technology solutions, resulting from extensive laboratory and field testing with technical experts, vendors, and law enforcement end users.

**The Sensor Catalog enables surface stakeholders to:**
- Make more informed technology investment decisions
- Tailor Concept of Operations (CONOPS) to their unique environments
- Develop improved grant applications with a greater understanding of solution applicability

**The Sensor Catalog contains:**
- 11 years of surface security technology assessments
- 35 Commercially Available Technologies
- 19 Legacy Systems
- 17 Demonstrations of Security Technologies Since FY16

**Technology Categories**
- Baggage Screening
- Person Screening
- Intelligent Video & VPMS
- Intrusion Detection
- Vehicle Screening
- Trace Detection
- Rail Undercarriage Screening (RUS)
IMD Stands Ready to Assess Technologies and Risk

IMD is prepared to identify and document technology capability needs supporting TSA’s UAS-related missions and fulfill public law requirements to enable designating Core 30 airports as Covered Facilities.

Initial Candidate Assessment Sites & Rationale

**MIA**

- Strong relationship through participation and formal OTA for ongoing IMD Airport Perimeter Pilot
- Miami PD and Miami Port Authority have expressed interest in equipping assets with UAS security technology
- Ranks highly in IMD’s Airport UAS Risk Prioritization Model

**DFW**

- Explicit FSD & airport authority interest in cost-shared partnership
- Already has existing detection system in place and is interested in partnering with TSA and FAA
- Ranks highly in IMD’s Airport UAS Risk Prioritization Model
Airport Infrastructure Protection (AIP)
**Mission**

Provide airports with infrastructure protection expertise to **improve situational awareness capabilities and channel airport security and efficiency.**

**Domains**

- **Airport Public Areas**
- **Exit Lanes**
- **Airport Perimeter**

**Focus Areas**

**Integration**

Secured funding for management of remaining CCTV Enhancement Projects, **mitigating the risk of de-obligating $30M**

**Partnerships**

Partnering with local airport authorities to design, conduct, and finalize perimeter protection projects that **increase airport security**

**Path Forward**

Establishing UAS detection testing, perimeter protection, and exit lane projects with additional funding to enhance security technology
Exit Lane Data Collection Site Selection

Background

- FAA Reauthorization Act Division K section 1920 authorizes $15M a year for two years for “a pilot program to implement and evaluate the use of automated exit lane technology at small hub airports and nonhub airports”
- While the appropriation of funds is being considered, IMD will conduct limited data collection at selected airports, then provide analyzed data to other airports as appropriate

Exit Lane Solution Categories

- Open Lane with Guard
  - Example: Eagle Security Group’s Eagle1 Portals
  - (Source: TSA)

- Interlocking Doors
  - Example: Gunnebo’s PasSec Lanes (Source: Gunnebo Entrance Control, Inc.)

- Technology-Enhanced Security Force
  - Smart One-Way Door
  - Example: BAS Exit Lane Monitoring System (Source: BAS Strategic Systems, Inc.)
  - Video Analytics
  - Example: Custom Application
  - Other Sensors
  - Example: FES CLANE (Source: Flight Sensors and Systems, Inc.)

- Custom Multi-Layer
  - Example: Custom Application
  - Multi-Layer Portal
  - Example: Custom Application
Air Cargo Requirements Branch (ACRB)
**ACRB Overview**

**Mission**
Develop air cargo security policies and requirements to *promote aviation security collaboratively with stakeholders, reducing the risk of catastrophic terrorist attacks.*

**Domains**
- Air Cargo
- Air Cargo Screening Facilities

**Focus Areas**
- **Integration**
  - Identifying and distributing capability gaps to inform internal and external policy improvements
- **Partnerships**
  - Engaging partners *by sharing best practices* and feedback on policy requirements to maintain strategic partnerships
- **Path Forward**
  - Collaborating within TSA to *clarify, align, and update* domestic and international air cargo procedures to reduce the risk of attacks

*Transportation Security Administration*
Capabilities Assessment & Qualifications Branch (CAQB)
CAQB Overview

Mission

Collaborate with industry to develop requirements and qualify technologies to address identified air cargo screening security capability gaps.

Domain

Air Cargo

Air Cargo Screening Facilities

Focus Areas

Integration

Collaborating with technology manufacturers to increase security technology device diversity in the air cargo screening environment

Partnerships

Collecting infrastructure protection data from all cargo carrier sites to enhance security technology research and development efforts

Path Forward

Implementing EDS pilot to determine suitability of EDS in air cargo environments and to improve air cargo security in the U.S. and abroad
CAQNB published an updated version of the Air Cargo Security Technology List in FY19 to reflect updated air cargo security technology standards, kickstarting efforts to promote with internal and external stakeholders.

### 2019 ACSTL Technologies

<table>
<thead>
<tr>
<th>Technology</th>
<th>Qualified</th>
<th>Approved</th>
<th>Grandfathered</th>
<th>In Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Computed Tomography (non-CT) XRAY Technology</td>
<td>39</td>
<td>1</td>
<td>58</td>
<td>16</td>
</tr>
<tr>
<td>Explosive Trace Detection (ETD) Technology</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Explosive Detection System (EDS) Technology</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Metal Detection (EMD) Technology</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

### ACSTL Promotion Efforts

1. Collaborating with Strategic Sourcing Program Office to promote the ACSTL across DHS
   - Publishing SSI and non-SSI versions of the ACSTL to make technology information more accessible to end-users
2. Increasing industry understanding of how IMD defines qualified, approved, and grandfathered devices to increase transparency