TSA Innovation Task Force (ITF)

Innovative Demonstrations for Enterprise Advancement (IDEA) Broad Agency Announcement (BAA) | **Industry Day**

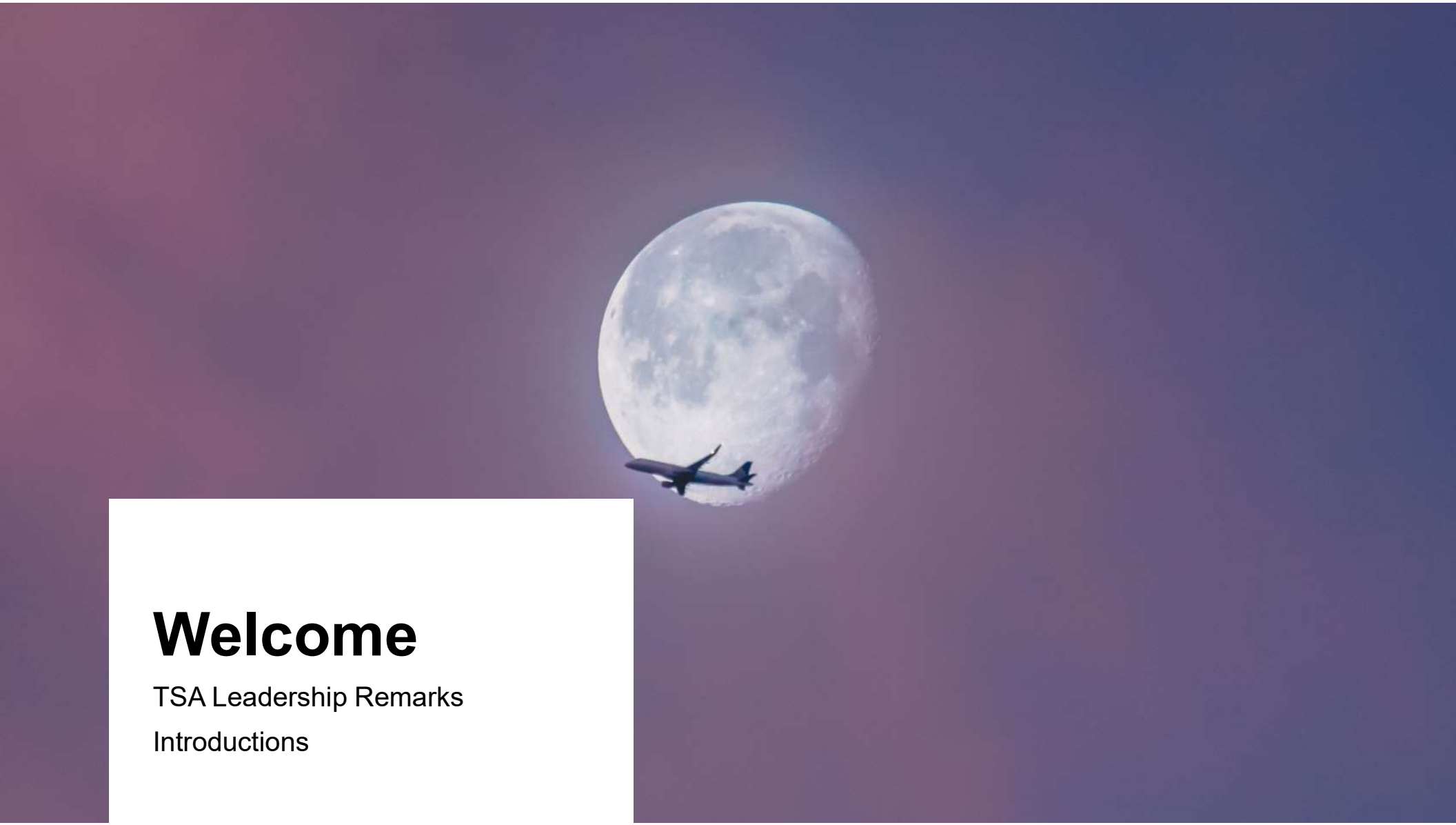
December 2019

Transportation Security Administration

RCA | REQUIREMENTS & CAPABILITIES ANALYSIS

Run of Show

- 9:00 — WELCOME
- 9:30 — IDEA OVERVIEW
- 9:50 — DEMONSTRATIONS
- 10:20 — CAPABILITY MANAGER PANEL
- 11:05 — FIELD PERSPECTIVES PANEL
- 11:40 — Q&A AND CLOSING



Welcome

TSA Leadership Remarks

Introductions

WELCOME

Stacey Fitzmaurice

Executive Assistant Administrator (EAA)

Operations Support (OS)

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WELCOME

Keith Goll

Deputy Assistant Administrator (DAA)

Requirements and Capabilities Analysis (RCA)

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WELCOME

Mara Winn

Acting Division Director (DD)
Innovation Task Force (ITF)

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WELCOME

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IDEA Overview

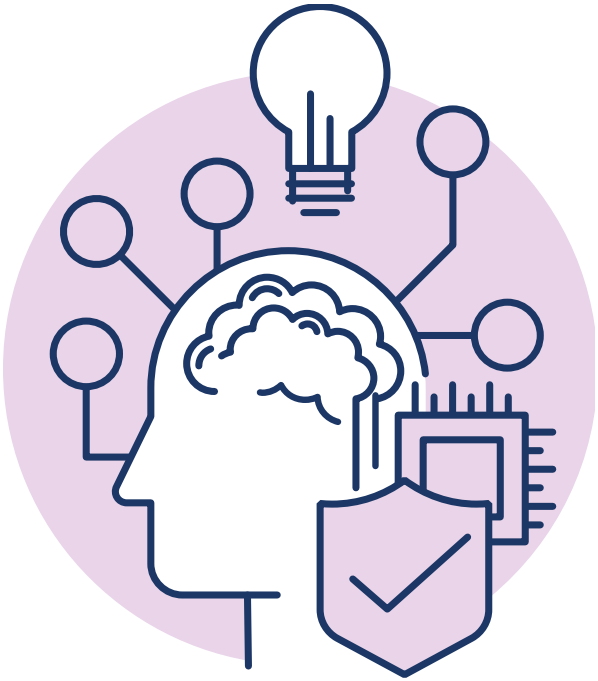
BAA Problem Statements

Review and Selection Process

Will Hastings

IDEA OVERVIEW

The IDEA Broad Agency Announcement



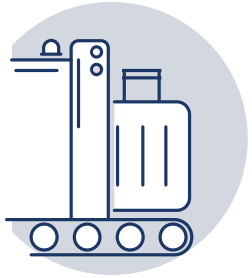
The Innovative Demonstrations for Enterprise Advancement (IDEA) Broad Agency Announcement (BAA) is the solicitation method traditionally used by ITF. The IDEA BAA seeks to identify emerging **people**, **process**, and **technology** capabilities for demonstration in live airport environments. The BAA serves as the **formal**, **competitive intake method** for ITF-led solution demonstrations to capture operational data and inform future requirements. The IDEA BAA seeks solutions that:

- **Align to the TSA Mission**
- **Address TSA Capability Gaps**
- **Improve Security Effectiveness**
- **Improve Screening Efficiency**
- **Enhance the Passenger Experience**

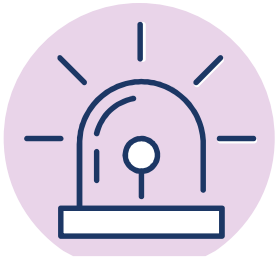
Will Hastings

IDEA OVERVIEW

IDEA Targeted BAA 2019 Problem Statements



Portable Screening (On-Person and Accessible Property)
How can TSA conduct primary screening of employees and passengers across various areas in the airport environment using portable solutions?



Alarm Resolution (On-Person, Accessible Property, and Checked Baggage)
How can TSA, while conducting on-person, accessible property, and checked baggage screening, perform alarm resolution via secondary screening without the need to physically pat-down passengers or directly collect a trace/particulate sample of the alarmed item/substance?

Will Hastings

IDEA OVERVIEW

BAA Submission & Selection Process

01 Industry Exchange

Engage with industry stakeholders at TSA industry days, events and conferences

Inform vendors about solicitation opportunities and **current problem statements**

02 Whitepaper Submissions

Vendors **submit whitepapers** that summarize their **TRL 6+ solution**

ITF accepts:

- Whitepapers up to 5 pages
- Slide decks up to 15 slides
- Videos (with transcript) up to 5 minutes

03 Whitepaper Reviews

Vendor whitepapers are subject to a **technical and a panel review**

Submissions are assessed for potential impact, feasibility, and problem statement alignment

Selected vendors will be notified

04 Vendor Pitches

Selected vendors **pitch their solution** via phone or video conference

A **question-and-answer** session with TSA subject matter experts follows the pitch

05 Selection for Demo Planning

TSA leadership and subject matter experts review all submission information to **determine the solution's suitability for ITF demonstration**

Selected vendors will be notified

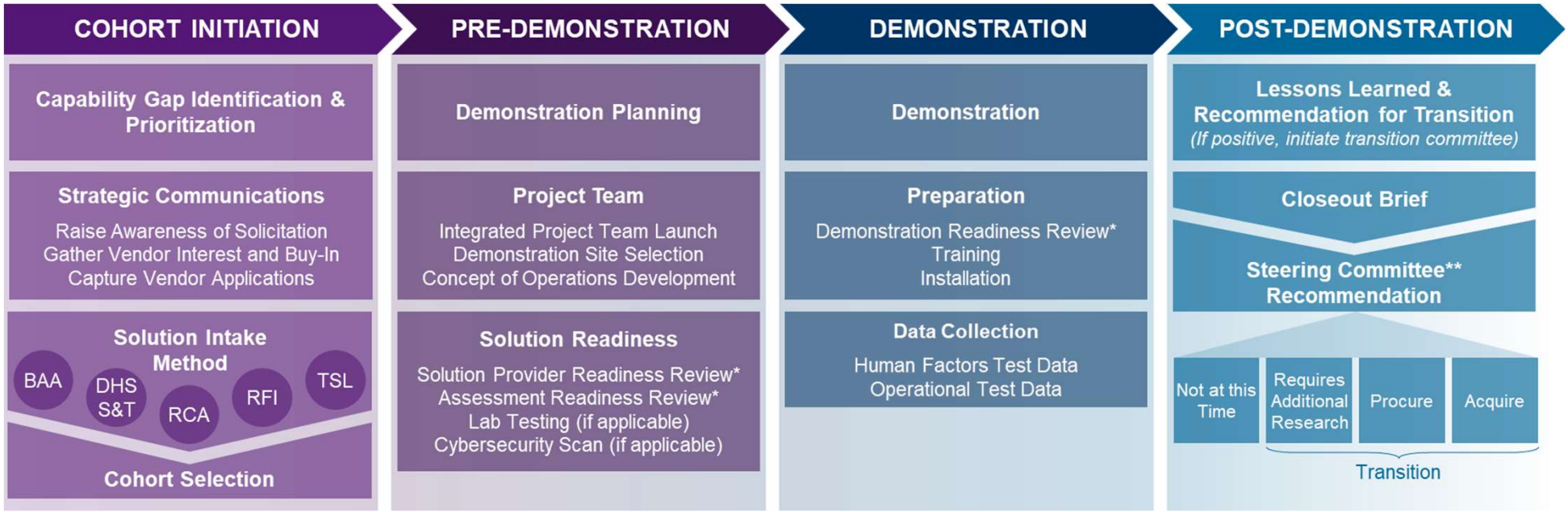
Demonstrations

Demonstration Lifecycle

Previous and Current Demonstrations

Steve Coda

ITF Solution Demonstration Lifecycle



*Demonstration Milestone Deliverable
**As referenced in the TSA Systems Acquisition Manual (TSAM)

Steve Coda

ITF DEMONSTRATIONS

Previous ITF Demonstrations

Accessible Property - *Automated Screening Lanes (ASL)*
MacDonald Humfrey, Scarabee, Vanderlande
Integrates baggage screening to increase throughput, improve bag search hand-off, and reduce manual effort required by officers. This was ITF's first demonstration, and has since been deployed broadly by TSA.

Identity Management - *Biometric TDC (Phases I – III)*
CBP Traveler Verification System (TVS)
Uses a mobile device connected to US Customs and Border Protection's (CBP) biometric database to confirm passenger identity. This was the first collaboration of its kind between TSA and CBP.

Accessible Property - *Computed Tomography (CT)*
Analogic, IDSS, L3, Smiths Detection
Improves upon currently used X-ray imaging by providing a 3D image of carry-on luggage. The CT capability was acquired by TSA and the procurement process has since been enabled by the US Congress.

Alarm Resolution - *Explosive Trace Detection*
Rigaku
Integrates trace detection and identification capabilities into a single unit.

Accessible Property - *Training Enhancement*
ProDetect
Combines simulator-based and online training. This open architecture, customizable, training solution will inform future agency-wide CT training efforts, and has moved to Phase II for demonstration.

Specialized - *Planning & Staff Allocation*
Copenhagen Optimization
Forecasts passenger throughput to better plan checkpoint staffing and operations to optimize lane performance and staff scheduling. Following demonstration, this tool was referred to Security Operations.

Steve Coda

ITF DEMONSTRATIONS

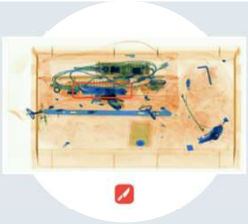
Current ITF Portfolio

On-Person - *WTMD and AIT Combined System**
CEIA United States, Ltd.
Walkthrough Metal Detector (WTMD) that incorporates with existing L3 or Rohde & Schwarz AIT system, merging images from both systems.

On-Person - *Shoe Analyzer**
CEIA United States, Ltd.
ETD automatically detects the presence of metallic and non-metallic threats in passenger shoes.

On-Person - *Enhanced Advanced Imaging Technology (eAIT)**
Rohde & Schwarz
On-person screening technology that allows passengers to use a relaxed stance during screening and reduces false alarms relative to legacy systems.

Accessible Property - *Common GUI**
Vanderlande Industries, Inc.
Open platform and common GUI for x-ray and CT scanners that allow for the integration of 3rd party algorithms paired with existing hardware.



Accessible Property – *Automated Threat Recognition**
Synapse Technology Corp.
Automated Threat Recognition (ATR) technology flags threats through machine learning that adapts to TSO decisions over time.

Specialized- *Redefining the Passenger Experience**
Adobe Systems Federal, LLC
Combination of digital signage and interactive screens to deliver personalized experiences to all passengers on their own devices.

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*Indicates that solution demonstration was sourced from the division's third annual Broad Agency Announcement (BAA), Innovative Demonstrations for Enterprise Advancement (IDEA).

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ITF DEMONSTRATIONS

Current ITF Portfolio

On-Person - *Detection at Range*
ThruVision
Enables screening authorities to detect concealed metals, non-metals, liquids, gels, and powders at a range of up to 25 feet

Specialized – *Customer Movement*
CrowdVision (previous LAS pilot)
Determining operational requirements for crowd movement solution to meet Congressional mandate that TSA provide information on wait times at each security checkpoint

Identity Management - *Enhanced Document Inspection (EDI)*
Zarbeco LLC
The Zarbeco Mi-Scope provides enhanced magnification capabilities to identify fraudulent identification during passenger screening

On-Person – *Walk-through On-Person Screening*
Rohde & Schwarz
Walk-through on-person screening system that utilizes ultra-wide band millimeter wave technology to facilitate the real-time detection of on-body concealed threats

Specialized - *Digital Signage*
Synect
Displays animated media content of divestment procedures, estimated wait times, and other information traditionally relayed by the TSO. After demonstration at SFO, United Airlines elected to maintain three of the units.

Alarm Resolution – *Mass Spectrometry Explosive Trace Detection (ETD)*
1st Detect
Mass spectrometry Explosives Trace Detection (ETD) that detects multiple peaks for distinct compound identification.

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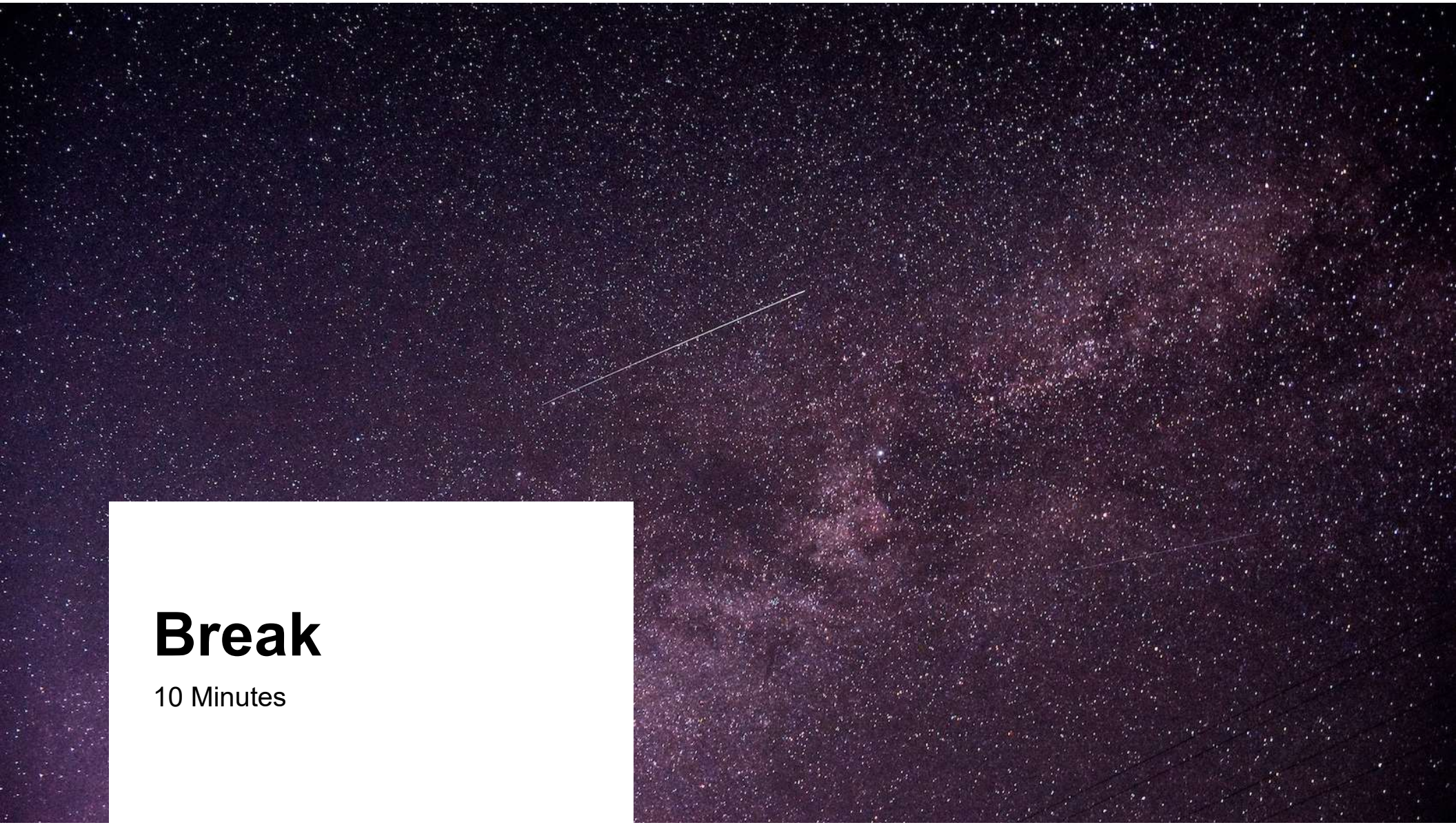


Break

10 Minutes

Capability Manager Panel

DISCUSSION

Capability Manager (CM) Panel

Matt Gilkeson

Panel Moderator

Dan Williams

Capability Manager

On-Person Screening

Frank Cartwright

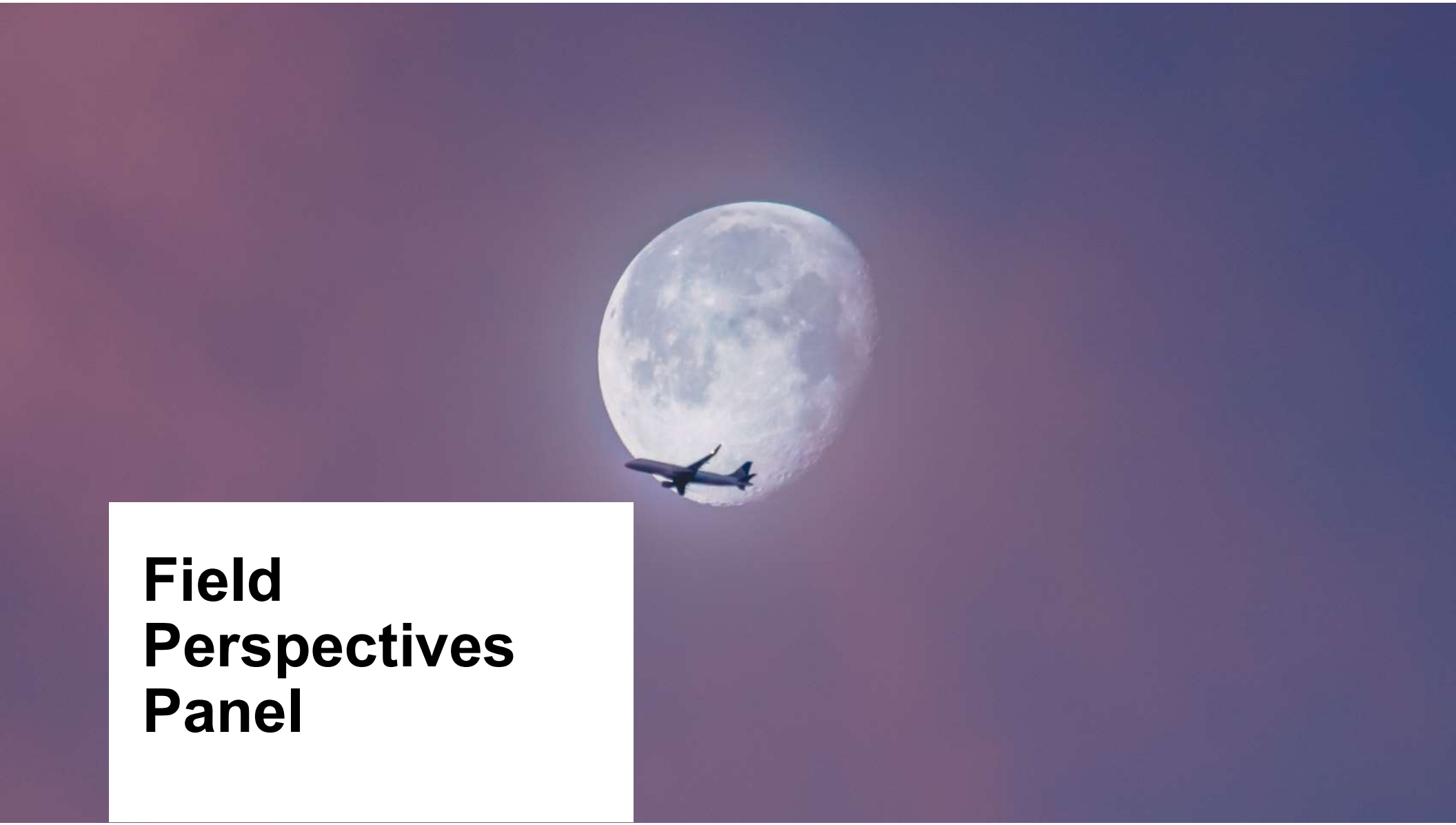
Branch Manager

Capability Development & Integration (CDI)

Kevin Chan

Capability Manager

Alarm Resolution



Field Perspectives Panel

DISCUSSION

Field Perspectives Panel

Jessie Fiebig

Panel Moderator

Scott Johnson

Federal Security Director (FSD)

Dulles International Airport (IAD)

Rashad Smith

Security Operations (SO)

Insider Threat Team

Ron Mildiner

Deputy Federal Security Director (DFSD)

Ronald Reagan Washington National Airport (DCA)

Crowd Movement Technology

Jessie Fiebig

CROWD MOVEMENT TECHNOLOGY

Wait Time Requirement

The **FAA Reauthorization Act of 2018*** requires TSA to *"make available to the public **information on wait times** at each security checkpoint…**online and in physical locations** at applicable airport terminals."* The requirement in the Act, **due for completion on April 5, 2020**, provides several challenges for TSA which require vendor input and collaboration**.**

ITF Requested Information

TSA is seeking whitepapers, limited to three (3) pages, on applicable crowd movement technologies, including:

1. Depiction of how technology tracks customer movement and reports the data to an external source (including data format)
2. Vendor protections of the privacy of the passenger and meets TSA's information security requirements
3. Attached data flow diagram and system security plan, if company has this in place

This request will **NOT** lead to a demonstration, but TSA may reach out to discuss submitted technologies.

This information request **will close on December 21, 2019**

*Refers to HR302, Section 1922

Closing

CLOSING

Mara Winn

Acting Division Director (DD)
Innovation Task Force (ITF)

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THANK YOU.

Innovation Task Force

tsa.gov/itf

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