Test and Evaluation

The Key to Successful Acquisition Outcomes

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DHS Test & Evaluation Year in Review

- FEMA Logistics System
- USCG Polar Security Cutter
- CBP TECS Modernization
- CWMD Radiation Portal Monitor
- CBP Mobile Surveillance System
- CBP Mobile Surveillance System
- USCG National Security Cutter
- USCG MH-65
- CBP Wall
- TSA Checkpoint CT

Aircraft Vulnerability
LFT&E at APG
FEMA Logistics Supply Chain Management System (LSCMS)

- End-to-end supply chain management for critical disaster assets and commodities
- LSCMS provides situational awareness and in-transit visibility into the entire supply chain, request for assets and commodities, orders to FEMA and partners, transportation, inventory management
- Completed FOT&E August 2018
USCG Polar Security Cutter (PSC)

- The U.S. has vital national interests in the polar regions
- U.S. Coast Guard Heavy Icebreaker Polar Star
  - Commissioned 1976
  - Only active heavy icebreaker in the fleet
  - Five Operation Deep Freeze deployments to resupply McMurdo Station in Antarctica
CBP TECS Modernization

- Primary traveler screening tool at 329 Ports of Entry (POE) in the U.S. and 15 preclearance offices outside the U.S.
- Cyber-focused FOT&E occurred in operationally active land port of entry, CBP data centers, and CBP SOC over four months

Land POE at Detroit, Michigan
Countering Weapons of Mass Destruction (CWMD) Radiation Portal Monitor Replacement Program

- Approximately 1,300 RPM-RP systems currently fielded
  - Interdict illicit radiological/nuclear materials at sea and land ports of entry
- Detection characterization and environmental testing
  - White Sands Missile Range
  - DTRA TEAMS site, Albuquerque, New Mexico

Chamber Testing, WSMR
CBP Mobile Video Surveillance System (MVSS)

- Mobile area surveillance, day and night
- In remote, rural, and urban areas at a range of up to 5 miles
- OT&E conducted September 2018
- MVSS is undergoing Mobility, Environmental, and Vibration Testing in DoD facilities at Aberdeen Proving Ground (APG), Maryland
USCG National Security Cutter

Operational Test & Evaluation of Cyber Resilience Adversarial Assessment August 2018

USCGC Hamilton

The San Diego Union-Tribune

Coast Guard unloads $500M of cocaine
USCG MH-65

- MH-65 Dolphin is a short-range recovery helicopter that conducts search and rescue and law enforcement missions
- Final segment of upgrades to modernize the automatic flight control system, digital display cockpit, and new electro-optical and infrared sensors
- OT&E scheduled in January 2019
CBP Wall

• Impede and deny freedom of movement as a function of border security
• Influence and control the border environment and initiate a timely response to detected illicit activity
• Prototype testing conducted January 2018
• Provide capability for checkpoint screening of divested accessible property, with automated threat detection capabilities
• Generates 3D images of the inside of a checked bag as it moves through its scan plane
• System consists of:
  – Scanner
  – Transport and Control Equipment
  – Primary Viewing Station
  – Alternate Viewing Station
• Conducted OT&E 15 August to 6 September 2018
A Look Ahead…

CBP Biometric Entry/Exit (BEE)

Delta unveils first biometric terminal in U.S. in Atlanta; next stop: Detroit

By Kathryn Steele • posted Nov. 29, 2018 6:00 am

Starting this December, customers can use facial recognition technology from curb to gate at ATL’s Terminal F and to board at DTW

Today, Delta Air Lines, in partnership with U.S. Customs and Border Protection (CBP), Hartsfield-Jackson Atlanta International Airport (ATL) and the Transportation Security Administration (TSA), unveiled the first biometric terminal in the United States at Maynard H. Jackson International Terminal (Terminal F) in Atlanta, announced...
A Look Ahead…

FEMA Integrated Public Alert and Warning System (IPAWS)
A Look Ahead...

USCG 47' Motor Lifeboat

47' MLB in Rough Seas

47' MLB Self-Righting Test
Workforce Development

• Operational Test Director course
• T&E for Information Technology Acquisitions course
• Inaugural DHS T&E Managers Symposium
• Cybersecurity T&E Continuous Learning Module
• Learning seminars and workshops:
  − Scientific Test and Analysis Techniques
  − Integrated Evaluation Framework
  − Incorporating T&E into Acquisition Contracts
  − Certified Scrum Master
  − Cyber Tabletop Overview and Facilitator
  − Writing an Effective TEMP
  − Software Reliability
  − Reliability webinars

Key to success: Highly skilled Test and Evaluation workforce
Summary

If you want to know your system works, you have to test it. If you want to know with confidence, you have to plan, resource, and conduct T&E accordingly.

Homeland Security Operators are counting on us to get it right.
47’ MLB in Rough Seas
47’ MLB Self-Righting Test