Summary and Next Steps

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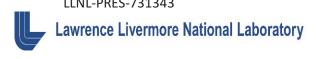
Was ADSA 16 Successful?





Was ADSA 16 Successful?

- Networking
- Holistic (macro) security
- New ideas; need for out of the box thinking; need for innovation.
- Benefits of privatize security (the ability to set your own requirements specifications)
 - Mall of America
 - Airlines





What Did We Hear?

- Dialogue about the relationship between Manufacturers and TSA
- Attendance continues to grow. 35 people to 180 attendees -- 5x increase.
- **Silver Bullet**—May exist in emerging technologies
- Benchmarking--Need current technologies performance,
- TSA panel.
 - ADSA brings stakeholders together; it keeps getting better
 - ITF: Innovation Task Force ; ID gaps; DT&E to fill them
 - TSCAP: Trans. Security Capability Assessment Process; Enterprise view/challenges
 - What is the amount of risk is TSA willing to take
 - International markets for Global Aviation Security :Same Threats, Manufacturers...
 - Systems Engineering: Technology Development Process
- **Cyber Security:** Network and end points are secure
- Predict Terrorists Targets—Strong Idrs do not want to attack civilian targets?
- Macro Security—No new technologies; What do we do then?
 - We are the old team we need the new team
 - Release tools; public acceptance of unfamiliar approaches.





Requirement-Based Design—We need leadership

Former insider look

- Inside
 - Lost track of the mission; only low risk development allowed
 - Diminishing return in more time doing lab testing; Have to get equipment early into the airport; until then you
 don't really know how well its going to work

Outside

- OEMs massively invest; Remote connectivity; Data gathering & analysis. etc.; Increase risk
- Run secondary software in the background for R&D then DT&E...get into the field early and often
- Allow longer term R&D; Gov't should continue to fund third parties and let the market play out
- Incentive to take some risk; need to get back into startup mode.

Manufacturers Panel

- In US, ITF is a great start; EU & Rest of World leading in innovation—replay test;
- Need clearly defined requirements, focus on what you really need; improved gov't & vendor relationship; academic relationship -- streamline IP agreements (templates?).
- Planning and funding are unpredictable
- Testing
 - Number of shalls—tiered; Consensus standards; more agility; too long in testing
 - What can manufacturers do to address re-occurring issues encountered repeatedly in multiple testing cycles?
 - What can we do to ease the testing burden, and how and where should we test.
- What should TSA do to ensure cost effective TSE to meet current and emerging needs
 - DoD acquisition lifecycle guarantees procurement pipeline, TSA's are not typically
 - Manufacturers should not expect the gov't be your Sugar Daddy





A Third Party

- Confusing, lucky guesses, painful, but it has been good; fail early and fail fast
- Government wants us to succeed

Airline and Airport Perspectives Panel

- Passenger seamless experience; don't want to talk to anyone
 - Hassle-free experience, choices via kiosks, tag your own bags, etc.
 - Passengers like to do things themselves, at their own pace
- Airlines want safe, secure, fast, smooth and simple
- Airline employees are screened in collaboration with airports and local authorities
- Disney was asked how to help with flow.
- Communication. Responsibility of Government to explain policy changes.
- Collaborate, demonstrate assess. Airport ecosystem. Lean six sigma metrics.

JetBlue Collection & Dissemination of Security-Related Information

- Incident command center; social media
- Proactive never reactive... (interview...)
- Track & trend customers, crew members, etc. not profiling
- Respond to subpoenas only, otherwise no data sharing.





Cargo Update

- 2007 100% screening; Certified Cargo Screening Program
- Certified shipper; Risk-Based Strategies;
- R&D needs: Cheap, fast (20 skids/hr); low cost large aperture, heterogenous cargo

Aviation Security in Israel compared to US

- Israel: Screen cars entering airport; profiling; interrogation
- You may miss your flight
- Summary of Future X-ray Systems
- Specification of Jell-O—Hard problem need academics to help
- RORs, Transfer Functions, Simulants
- Mall of America Security—Necessity of interviewing, behavior detection
 - Do a study to determine why successful here but not what TSA found out
 - See something, say something. What is out of the ordinary for your environment?
- Screening/Security at Large Venues—
 - Agent based modeling and simulation.





- Weapons ATR—eventually will need 100,000+++ images
- Visual Analytics for Security Applications
- DE Decomposition
 - Many possible spaces, what is best?
 - Need vendors to get involved.
- Iterative Low-dose CT with DNN
- Realistic Simulations of Baggage—use animation software platforms.
- DICOS 2A and the TSL/DHS Database
 - Need input and participation from manufacturers, researchers, etc.
 - Manufacturers participate to make sure we get it right and understand it, interoperability; need to deploy ASAP to DT&E, fix bugs, etc.
 - Opens up the market and will increase sales





What we did not hear?

- Prohibited items at the check point is more than just guns and knives
- The role of lobbyist
- Who are the engineer leaders
- The B tour on private security
- How can you speed up deployment, checkpoint, etc.
- Not clear how out-of-the-box technologies apply
- How to handle 5%++ increase in passenger load
- Which is better educating or sorting passengers
- What does risk mean, how do we manage it, how do we communicate it?
- How does TSA learn from DoD, NIH, NSF, FDA, etc. What is appropriate for TSA?





Next Steps

ADSA 17 is going to be systems engineering of security systems.

Oct. 17 & 18, 2017

