Sixteenth Advanced Development for Security Applications Workshop (ADSA16):

Addressing the Requirement for
Different Stakeholders in Transportation Security

Workshop Objectives

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So What? Who Cares?

- Competing goals for aviation security
  - Terrorist
    - Still trying to disrupt aviation security, smart adapting adversary
  - Strengthen security
    - More threats, lower mass
  - Increase operational efficiency
    - Reduce costs, labor, footprint, deployment time/effort
  - Improve passenger experience
    - Reduce divesture, wait time
- Still no silver bullets
  - No emerging technologies can satisfy all competing objectives – just incremental improvements
- More problems
  - Long wait times predicted for this summer
  - Possible TSA budget cuts
  - Laptops banned on some international flights
  - Displacement – bomb threats at Jewish community centers and schools, London Parliament
- ADSA16 objectives – finding solutions to problems – examples:
  - Allocate funding differently – scan some people less, some more, spend more on baggage claim
  - Get more performance from existing equipment
    - Marco-security – use additional information – "Google Security," deterrence ….
  - Balance the competing goals
    - Predict and accept more risk – is terrorism just crime? Accept false negatives?

ADSA Format

- This is a workshop, not a conference
  - Speakers are instructed to begin with "So What? Who Cares?" (elevator speech)
  - Conversation and questions are expected at all times, especially during presentations after first slide
  - Optimal presentation ends after first slide
- Public domain – no SSI or classified material
- No speaker introductions; read handouts

Does solving one problem lead to another?

BACKUP SLIDES

DHS Tactics

- Augment abilities of vendors with 3rd parties
  - Academia
  - National labs
  - Industry other than the vendors
- Create centers of excellence (COE) at universities
- Hold workshops to educate 3rd parties and discuss issues with involvement of 3rd parties
  - Algorithm Development for Security Applications (ADSA)
- Forage for technology in other fields

Equipment Requirements

- Probability of detection (PD)
- Probability of false alarm (PFA)
- FA resolution
- # types of threats
- Minimum mass
- Minimum sheet thickness
- Total cost of ownership
  - Purchase price
  - Siting
  - Labor
  - Maintenance

- Extensibility
- Ability to fuse
- Compatible with risk-based screening
- False alarm resolution methodologies
- Siting
- HVAC, space, weight shielding
- Throughput
- Safety

Questionnaire

- Request for everyone to answer questions preferably during the workshop

- ~10 questions – 10 minutes

- Available via Survey Monkey

https://www.surveymonkey.com/s/ADSA16

SurveyMonkey.com
because knowledge is everything

Minutes

- Minutes of discussion will be taken
  - Sensitive information to be redacted
- Please identify yourself and your institution first time you speak
- Suriyun Whitehead, thank you for taking minutes

Archival Materials

- Final reports and presentations from previous ADSAs

- Final reports from projects to CT-based EDS
  - Segmentation
  - Reconstruction
  - ATR

  https://myfiles.neu.edu/groups/ALERT/strategic_studies/

Acknowledgements

- Northeastern University (NEU)
- Awareness and Localization of Explosives-Related Threats (ALERT) DHS Center of Excellence
- Department of Homeland Security (DHS)
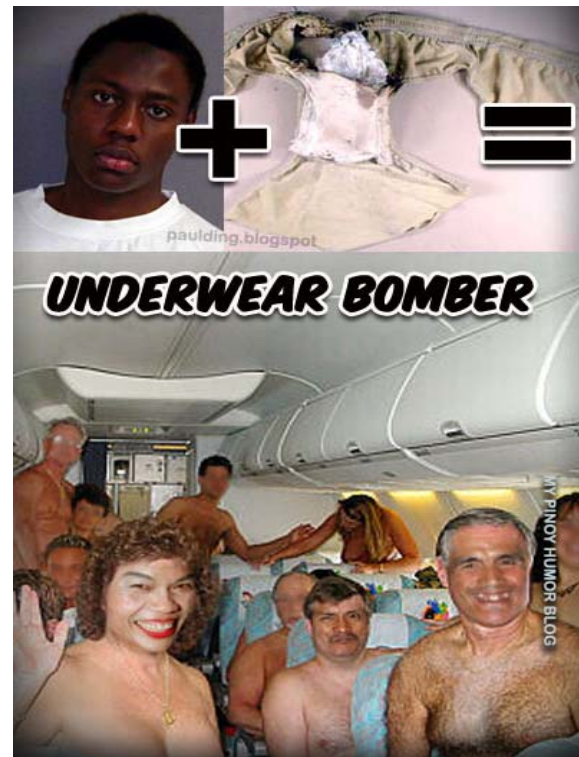- Presenters
- Participants

Logistics

- Melanie Smith, lead
- Tiffany Lam
- Deanna Beirne
- Kristin Hicks
- Anne Magrath

Let them know if you need support during or after workshop.

Final Remarks

- "Terrorism causes a loss of life and a loss of quality of life," Lisa Dolev, Qylur

- Need improved technology

- Thank you for participating

VENDOR PANEL DISCUSSION

Vendor Panel Discussion

- What could be done to decrease the time to deploy new technologies?
- What barriers have to be reduced for vendors to increase their own investment in new technologies?
- What can be done to cause vendors to work on long-term, high risk detection systems?
- How should third-parties (e.g., academia, national labs and industry other than the security vendors) be involved in the development of new technologies?

AIRLINE/AIRPORT PANEL DISCUSSION

Airline/Airport Panel Discussion

- How to balance competing goals
- Strengthen security
  - More threats, lower mass, smart adapting adversary
- Increase operational efficiency
  - Reduce costs, labor, footprint, deployment time/effort
- Improve passenger experience
  - Reduce divesture, wait times