

Fifteenth Advanced Development for Security Applications Workshop (ADSA15):

Next Generation Screening Technologies
and Processes for the Checkpoint

Workshop Objectives



Carl R. Crawford
Csuptwo, LLC

So What? Who Cares?

- Competing goals for aviation security
 - 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
- Recent problems
 - Long wait times in Summer
 - Metrojet Flight 9268, a Russian charter flight from Egypt
 - Displacement – soft targets (Paris, Brussels, Istanbul)
- Still no silver bullets
 - No emerging technologies can satisfy all competing objectives
- Finding Solutions – ADSA15 objectives
 - Briefs on problems
 - Review emerging technology - for fusion
 - Forage in other fields – big data, capitated medicine, lie/hostile detectors, automated algorithm development, standards, ubiquitous sensors
 - Protecting soft targets
 - Allow scientific method to work

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

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/ADSA15>



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
- 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

