Ninetieth Advanced Development for Security Applications Workshop (ADSA19):

Rapid Response to an Adapting Adversary

Workshop Objectives



So What? Who Cares?

- Are we adapting fast enough?
 - GAO (11-740):
 - "TSA Has Enhanced Its Explosives Detection Requirements for Checked Baggage, but Additional Screening Actions Are Needed"
 - Threat of the day may be gone by the time deployed scanners are updated
 - May not be lucky with availability of new equipment or protocols
 - AIT after underwear bomber
 - 3-1-1 after liquid threat
 - May need to shutdown airports
- ADSA19's objectives
 - Reduce time to:
 - Update installed base
 - Research and develop new equipment
 - Recommend changes to TSA
 - Requirements; testing; incentives
 - Prevent displacement to new/soft targets

ADSA Format

- This is a workshop, not a conference
 - Speakers are instructed to begin with "So What?
 Who Cares?" (elevator speech)
 - Crawford bears responsibility for format (and agenda)
 - 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

ADSA20 – Save the Date

- May 7-8, 2019
- Theme: TBD
- Contact me if you:
 - Have suggestions for topics
 - Want to present

"ADSA" For Customs and Border Protection

- ADSA-CBP-01
 - June 20-21, 2018
 - ~150 people
 - Consensus to continue workshops
- New name confusion with ADSA
 - Customs and Border Protection Advanced Developments Encompassing Processes and Technologies (CBP-ADEPT)
- CBP-ADEPT-2
 - March 27-28, 2019
 - Topics:
 - An adaptive adversary: Integration of equipment and data;
 Collection and use of meta-data; Deterrence/hardening; Insider threats; Conops; Adaptation of TSA technologies; Economics incentives' Simulation tools; War gaming applications
 - Contact me if want to present or attend



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 riskbased 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/ADSA18



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







Acknowledgements - Logistics

- Tiffany Lam, lead
- Deanna Beirne
- Kristin Hicks
- Anne Magrath
- Pooja Ravichandran
- Sara Baier

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

