



Awareness and Localization of Explosives-Related Threats (ALERT)

A Department of Homeland Security Center of Excellence

Algorithm Development for Security Applications (ADSA) Workshop 10: Explosives Detection in Air Cargo

May 6-7, 2014

Raytheon (Room 240), Egan Research Center, Northeastern University
120 Forsyth St., Boston, MA

AGENDA

Tuesday, May 6, 2014 – Day 1

Time	Topic	Speaker	Affiliation
7:30 AM	Registration/Continental Breakfast		
8:30 AM	Welcome – ALERT	Michael Silevitch	ALERT / Northeastern University
8:35 AM	Welcome – DHS	Laura Parker	Department of Homeland Security
8:40 AM	Introduction	Carl Crawford	Csuptwo
Setting the Stage			
9:00 AM	DHS Activities in Cargo Inspection	Stephen Surko	Department of Homeland Security
9:25 AM	Photon and Neutron Interrogation Techniques for Chemical Explosives Detection in Air Cargo: A Critical Review	Tim White	Pacific Northwest National Laboratory
10:00 AM	What's the Problem with Neutrons for Explosive Detection?	Harry Martz	Lawrence Livermore National Laboratory
10:25 AM	Break		
10:50 AM	Hurdles to the Adoption of New Methods II: The Regulators Strike Back	Tim Rayner	MultiX
11:15 AM	Air Cargo Explosives Detection Pilot Project - Overview	Doug Bauer	Department of Homeland Security (Retired)
11:25 AM	Air Cargo Explosives Detection Pilot Project -Details	Amy Waters	Lawrence Livermore National Laboratory
11:50 AM	SPAC: CT Scanning of Palletized Air Cargo and Security Challenges for Overnight Cargo	Walter Garms	Morpho Detection
12:15 PM	Lunch		



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Time	Topic	Speaker	Affiliation
Advanced Technologies			
1:00 PM	Neutron Resonance Radiography	Dave Perticone	L-3 Communications
1:25 PM	Two Particle Correlations in Low Efficiency Detector Systems	Edward Hartouni	Lawrence Livermore National Laboratory
1:50 PM	Nuclear Reaction Based Monoenergetic Gamma Ray Radiography System for Detection of Nuclear Materials	Richard Lanza	Massachusetts Institute of Technology
2:15 PM	Hardened Unit Load Device (HULD) Research and Development History	Nelson Carey	Department of Homeland Security
2:40 PM	DHS Applications of PaX Source	Rajiv Gupta	Massachusetts General Hospital / Harvard University
3:05 PM	Statistical Framework for Assessing Trace Detection Methods for Air Cargo	Michelle Clark	MIT Lincoln Laboratory
3:30 PM	3D CT with Few Projections for Sea Freight Container Inspection	Stefan Moser	Fraunhofer EMI
Emerging Technologies			
3:55 PM	DNDO's Integrated Threat Detection Platform	Kevin Cronk	Department of Homeland Security
4:20 PM	Signature Discovery Initiative	Mark Tardiff	Pacific Northwest National Laboratory
4:40 PM	Two Strategies for Signature Discovery: Small and Large Data Spaces	Alejandro Heredia-Langner	Pacific Northwest National Laboratory
5:00 PM	"Big Data" Machine Learning for Prediction and Classification	Daniel Acuna	Northwestern University
Reception and Networking Session			
5:25 PM	Reception and Networking Session		
6:55 PM	Adjourn	Carl Crawford	Csuptwo



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AGENDA

Wednesday, May 7, 2014 – Day 2

Time	Topic	Speaker	Affiliation
7:30 AM	Continental Breakfast		
8:00 AM	Call to Order/ADSA11	Carl Crawford	Csuptwo
Advanced Technologies			
8:10 AM	Cargo Scanning with X-Rays and Neutrons and the Challenge of Effective Detection	Nick Cutmore	Commonwealth Scientific and Industrial Research Organization (CSIRO)
8:35 AM	Quantitative and Qualitative Approaches to Neutron Imaging	Jens Gregor	University of Tennessee
9:00 AM	From Steady State to Pulsed: A Review of Neutron Interrogation Techniques for Explosives Detection	Dan Strellis	Rapiscan Laboratories, Inc.
Emerging Technologies			
9:25 AM	Sparse View CT	Synho Do	Massachusetts General Hospital / Harvard University
9:50 AM	Radar Threat Detection	Stuart Harmer	Radio Physics Solutions, Ltd.
10:15 AM	Break		
10:40 AM	Femtosecond Laser Based Truck Mounted Trace Detection	Theodore Goodson	University of Michigan
11:05 AM	Interior Tomography and Spectral CT	Ge Wang	Rensselaer Polytechnic Institute
11:30 AM	Lunch		
Vendor Perspectives			
12:15 PM	MVCTC	Simon Bedford	Astrophysics Inc.
12:40 PM	Misc. Topics	Dan Strellis	Rapiscan Laboratories, Inc.



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Time	Topic	Speaker	Affiliation
1:05 PM	Challenges and Solutions of Air Cargo Screening	Martin Hartick	Smiths Detection
1:30 PM	Passport's Explosive Detection Technology	Stephen Korbly	Passport Systems Inc.
1:55 PM	L-3 Commercial Offerings	Stewart Hampton	L-3 Communications
2:20 PM	A Mobile X-Ray/Neutron Cargo System for Aviation Security	Seth Van Liew	AS&E
Wrap Up			
2:45 PM	Next steps	Harry Martz	Lawrence Livermore National Laboratory
3:50 PM	Closing remarks – ALERT	Michael Silevitch	Northeastern University / ALERT
3:55 PM	Closing remarks – DHS	Laura Parker	Department of Homeland Security
4:00 PM	Adjourn	Carl Crawford	Csuptwo