

Borders and Maritime Security Division

DHS University Network Summit 2008

Port Security Panel Session

Bob Knetl

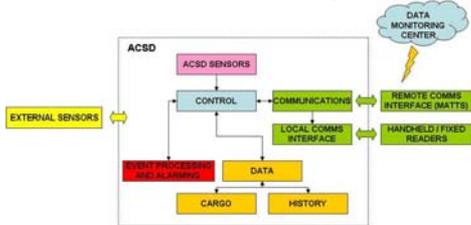
Program Manager, Cargo Security



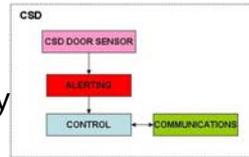
**Homeland
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DHS S&T Cargo Security Programs

Advanced Container Security Device (ACSD) - Monitors container's 6 sides for intrusion as well as human cargo



Container Security Device (CSD) - Monitors the container doors only (in advance of an ACSD capability)



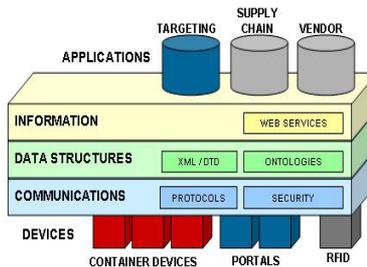
Hybrid Composite Container - Next generation container constructed of alternative materials and allows utilization of embedded security sensor technology



Marine Asset Tag Tracking System (MATTs) - Provides remote communications capability for an ACSD (and potentially CSD) to transmit alarm and status info



Supply Chain Security Architecture
Defines systems multi-level, multi-security data flow, structures and COMMS for all elements for movement of secure freight



Secure Wrap - Monitors secure tamper-indicative wrapping material for palletized cargo



Secure Carton - Monitors tampering of cargo packages (box, carton, or pallet levels)

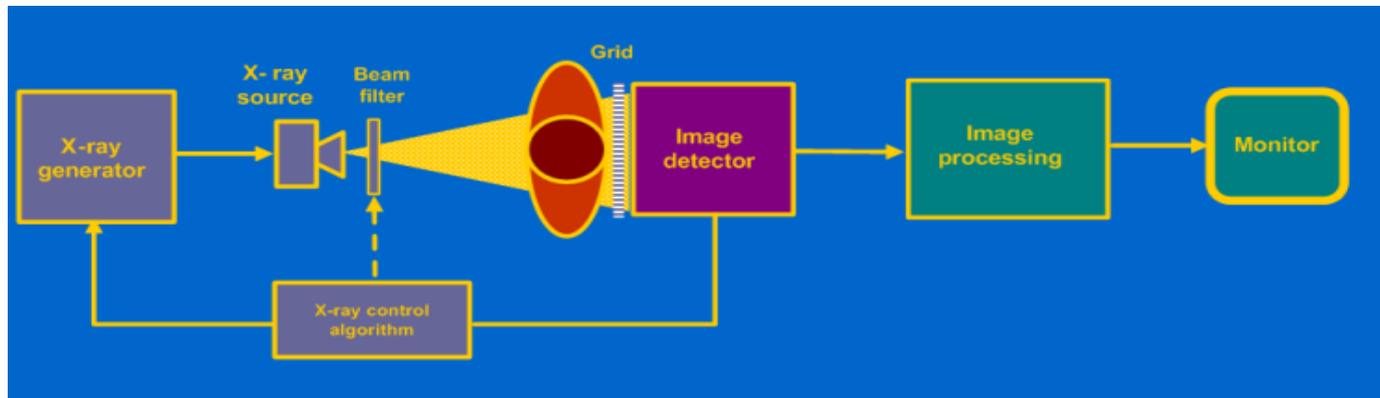
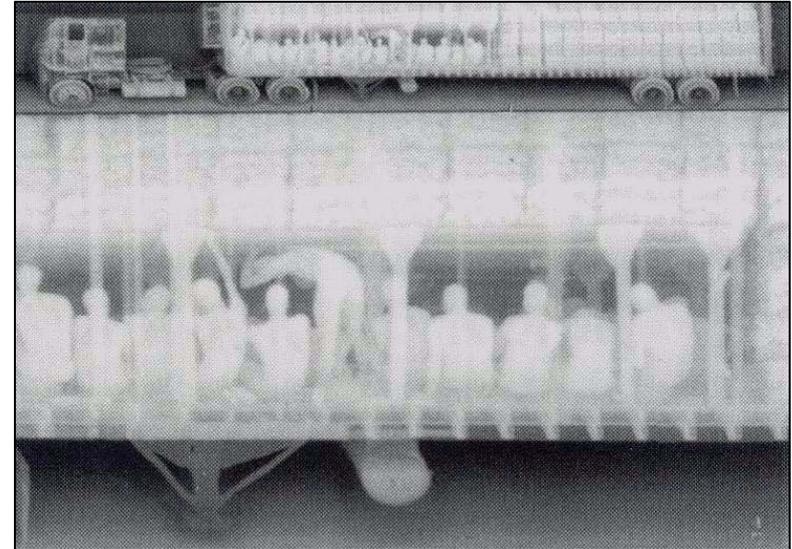


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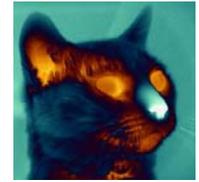
Challenges in Cargo Technology: Container Scanning and Imaging

Improve the capability to non-intrusively scan and image shipping containers

- Enhance existing x-ray and Gamma NII systems
- Augment NII systems with emerging next generation technologies
- Incorporate operator-assisted decision aid software
- Other non-traditional methods?

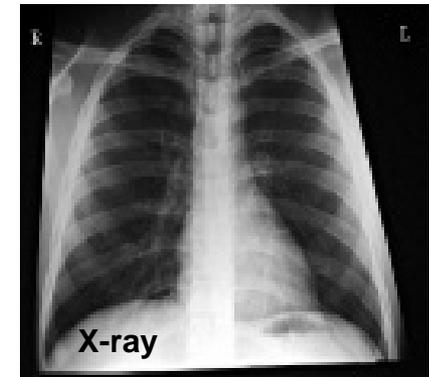


Challenges in Cargo Technology: Container Scanning and Imaging



Considerations

- Improvements in steel container scanning penetration, image resolution, container throughput, and contrast sensitivity?
- Health Safety of users/operators and cargo (food products or stowaways)
- Mobility – port real estate is not cheap
- Interoperable with existing systems



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***Emergent Technologies... Orthogonal Capabilities
New Applications...***