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Cargo Security Technology

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Secure Commerce and Border Systems



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Background

- Sandia has been involved in various projects in cargo security funded by DHS S&T Borders and Maritime Division (BMD)
- Customer is Customs and Border Protection Office of Field Operations (CBP OFO)
 - “U.S. Customs and Border Protection has a complex mission at ports of entry with broad law enforcement authorities tied to screening all foreign visitors, returning American citizens and imported cargo that enters the U.S. at more than 300 land, air and sea ports.”
 - Since 9/11, stated CBP OFO goal is detect and deter terrorist activity at our ports of entry

Security vs. Commerce Flow

- One extreme: Full scanning and inspection of every container entering our borders
- Other extreme: Optimized processing for maximum economic benefit
- Result: Risk-based targeting system
 - What is the threat?
 - What is the philosophy of a risk-based approach?

Container Security Technology

- Current Customs requirement: ISO bolt seal
- Other technologies:
 - Electronic seals
 - Container security devices (CSD)
 - Tracking devices
- Advanced/future technologies



Technology Questions

- How can Customs leverage data from commercial technologies to enhance security?
- Can technology help improve both security and commerce flow?
- What incentives can be given to commercial industry?
- How do we account for the effectiveness and sophistication of specific technologies?
- How do we trust the point of stuffing?