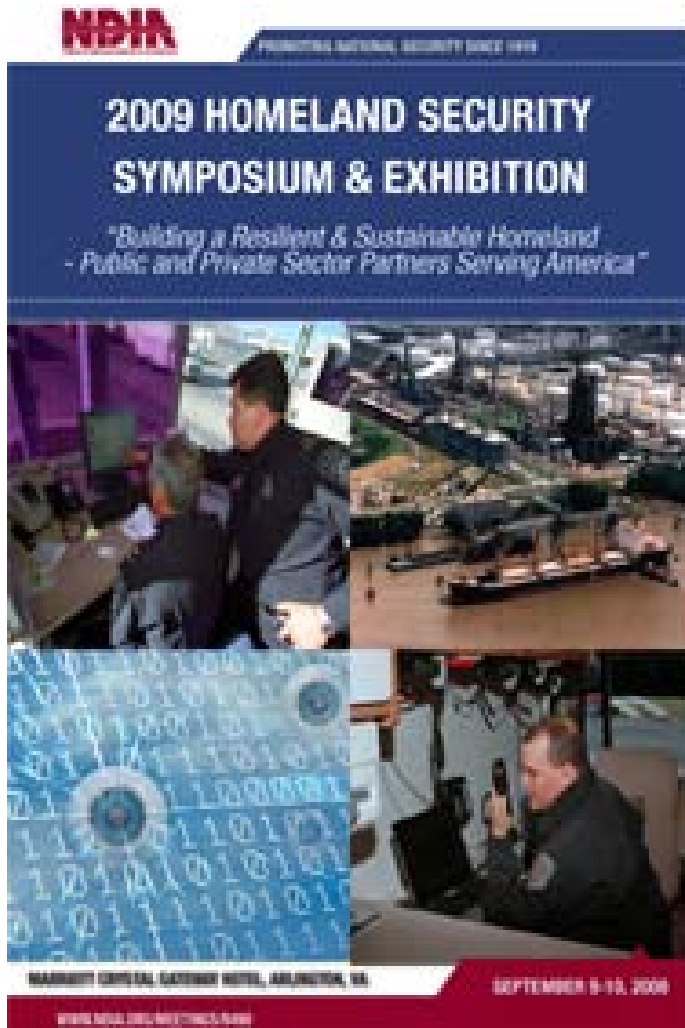


International Supply Chain Vulnerabilities



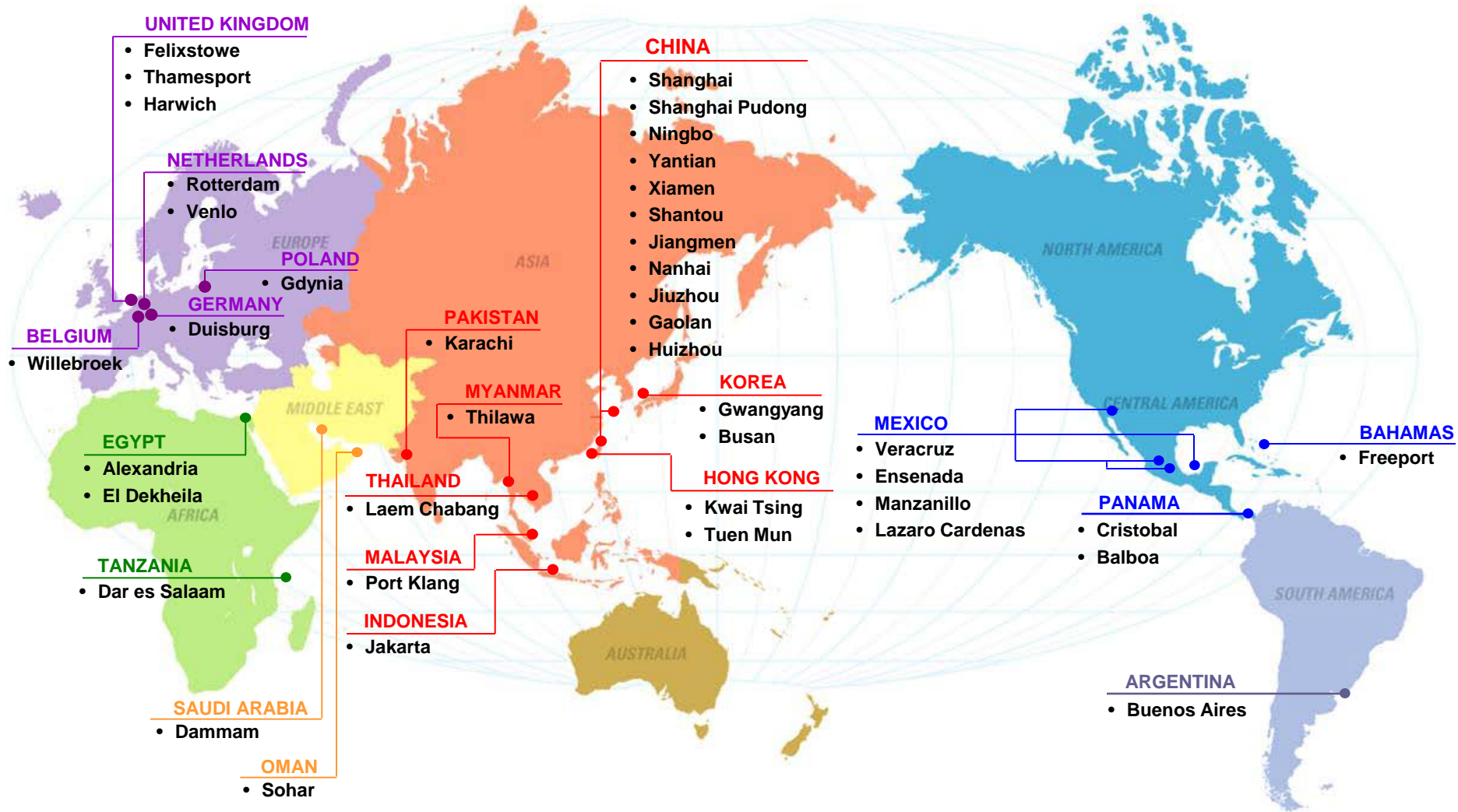
Gary D. Gilbert
Senior Vice President
Hutchison Port Holdings
9 September 2009

Maritime Perspective Protecting Ports, Vessels & Cargoes



AFP

HPH Ports Around The World – 49 Ports



HPH 2008 Volume 69 million Containers

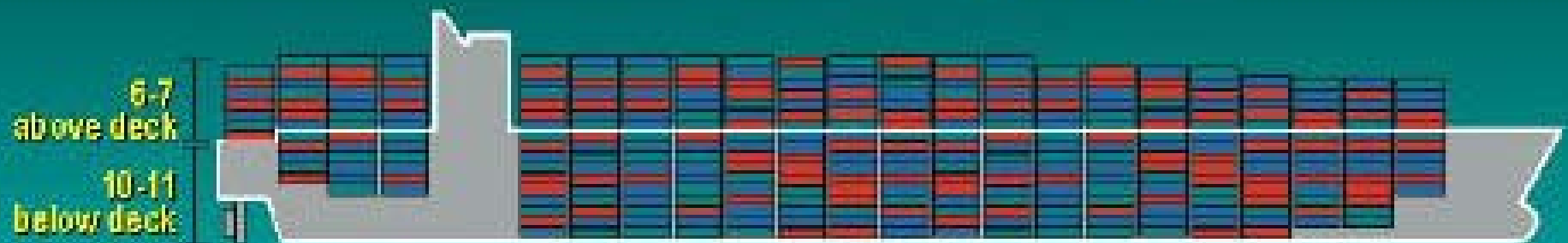


The 15,000 TEU Containership

LOA. = 400 m (1,312 ft.)

Draft = 14 m (46 ft.)

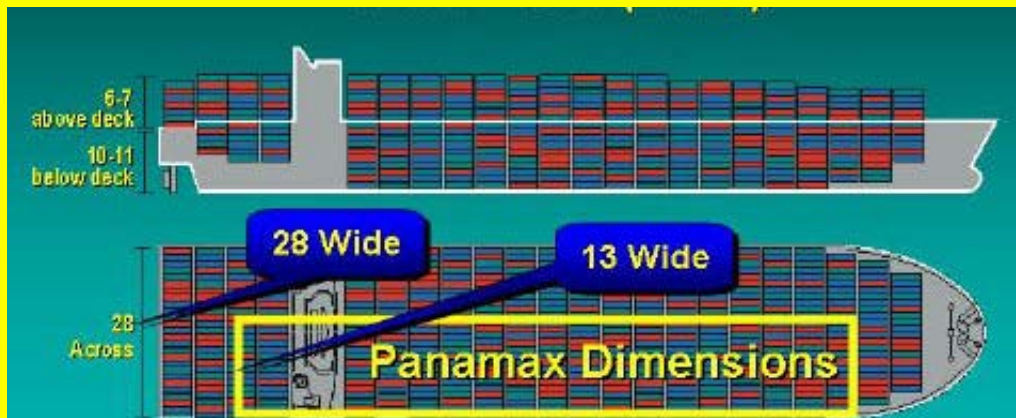
BEAM = 69 m (226 ft.)



Quarantine Station



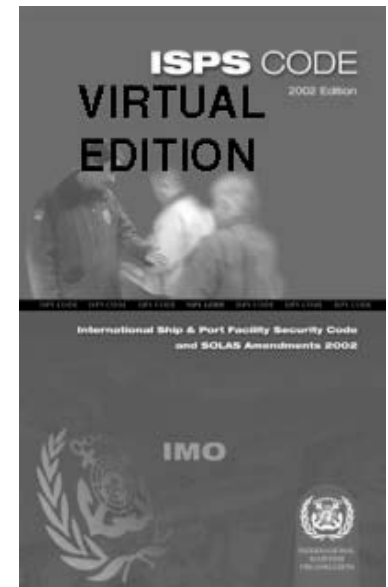
The 15,000 TEU Containership





INTERNATIONAL MARITIME ORGANIZATION

Implementation of the IMO – ISPS Code



International Maritime Organization



The International Maritime Organization (IMO), a United Nations group of 162 signatory countries, adopted, in December 2002, amendments under the 1974 Safety of Life at Sea Convention (SOLAS) the new International Ship and Port Facility Security Code (ISPS Code).

The code contains mandatory security related requirements for governments, port operators and shipping companies. Each government, port operator and ship must have a security designate, security plan, training and risk assessment as **per international law commenced 1 July 2004.**

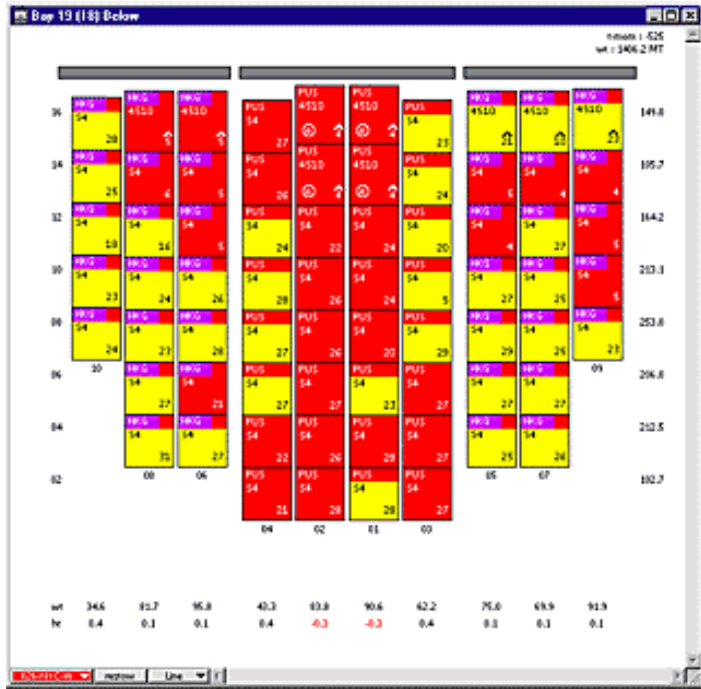


Key elements of CSI



- Establish security criteria for identifying containers that may pose a risk for terrorism, based on advance information.
- Pre-screen containers at the earliest possible point.
- Use technology to quickly pre-screen containers that may pose a risk for terrorism.
- Develop secure and "smart" containers.

69 million Trojan Horses





Customs Declaration

19 CFR 122.27, 148.52, 148.53, 148.110, 148.111, 149B, 31 CFR 525B

FORM APPROVED OMB NO. 1581-0009

Each arriving traveler or responsible family member must provide the following information (only ONE written declaration per family is required):

1. Family Name: _____
 First (Given) _____ Middle _____
2. Birth date: Day _____ Month _____ Year _____
3. Number of Family members traveling with you: _____
4. (a) U.S. Street Address (hotel name/destination): _____

- (b) City: _____ (c) State: _____
5. Passport issued by (country): _____
6. Passport number: _____
7. Country of Residence: _____
8. Countries visited on this trip prior to U.S. arrival: _____
9. Airline/Flight No. or Vessel Name: _____
10. The primary purpose of this trip (business): Yes No
11. I am (We are) bringing:

(a) fruits, vegetables, plants, seeds, food, insects:	Yes	No
(b) meats, animals, animal products:	Yes	No
(c) disease (eggs, ticks, snails):	Yes	No
(d) soil or manure on a farm/ranch/pasture:	Yes	No
12. I have (We have) been in close proximity of (such as touching or handling) livestock: Yes No
13. I am (We are) carrying currency or monetary instruments over \$10,000 U.S. or foreign equivalent: Yes No
 (see definition of monetary instruments on reverse)
14. I have (We have) commercial merchandise: Yes No
 (articles for sale, samples used for soliciting orders, or goods that are not considered personal effects)
15. Residents — the total value of all goods, including commercial merchandise I/we have purchased or acquired abroad, (including gifts for someone else, but not items mailed to the U.S.) and am/are bringing to the U.S. is: \$ _____
- Visitors — the total value of all articles that will remain in the U.S., including commercial merchandise is: \$ _____

Read the instructions on the back of this form. Space is provided to list all the items you must declare.

I HAVE READ THE IMPORTANT INFORMATION ON THE REVERSE SIDE OF THIS FORM AND HAVE MADE A TRUTHFUL DECLARATION.

X _____
 (Signature) Date (day/month/year)

For Official Use Only

Layers of Security

- Container Imaging
- Radiation Detection
- Container Monitoring –Location & Tamper Evidence
- Manifest Information
- Basic Port/Terminal Security (ISPS Code)

Radiation Detectors - Felixstowe





1

GOMACO

40m
S.W.L.

SHIPPING CO
MEDITERRANEAN

MSC

SHIPPING CO
MEDITERRANEAN

MSC

SHIPPING CO
MEDITERRANEAN

MSC

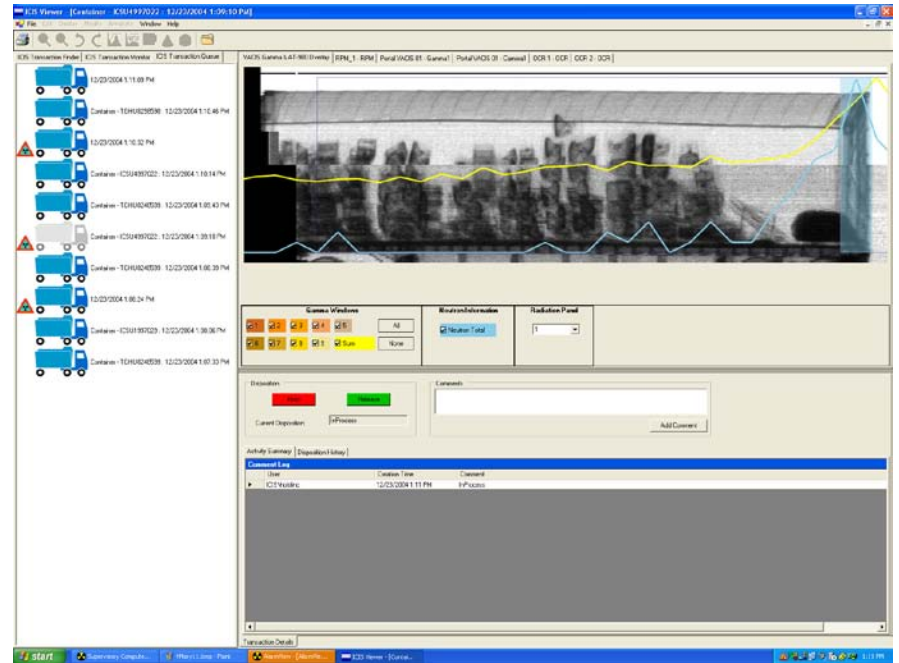
Radiation Scanning and X-Ray Imaging in Hong Kong....Tractor moving at 16 kmp

VACIS + OCR
Portals

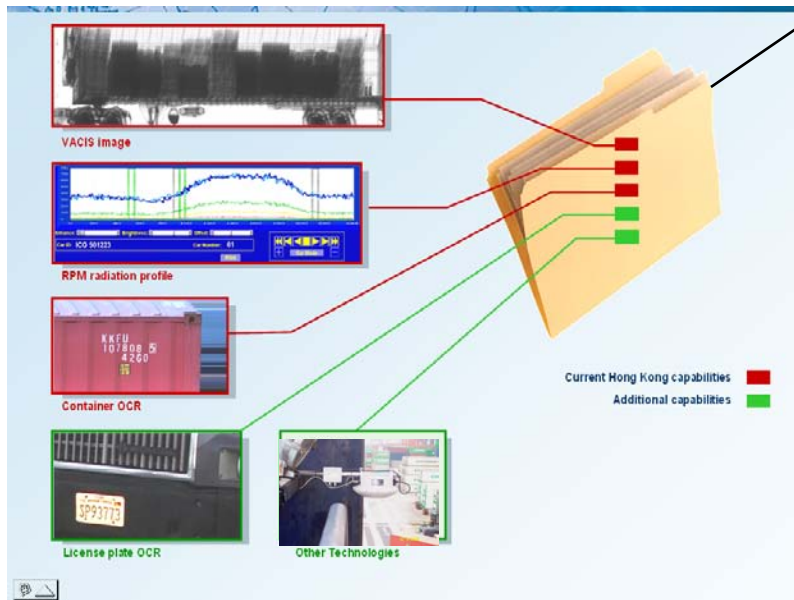
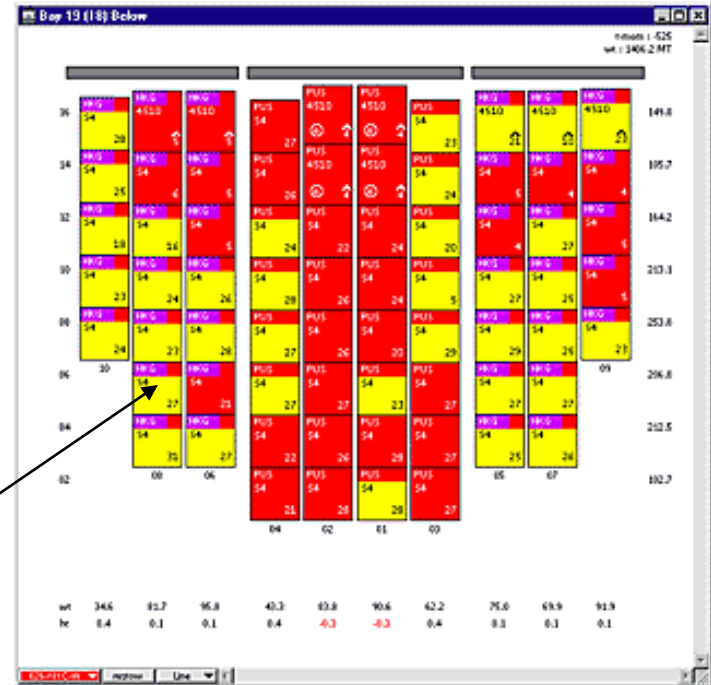
RPM + OCR
Portals



Data Integration



Data Integration Folder for Every Container Onboard



Secure Freight Initiative





SAFE Port Act, Oct '06

Section 208 -

Directs the Secretary to conduct a pilot project at an overseas port similar to the Integrated Container Inspection System being tested at the port in Hong Kong.



9/11 Commission Act, Aug '07
Title XVII - Maritime Cargo
Section 1701 - U.S. 100% Container Inspections

- **Imaging & Radiation Scanning in Ports prior to arrival in U.S.**
- **Passed House 371 to 40**
- **Passed Senate 85 to 8**
- **Effective July 1, 2012**

100 % Scanning Challenges

- **Sustainability of the scanning equipment in extreme weather conditions**
- **Varying costs of transferring the data back to the United States**
- **Re-configuring port layouts to accommodate the equipment without affecting port efficiency**
- **Developing local response protocols for adjudicating alarms**
- **Addressing health and safety concerns of host governments and respective trucking and labor unions**
- **Identifying who will incur the costs for operating and maintaining the scanning equipment**
- **Acquiring necessary trade data prior to processing containers and addressing privacy concerns**

100% Scanning Challenges

- **Concluding agreements with partnering nations and terminal operators to document roles and responsibilities regarding issues such as: ownership, operation, and maintenance of the equipment; sharing of information; and import duty and tax considerations**
- **Staffing implications for both the foreign customs service and terminal operator**
- **Licensing requirements for the scanning technology**
- **Reaching agreement with foreign and industry partners to continue scanning 100 percent of U.S.-bound containers after the pilot ends; and**
- **Discussing the potential requirements for reciprocal scanning of U.S. exports.**





Simulating the Impact of Container Inspections on Port Terminal Operations

Nitin Bakshi, The Wharton School,
University of Pennsylvania

Noah Gans, The Wharton School,
University of Pennsylvania

Month of Data from Hong Kong and Yantian



Present CSI Protocol



- **Containers Tagged for Inspection**
 - **US-bound containers only**
 - **24 hours before departure**

- **Inspection process for tagged containers**
 - **2 handheld spectroscopic devices per high-energy x-ray radiographic scanner**
 - **inspections First-Come-First-Served**
 - **60 minutes to notify local authorities**
 - **40 minutes to pick from stack and transport to inspection station**
 - **20 minutes to inspect containers**

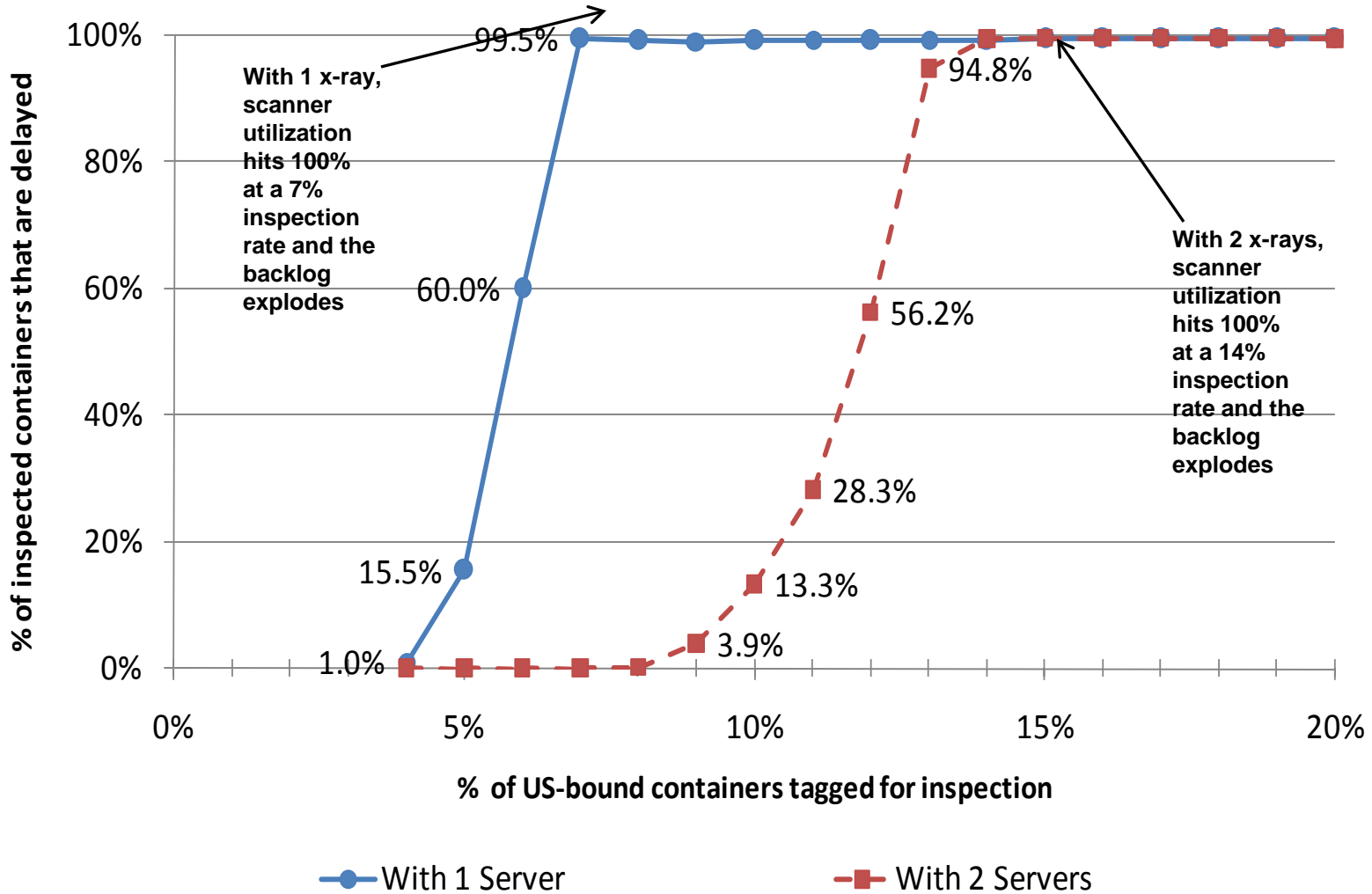
Results for the CSI Protocol

- Percentage of delayed containers
 - With 1 inspection station at Hong Kong
 - a 5% inspection rate is workable
 - at a 7% inspection rate, 100% utilization
 - With 2 inspection stations
 - a 10% inspection rate is workable
 - at a 14% inspection rate, 100% utilization
 - At terminal Yantian the analogues are
 - 1% and 3% for workable rates
 - 2% and 4% for 100% utilization

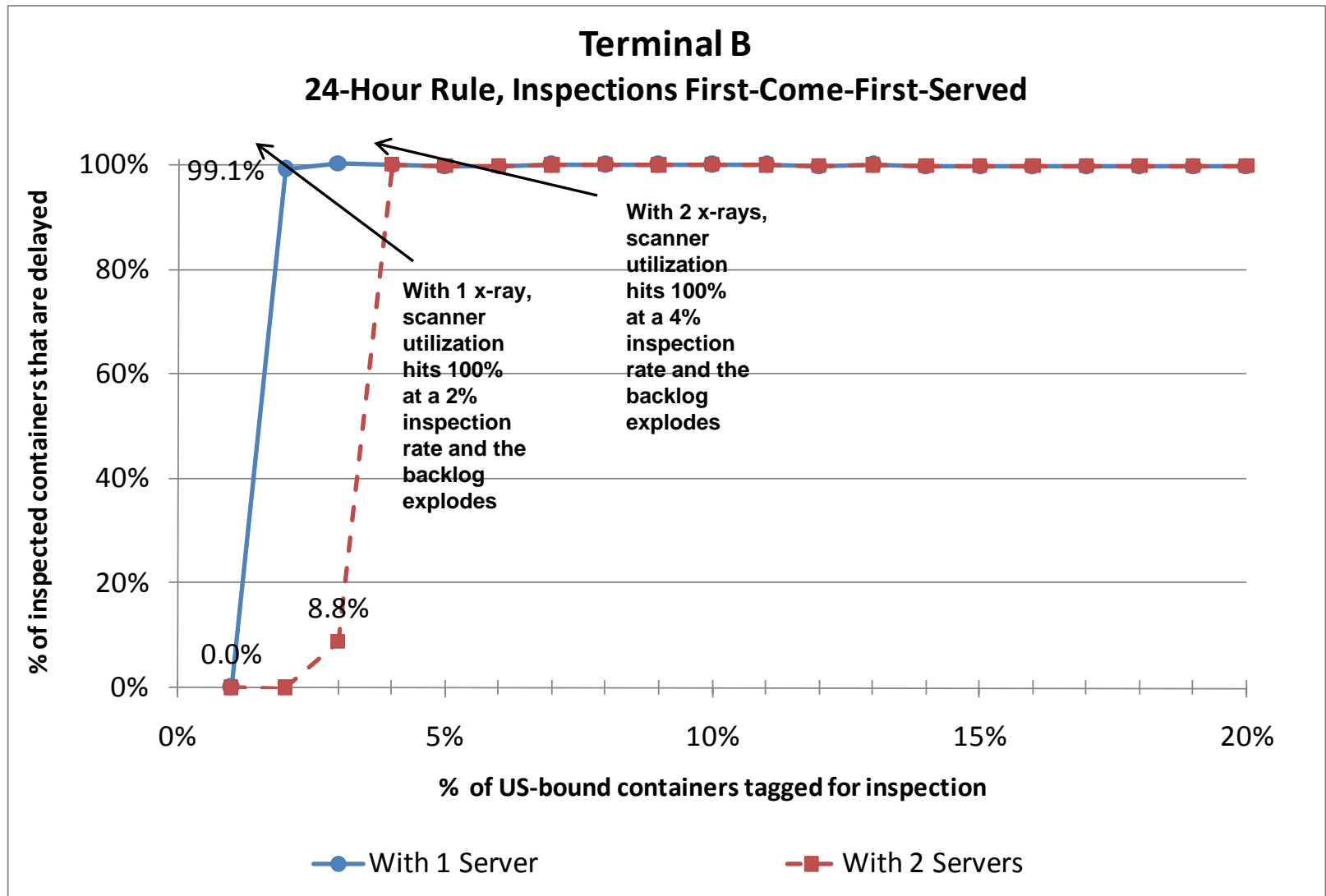
Base case: as inspection rates climb the % delayed explodes

Terminal A

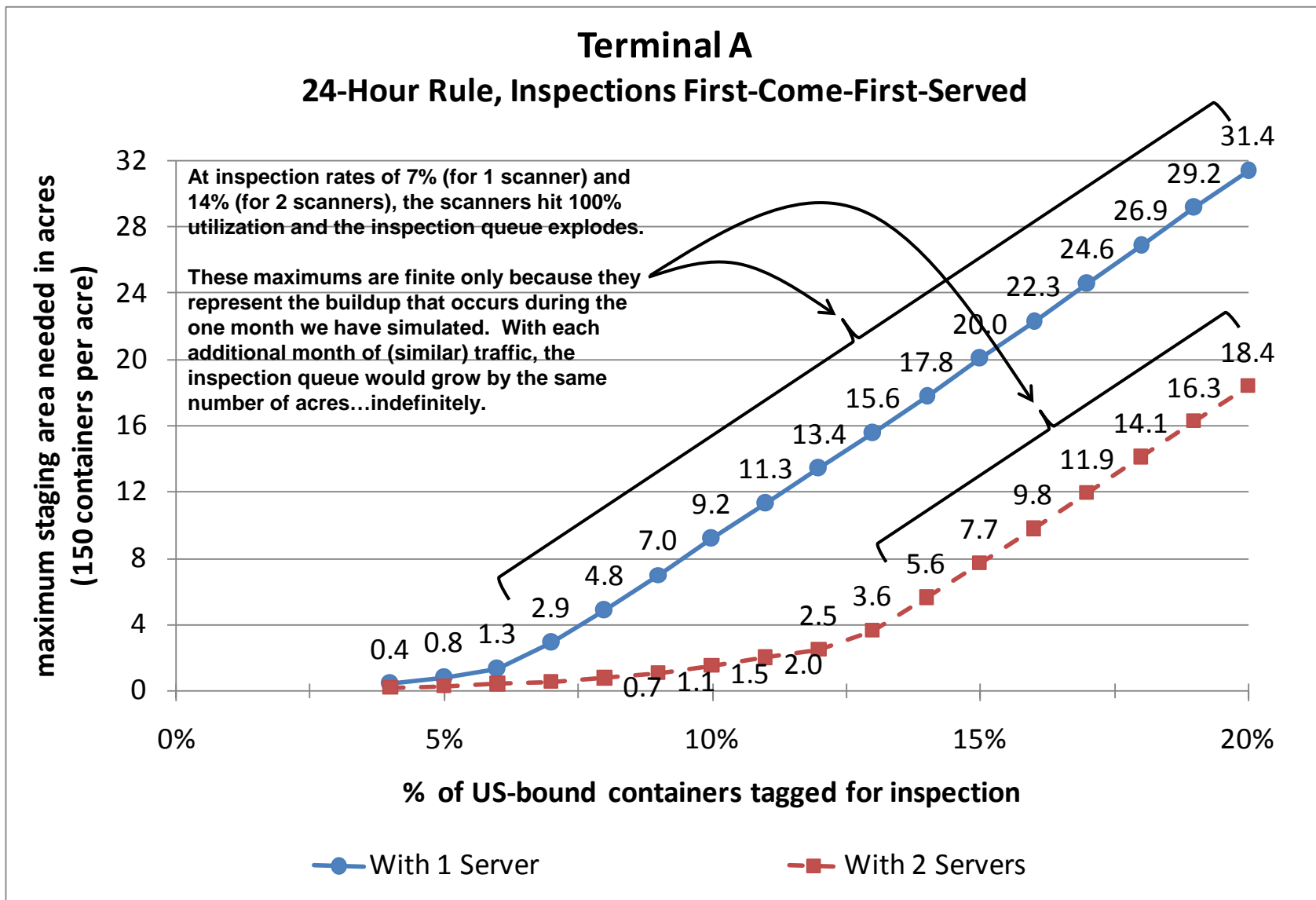
24-Hour Rule, Inspections First-Come-First-Served



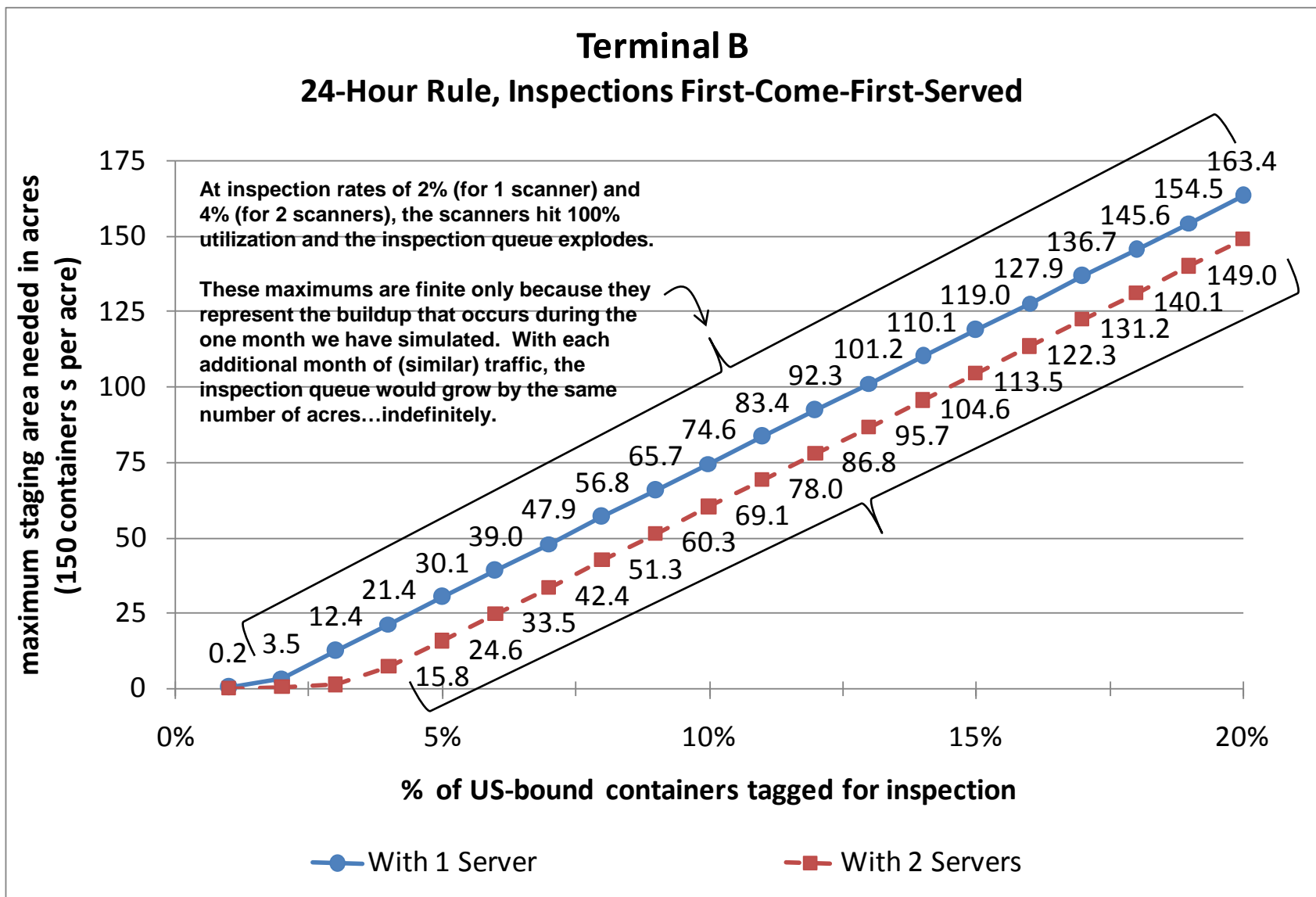
Base case: as inspection rates climb the % delayed explodes



Base case: for utilization $\geq 100\%$ inspection backlog explodes



Base case: for utilization $\geq 100\%$ inspection backlog explodes



FREEPORT NEWS

GRAND BAHAMA'S FIRST NEWSPAPER

FRIDAY, AUGUST 28, 2009

Vol 48: No 267 © The Nassau Guardian (1844) Ltd

24 PAGES \$0.75

EFFECTIVE SECURITY

Drug interceptions increase at Freeport Container Port; another big bust yesterday

By **LEDEDRA MARCHE**
Senior FN Reporter
lededra@nassguard.com

Bahamas and United States Customs along with The Bahamas Drug Enforcement Unit and the U.S. Drug Enforcement Agency intercepted 25 suspected kilos of cocaine at the Freeport Container Port Thursday afternoon, making it the third successful seizure at the transshipment port this month.

Acting on information they had received, authorities conducted a search of a container at the Container Port around 4:00 p.m. and discovered three backpacks which contained the suspected cocaine with a street value of \$550,000.

Officers from the Drug Enforcement Unit are continuing investigations into Wednesday's seizure.

Over the past 18 months, the container terminal — with its interdiction partners, Bahamas and U.S. Customs and Border Patrol agents, the DEA and DEU — has intercepted nearly a metric ton of cocaine.

The success in drug detection in containers that pass through the Freeport Container Port is a result of the new security initiatives, inclusive of electronic surveillance technology, physical perimeter installations and well-trained Bahamian operators and officers, at the 115 acre-site.

(Continued on Page 6)



HIGH DETECTION RATE — Beefed up security measures over the years have contributed to the success of drug detection in containers making their way through the Freeport Container Port.

Layers of Security

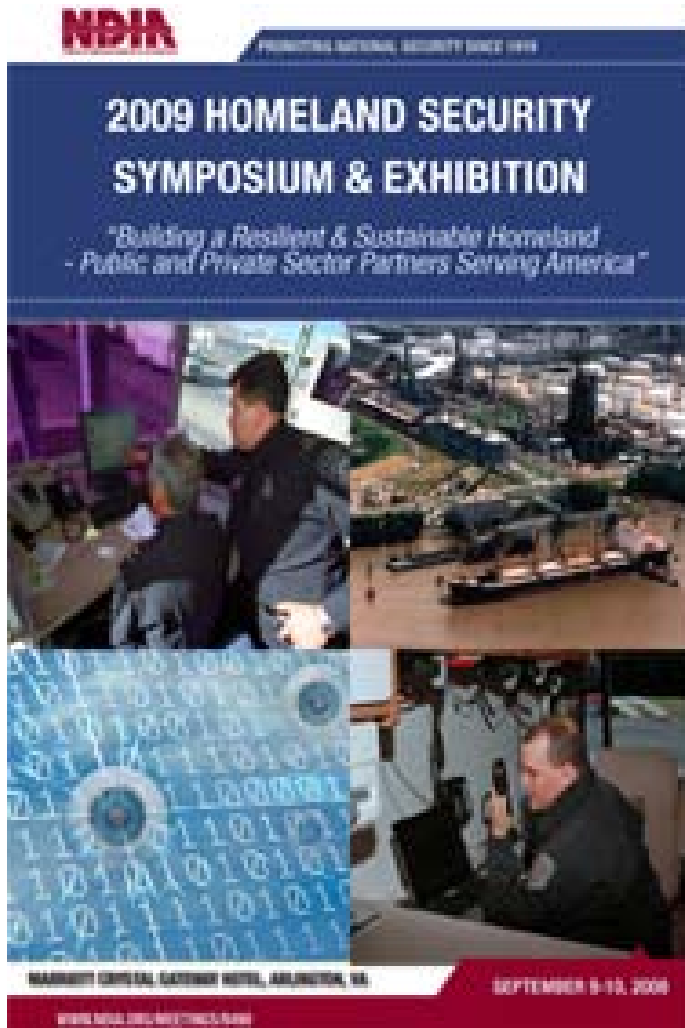
- Container Imaging
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- Container Monitoring –Location & Tamper Evidence
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International Supply Chain Vulnerabilities



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