PORT SECURITY:
Interagency Operation Centers,
Past, Present, and Future

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at the U.S. Government Accountability Office

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AGENDA

- Background
- Maritime Domain Awareness
- Predecessors and Pilots
- Expansion of IOCs
- Other Coordination Mechanisms
- Conclusions
- Questions & Contact Info

Sources for this presentation included
- GAO-03-15 (October 2002)
- GAO-05-394 (April 2005)
- GAO-12-202 (February 2012)
- GAO-12-185R (September 2012)
- GAO-13-734 (September 2013)
BACKGROUND

U.S. Government Accountability Office (GAO)

• GAO is an independent, nonpartisan agency that works for the U.S. Congress
• The GAO mission is to support the Congress in meeting its oversight responsibilities and to help improve the performance and ensure the accountability of the federal government
• GAO evaluates how the federal government manages programs and spends funds
• Regarding maritime issues, since 9/11, GAO has issued about 100 reports on maritime and supply chain security
• Stephen L. Caldwell was the director in charge of the maritime and supply chain security portfolio from 2006-2015
BACKGROUND
Importance of U.S. Ports

• Ports contain many types/sectors of critical infrastructure
• More than 95% of non-North American foreign trade arrives through U.S. ports
• Ports are major centers for chemical and petroleum production activities
• There are 17 strategic ports necessary for major military deployments
• Many ports feature important national symbols (e.g., the Statue of Liberty)
• Recreation is a central feature of many ports
BACKGROUND

Vulnerability of U.S. Ports

• Ports are extensive in size, and are accessible by water, land, and air
• Many ports are intertwined with major urban areas
• Ports process a large volume of cargo, passengers, and hazardous materials
• Ports are a hub of activity for multiple transportation modes
• Many vessels move through ports with relative anonymity
• Cargoes move quickly due to just-in-time delivery systems
MARITIME DOMAIN AWARENESS
National-Level Definition and Goals

• Interagency Operations Centers (IOCs) are part of a national-level effort to enhance Maritime Domain Awareness (MDA)

• MDA is “The effective understanding of anything associated with the global maritime domain that could impact the security, safety, economy, or environment of the U.S.”

• Strategic goals:
  • Enhance transparency in the Maritime Domain
  • Enable accurate responses to maritime threats
  • Ensure freedom of navigation and efficient flow of commerce
MARITIME DOMAIN AWARENESS
National-Level Coordination Structure

• MDA efforts at the National Level have an overarching coordination structure

• White House Maritime Security interagency Policy Coordinating Committee, and its Maritime Security Working Group

• The Office of Global Maritime Situational Awareness (dual Navy & USCG) created to catalog ongoing efforts, identify gaps, and coordinate efforts

• New Assistant Deputy DNI for Global Maritime and Air Intelligence Integration (within ODNI) created to provide policy and direction to Intelligence Community elements to integrate activities and share information

Caldwell / Port IOCs
MARITIME DOMAIN AWARENESS
National and Port-level Stakeholders

- Five or more federal departments (plus their components) have roles in port security
- Add state and local agencies, which could be several depending on the port
- To some extent, all these stakeholders need to share MDA information and coordinate port activities
- IOCs are a mechanism for sharing between stakeholders at both the national and port level
MARITIME DOMAIN AWARENESS
IOC Role to integrate National and Port Level MDA

[Diagram showing the integration of national and port-level entities in the maritime domain, with labels for CIA, FBI, DOJ, DOD, DHS, USCG, and personnel from partner agencies, along with federal personnel working at field level at ports.]
Per the U.S. Coast Guard (USCG) Concept of Operations, an effective IOC should have the following 5 elements:

• Clearly defined governance & membership, documented agreements re: which agencies will participate, in which ways, where, and when

• Joint, coordinated operational activities (e.g., inspections, vessel boardings, patrols, exercises)

• Shared visibility of the operational schedules of maritime assets and known events.

• A regular schedule of coordination meetings with federal, state, and local port partners

• Shared access to interagency information-management systems
PREDECESSORS AND PILOTS
Pre-9/11 Port Committees and Centers

- Before 9/11, coordination among stove-piped operation centers was done through a variety of single-mission or ad hoc committees or centers.
- USCG was also going through a field-level reorganization to create “sectors” to combine what had been separate units for operations and marine safety (each with their own separate command operations centers).
- Some ports had long-standing committees to coordinate activities, such as Charleston which had such a committee or association since 1926.
- Other ports with Vessel Traffic Service areas or Vessel Movement Reporting Service areas, and Marine Exchanges, had centers to monitor AIS for navigation and marine safety (e.g., preventing vessel collisions).
- The 17 strategic military ports have long-standing Port Readiness Committees, which focus more on preparations to outload military cargos, less on day-to-day security of such ports.
PREDECESSORS AND PILOTS
Joint Interagency Task Force - South

- In 1989, DOD was identified as the lead agency for the detection and monitoring of aerial and maritime transit of illegal drugs into the U.S. and JTF-4 was established (which became JIATF-South)
- In 1994, the National Interdiction Command and Control Plan created a national task force, JIATF-South, which fully integrated the military, law enforcement, and intelligence agencies there
- JIATF - South is focused on a single mission – the counterdrug efforts – such as intelligence gathering and analysis, provided to on-scene assets to interdict drug smugglers, arrest the perpetrators, and support prosecutions
- The federal agencies participating bring their own specialized and classified IT systems into JIATF, there is no effort to create a single “system of systems” to physically integrate all the IT systems
- JIATF-South is not only interagency (U.S. agencies) but international – with representatives from other allied countries (e.g., some who bring their own naval vessels into the collective interdiction efforts)
PREDECESSORS AND PILOTS

9/11 And Creation of Pilots -- Seahawk

- Many maritime and port stakeholders saw the 9/11 attack as a port-centric event
- New York is a major port, the World Trade Center was owned by the Port Authority of NY and NJ, and much of the evacuation of lower Manhattan occurred across the water by vessels
- In 2003, Congress earmarked a special appropriation of $50 million to fund a pilot IOC in Charleston, SC
- The Charleston Harbor Operations Center (CHOC or “SeaHawk”) was established under the leadership of the Department of Justice (this was pre-DHS) with several other federal agencies
- The substantial funding allowed installation of the latest technology, funding for 24/7 operations, and paid the salaries for state and local participation in SeaHawk (at one time, 16 state and local agencies)
- The unique position of SeaHawk brought additional interest from other federal agencies (e.g., DOE to test large scale radiation monitors)
PREDECESSORS AND PILOTS
9/11 And Creation of Pilots -- Jayhawks

- In the aftermath of the USS Cole attack (Oct. 2000 in the port of Aden, Yemen), the Navy had been investigated by a DOD Commission, and was reforming security practices, when 9/11 occurred.
- With the 9/11 attack, and Navy deployments to the Middle East, Navy security concerns turned to its major naval bases in domestic ports.
- Joint Harbor Operations Centers (JHOCs or “Jayhawks”) were established with Navy and USCG assets and resources and, in some cases, locals.
- JHOCs were funded through existing Navy and USCG resources, (unlike SeaHawk, the federal government did not pay local authorities salaries).
- The initial JHOCs in Norfolk VA and San Diego CA had 24/7 watches, and were integrated into a variety of sensors such as radars and cameras.
- Some of the functions coordinated at the JHOCs included joint / interagency coordination to board and inspect incoming vessels.
EXPANSION OF IOCs

Congressional Actions

• Beyond the earmark to fund SeaHawk in 2003, Congress took additional actions...
• In 2004, Congress required USCG to produce a Report to Congress on the implementation and use of IOCs at selected ports (including SeaHawk and JHOCs, among others)
• In 2006, SAFE Port Act required the Department of Homeland Security (DHS) to develop IOCs in all “high priority” ports within 3 years, and that they should include the characteristics of existing IOCs (including SeaHawk & JHOCs among others)
• In 2010, the USCG Authorization Act stated that such IOCs should include physical co-location of different agency staff (where practicable), as well as information management systems and include sensors
• One of the positive purposes that Congress thought IOCs could play was hosting and coordinating large-scale port-wide exercises
EXPANSION OF IOCs
Initial Actions by DHS and USCG

- In 2006, DHS delegated the Safe Port mandate (to create new IOCs) to USCG
- In 2005-6, USCG developed plans for up to 40 of what it called “sector command centers” or SCCs -- some of which would be “SCCs-Joint”
- With remaining appropriations, new JHOCs (also called SCCs-Joint where done with Navy resources) were established at additional ports with big naval bases (Puget Sound and JAX)
- Puget Sound JHOC was also international, including participation by Canada (their Coast Guard and Royal Canadian Mounted Police), which ramped up during the 2010 Winter Olympics in Whistler, British Columbia
- Another useful function that IOCs could play was to coordinate joint / interagency operations to escort vessels considered to be high-value targets to terrorist, such as LNG tankers
EXPANSION OF IOCs
USCG Change of Course

- Congress earmarked about $74 million for IOCs between FY 2008 and 2012
- However, USCG estimated total costs to fulfill the SAFE Port mandate at all high priority ports at $260 million, and it was unable to get additional fund requests through DHS & OMB to fund more robust brick and mortar IOCs
- In 2008, USCG told Congress that it intended to expand IOCs (with some being virtual IOCs) at all 35 USCG Sectors
- This development was a recognition that USCG was not going to get enough appropriations for brick and mortar IOCs, and the fact USCG need new IOCs to complete its own conversion to sectors
- A key part of USCG implementation of its IOC program was to do “virtual” IOCs by using a software package called “Watchkeeper” to provide information to USCG & port partners
EXPANSION OF IOCs

Watchkeeper Was to Provide a Variety of Information
EXPANSION OF IOCs
However, Watchkeeper Was Not Used By Port Partners

- In 2007, USCG and CBP formed a joint operations working group, & visited ports to assess existing cooperation at selected locations
- They found that in-person contact was desirable for more effective USCG & CBP coordination
- But, they also found that in-person co-location was not always feasible, requiring a virtual approach (which was consistent with USCG plans to implement Watchkeeper)
- By Sept 2011, USCG had granted 233 partners at 11 ports with access to Watchkeeper
- However, during the 3 month period GAO examined, more than 80% had not logged on, and 97% had logged on only 5 times or less

Source: GAO analysis of U.S. Coast Guard data.
EXPANSION OF IOCs

Further Watchkeeper Deficiencies

- A factor in the low number of port partners using the software was that USCG had not included state and local partners when developing the functional requirements for Watchkeeper, so such partners did not see it as helpful to their job.

- Weak management of Watchkeeper also led to slippage in costs and schedules, and the cancellation of later segments, such as...
  - Segment 3 was to provide expanded sensors to fill gaps in situational awareness.
  - Segment 4 was to upgrade existing facilities to support interagency planning and operations, including space to be allocated for key port partners.
OTHER COORDINATION MECHANISMS

Area Maritime Security Committees

- At the port level, USCG established about 43 Area Maritime Security Committees, with a variety of port stakeholders to develop security plans, conduct exercises, and otherwise promote information sharing on threats, etc.
- GAO found that these committees improved the timeliness, usefulness, and completeness of information shared among stakeholders.
- They also helped establish relationships that facilitated the exchange of security information outside normal meetings.
- However, the committees only meet periodically, so were not useful for real-time intelligence or planning daily operations.
- Also, many committee members lacked security clearances, so could not be informed of more sensitive security issues or operations.
- In response to GAO recommendations, USCG improved its efforts to get clearances for key members of Area Maritime Security Committees.
OTHER COORDINATION MECHANISMS

DHS-Led Coordination Efforts

- Regarding IOCs, once DHS delegated the responsibility to USCG in 2006, it provided no further guidance or support to USCG, and other DHS components were unwilling to sign onto USCG efforts...
  - It was not until mid-2011 that DHS (via its Information Sharing and Safeguarding Governance Board) got involved, and not until Dec 2011, that DHS signed a directive to components to participate in IOCs
- DHS had two failed department-wide efforts to develop regional structures and mechanisms that may have impacted IOCs or similar centers
  - In 2004, DHS responded to legislation (the Homeland Security Act 2002 requiring it to come up with a regional / field reorganization plan) with a 7-page report to Congress; it called for a “Regional Concept” and asked for $50 million in FY2006 to start implementing results of its I-Team
  - In 2010, DHS completed a “bottom-up review” (as part of its QHSR), which recommended DHS develop a unified structure for components in the field; then DHS quietly dropped the proposal without any documentation
- In 2012, DHS senior officials said they are no longer pursuing a realignment of component field units, but were encouraging component-led or virtual efforts
- In 2013, DHS senior officials also said they were no longer pursuing specific virtual solutions to better integrate components at the field level
OTHER COORDINATION MECHANISMS

Component-Led Coordination Efforts

- GAO examined 4 other mechanisms, all with documented charters; federal, state and local agencies; and a designated lead agency
- The port-level mechanism is called the Regional Coordination Mechanism (ReCoM)
  - ReCoMs were established 2011 by the Maritime Operations Coordination Plan (signed by leaders of USCG, CBP, ICE)
  - The Plan directs these agencies to fuse intelligence, planning and operations to target terrorist and criminal networks along the coastal borders
  - USCG serves as lead for planning and coordinating among components
  - About 32 ReCoMs have been established in line with USCG sector jurisdictions
  - Among other actions, ReCoMs help implement the small vessel strategy
- The 3 other mechanisms (not specific to ports) are shown on the next slide
OTHER COORDINATION MECHANISMS
Successful Collaboration Practices

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<th>Selected DHS collaborative field mechanisms</th>
<th>Positive working relationship</th>
<th>Sharing resources</th>
<th>Sharing information</th>
<th>Shared public recognition</th>
<th>Compatible technology</th>
<th>Sharing a common mission</th>
<th>Physical collection of participants</th>
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Summary of successful collaborative practices reported by the 10 mechanisms:

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- 10 of 10
- 10 of 10
- 7 of 10
- 7 of 10
- 7 of 10
- 7 of 10
- 6 of 10

Legend:
- Respondent reported practice as key to success

Source: GAO analysis of DHS information.
OTHER COORDINATION MECHANISMS

Competing and/or Duplicate Efforts

• In some ports, other DHS and DOJ funded coordination centers were built despite substantial overlap in both function and geography with existing USCG IOCs

• CBP built an Operational Integration Center (OIC) at Selfridge Air National Guard Base near USCG Sector Detroit’s IOC

• FEMA’s Port Security Grant Program funded the $21 million Port of Long Beach Joint Command and Control Center near USCG Sector LA’s IOC

• Some DHS-funded Fusion Centers and DOJ-funded High Intensity Drug Trafficking Areas (HIDTA) are near other USCG Sector IOCs

• The overlapping functions and geography of these other mechanisms indicate that more strategic planning or investment by DHS and other departments could have allowed federal resources on such efforts to go further and create more/better IOCs
CONCLUSIONS
Where Do We Go From Here?

• Moving forward, DHS is not likely to help IOCs evolve to a higher state...
  • DHS had two major efforts (2004 and 2010) to realign component structures in the field—in part to improve info sharing and coordination of operations—but never followed through with such efforts; leaving components on their own to coordinate at the field level
  • DHS delegated IOC issues in the SAFE Port Act to USCG, thus abdicated any department level responsibility to manage the program (such as ensuring CBP or other component involvement, and/or approving funding)
• For the existing IOCs or less-robust USCG Sector Command Centers...
  • While DHS is not tracking best practices, GAO’s work did identify several successful collaboration practices (see slide 25)
  • Where virtual collaboration is the norm, collaboration can be increased through regular in-person weekly or monthly meetings or socials
  • When integrating operations, don’t necessarily attempt to physically integrate separate component IT systems into a “system of systems” (i.e., use the JIATF-South model and not the Watchkeeper model)
  • Better strategic planning and investments can ensure that different / nearby coordination centers do not compete or duplicate IOCs
QUESTIONS AND CONTACT INFO
Questions?

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For access to referenced GAO reports, see GAO website: www.gao.gov