

July 31, 2013

**Congressional Committees** 

Subject: Army Logistics: Container Handling Equipment Requirements, Contracts, and Inventory

Container handling equipment provides Army commanders with the flexibility they need to respond to rapidly shifting operations by supplying the capability to transport critical cargo. To support a versatile and expandable distribution system, the Army has five types of container handling equipment to carry both containerized and non-containerized (or "break bulk") cargo: flatracks, container roll-in/out platforms (CROPs), container handling units (CHUs), enhanced container handling units (E-CHUs), and container transfer enhancements (CTEs). Flatracks, which can carry both containerized and "break bulk" cargo, and CROPs, which can carry only "break bulk" cargo, are structural steel frames. CHUs and E-CHUs attach to the lifting arm of a truck and allow for upload and offload of containers. The CTE is a modification to a trailer which allows the container to roll onto the trailer while being pushed by the CHU/E-CHU.

House Report 112-493 mandated GAO to provide a report to the congressional defense committees on the acquisition plan, requirement, and inventory for container handling equipment in the Army, including CROPs, flatracks, E-CHUs, CTEs, and similar equipment in use by the Army.<sup>1</sup> Our objectives for this report were to describe (1) how the requirements for container handling equipment have changed since 1998 and when the corresponding contracts were awarded or delivery orders issued and (2) the current and projected inventories of container handling equipment. Enclosure 1 provides a copy of the slides detailing the results of our review that we used in briefing your offices on July 11, 2013.

To address our objectives, we reviewed relevant documents related to the Army's container handling equipment. These include the 1998 Operational Requirements Document for the Palletized Load System; Operational Needs Statements<sup>2</sup> and Equipment Sourcing Documents<sup>3</sup> for flatracks; the 2010 Combined Arms Support Command (CASCOM) flatrack/CROP briefing; the 2012 Distribution Enablers Study; the draft Capability Production Document; and contracts and related documents for container handling equipment. Additionally, we interviewed Army officials responsible for the requirements, acquisitions, program management, and inventory of

<sup>&</sup>lt;sup>1</sup>The explanatory statement accompanying the Consolidated and Further Continuing Appropriations Act, 2013, Pub. L. No. 113-6 (2013), retained a reporting requirement established in House Report 112–493. *See* 159 Cong. Rec. S1404 (daily ed. Mar. 11, 2013); H.R. Rep. No. 112-493, at 138 (2012).

<sup>&</sup>lt;sup>2</sup>Operational Needs Statements provide a way for unit commanders to identify urgent needs for new materiel or new capabilities.

<sup>&</sup>lt;sup>3</sup>Equipment Sourcing Documents are requests for filling an equipment shortage that has already been validated or authorized by the Department of the Army.

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Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39-18 container handling equipment, including CASCOM, the office of the Assistant Secretary of the Army (Acquisition, Logistics & Technology), the Department of the Army, TACOM,<sup>4</sup> and the Program Executive Office. We obtained data on container handling equipment inventory as of June 2013. We reviewed these data for obvious inconsistency errors and completeness. When we found discrepancies, we brought them to the attention of Army officials to ensure correction of the discrepancies. From these efforts, we determined that the data were sufficiently reliable for the purposes of this report.

We conducted this performance audit from May 2013 through July 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our findings and conclusions based.

In summary, requirements for container handling equipment have changed since 1998 from focusing on "break bulk" to focusing on containerized distribution. This change occurred because of unanticipated warfighter needs during operations in Iraq and Afghanistan and the development of new container handling equipment technologies. Contracts were awarded and delivery orders issued from 2001 through 2012 to correspond to the changing requirements for container handling equipment.

- Produced prior to the wars in Iraq and Afghanistan, the 1998 Operational Requirements Document indicated that cargo would be transported to secure locations in containers and then to troops in "break bulk," without using containers. Capabilities that would later be filled by CHUs/E-CHUs and CTEs were identified for the requirement to transport cargo in containers. CROPs were identified as a capability for the requirement to transport "break bulk" cargo without containers. Flatracks, the existing capability since 1994 to move both containerized and "break bulk" cargo, were no longer identified as a capability in the 1998 document because, according to the document, they added unnecessary weight to the load being transported and required additional equipment to place the container on and off the flatrack. As a result, in a 2001 strategy, the Army decided to eliminate the use of flatracks and transition funding to CROP procurement. In implementing this strategy, the Army awarded a contract in December 2002 for up to 3,997 CROPs and awarded another contract in June 2006, from which it ordered 32,917 CROPs.
- According to Army documentation, from 2008 through 2010, warfighters in Iraq and Afghanistan identified an unanticipated and urgent need for flatracks to move cargo in containers to forward operating units, in order to better conceal and protect items being moved along hazardous routes. After the Army's 2001 strategy eliminated the need for flatracks, Army officials stated that the ability to move containers to forward operating units was limited because CROPs cannot carry containers. Further, as of 2010, Army officials said that there was an insufficient inventory of CHUs/E-CHUs to meet the urgent need for container distribution, because the Army had not anticipated the need to move containers to forward operating units. Additionally, Army officials said warfighters had not yet been properly trained to use the CHUs/E-CHUs. Moreover, as of 2010, the CTE had

<sup>&</sup>lt;sup>4</sup>TACOM was formerly known as Tank-automotive and Armaments Command.

not yet been fielded because it was in testing. As a result of the urgent need to move cargo in containers, the Army awarded a contract in August 2010 for 3,227 flatracks. As of June 2013, Army officials stated that 328 of these flatracks had been shipped to troops and 2,899 were awaiting release by the Army.

- In February 2012, the Army issued the Distribution Enablers Study, which revisited the capabilities needed for "break bulk" and containerized cargo distribution. This study included the E-CHU in its analysis, because more E-CHUs had been fielded to units, and the CTE, which completed testing in 2011. The Distribution Enablers Study recommended using the E-CHU paired with the CTE, because this combination provides three times more capacity to distribute cargo than flatracks alone. As a result, in June 2012, the Army ordered 180 CTEs.<sup>5</sup>
- Requirements for container handling equipment are continuing to be updated and may change due to DOD's plans to reduce the size of the Army. A Capability Production Document—expected to be issued in late summer 2013 to update the 1998 Operational Requirements Document—is to provide updated requirements to include current technologies for CROPs, E-CHUs, and CTEs and is expected to add the flatrack capability for Army Corps of Engineers bridge units. Army officials said that plans are also being completed for each piece of container handling equipment—based on the 2012 Distribution Enablers Study—that will identify the quantity and type of equipment to be sent to units. Additionally, Army officials said that the Army Capabilities Integration Center is conducting a tactical wheeled vehicle reduction study, due to be completed in late 2013 or early 2014, which could affect requirements for container handling equipment.

Based on experiences during the recent operations in Iraq and Afghanistan, the Army's priority is to increase the inventory of E-CHUs and CTEs to move containerized cargo in a sufficient and secure manner to the forward-most units on the battlefield. According to Army officials, the Army has the majority of the inventory it needs of CROPs and flatracks to move "break bulk" cargo, and there is no future funding programmed for CROPs or flatracks. However, the inventory of CROPs and flatracks is projected to increase, because some CROPs and flatracks have been procured but have not yet been provided to units. Table 1 below shows the inventories of container handling equipment as of June 2013 and the projected inventories through fiscal year 2018.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup>The Army initially ordered 182 CTEs in June 2012 but reduced the order to 180 through a modification issued in December 2012.

<sup>&</sup>lt;sup>6</sup>Projected inventory includes (1) the current inventory as of June 2013, (2) E-CHUs, CTEs, CROPs, and flatracks that have been procured but have not yet been provided to units using fiscal year 2011 through fiscal year 2013 funds, and (3) E-CHUs and CTEs programmed for in the 2014 through 2018 Program Objective Memorandum. Projected inventory is subject to change based on Army budgetary decisions.

#### Table 1: Actual and Projected Inventory of Container Handling Equipment

Category	Inventory as of June 2013	Projected inventory through fiscal year 2018
Container handling unit	768	768
Enhanced container handling unit	1,241	6,035
Container transfer enhancement	0	6,324
Container roll-in/out platform	47,228	48,397
Flatrack	4,342	7,241

Source: Army G-8 data.

# Agency Comments and Our Evaluation

We provided a copy of a draft of this report, including the briefing slides, to DOD for comment. DOD provided technical comments that we incorporated, as appropriate.

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We are sending copies of this report to the appropriate congressional committees and to the Secretary of Defense and the Secretary of the Army. The report is also available at no charge on the GAO website at http://www.gao.gov.

Should you or your staff have questions concerning this report, please contact me at (202) 512-5257 or merrittz@gao.gov. Contact points for our offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are Marilyn Wasleski, Assistant Director; Nicholas Benne; Virginia Chanley; Joanne Landesman; Jodie Sandel; Michael Shaughnessy; and Amie Steele.

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Zina D. Merritt Director Defense Capabilities and Management

Enclosures - 1

#### List of Committees

The Honorable Carl Levin Chairman The Honorable James Inhofe Ranking Member Committee on Armed Services United States Senate

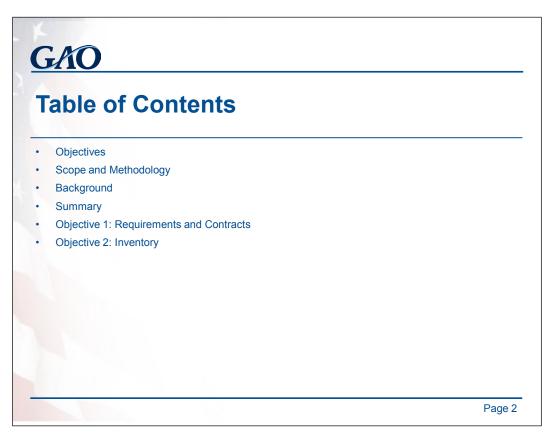
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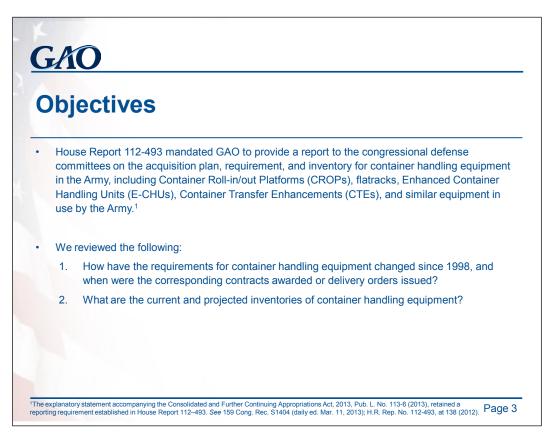
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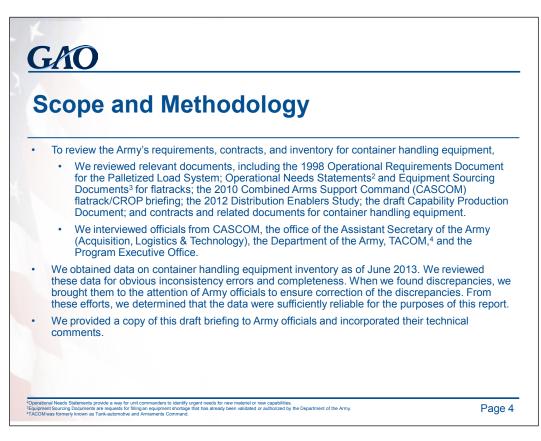
The Honorable C.W. Bill Young Chairman The Honorable Pete Visclosky Ranking Member Subcommittee on Defense Committee on Appropriations House of Representatives

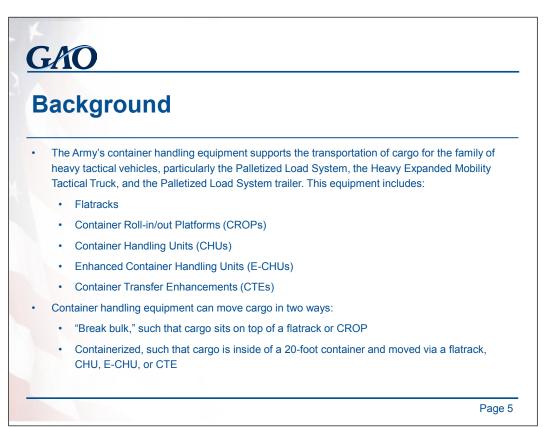


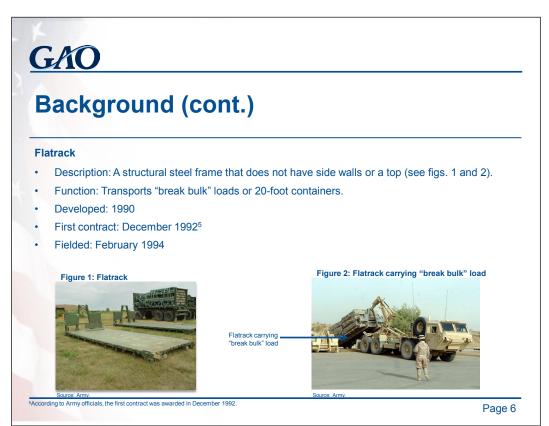




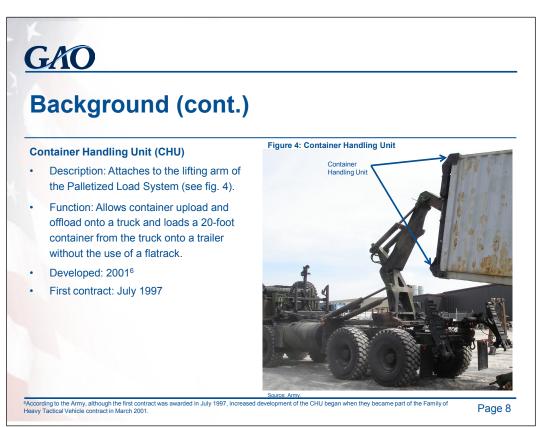








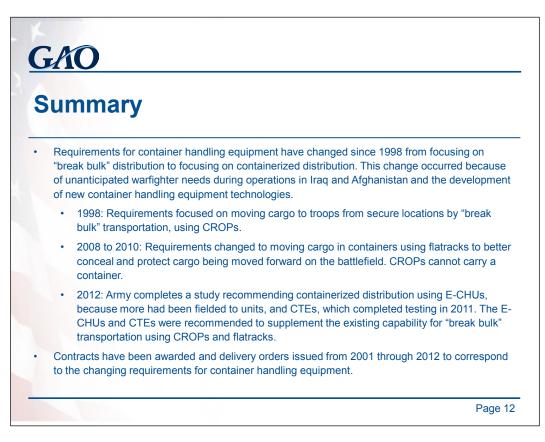




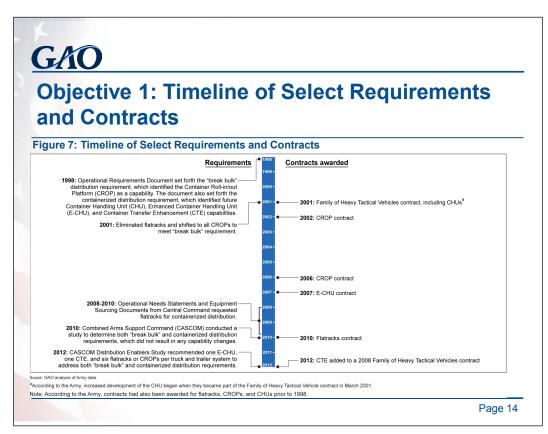


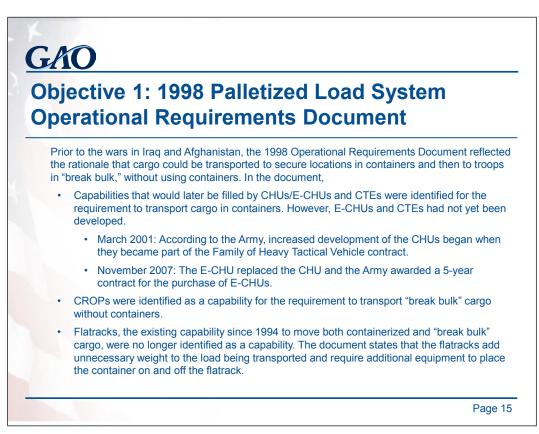


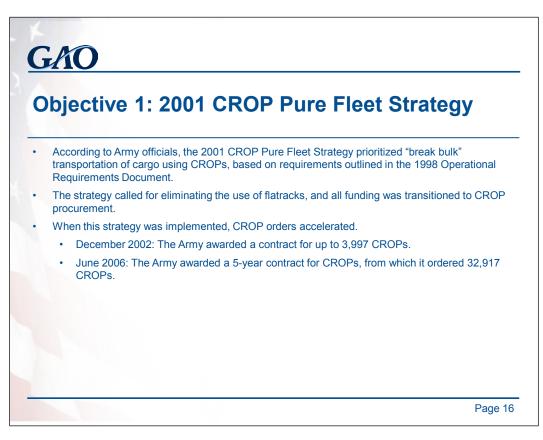
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	quipment functions are performed by the following Army
Container Handling Equipment Offices and Fu	unctions
c	Container handling equipment function
d Arms Support Command (CASCOM) D	evelops and maintains container handling equipment requirements document
3/5/7 V	alidates and approves the requirements documents.
	rograms funding based on requirements documents and available funding an etermines equipment distribution to active and reserve component units.
Secretary of the Army (Acquisition, P & Technology)	articipates in acquisition decisions.
Service Support e	repares acquisition plans and scope of work documents, provides new quipment training, and performs overall program management for container andling equipment.
ntracting Command A	wards contracts for container handling equipment.
4 O	oversees sustainment and maintenance of container handling equipment.
Life Cycle Management Command O d Logistics Support Center	Vversees inventory of container handling equipment.
& Technology) Executive Office for Combat Support and Performance Support Intracting Command Life Cycle Management Command O	repares acquisition plans and scope of work documents, provides r quipment training, and performs overall program management for c andling equipment. wards contracts for container handling equipment. Iversees sustainment and maintenance of container handling equip

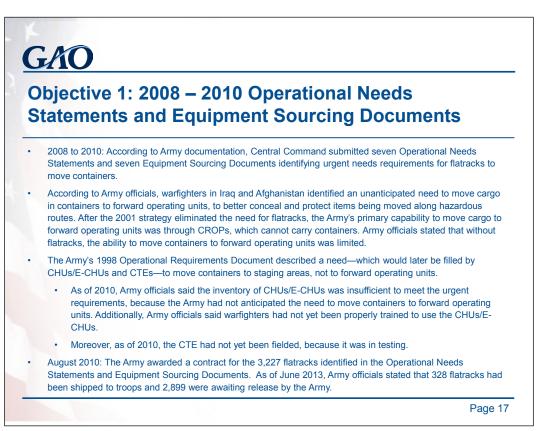


The Army plans to acquire additional		rough fiscal year 2018 to address
recent operations in Iraq and Afghania meet its requirements for "break bulk" Table 3: Actual and Projected Inver Category	stan. The Army has the majority of distribution.	
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Container handling unit		
°	1,241	6,035
Enhanced container handling unit	1,241 0	6,035 6,324
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Enhanced container handling unit Container transfer enhancement Container roll-in/out platform	0	6,324
Container handling unit Enhanced container handling unit Container transfer enhancement Container roll-in/out platform Flatrack Source: Army G-8 data.	0 47,228	6,324 48,397

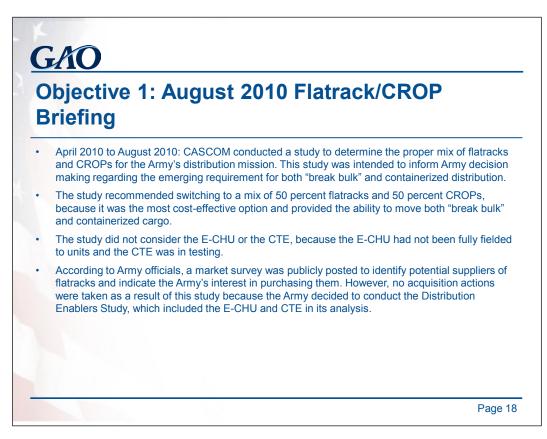


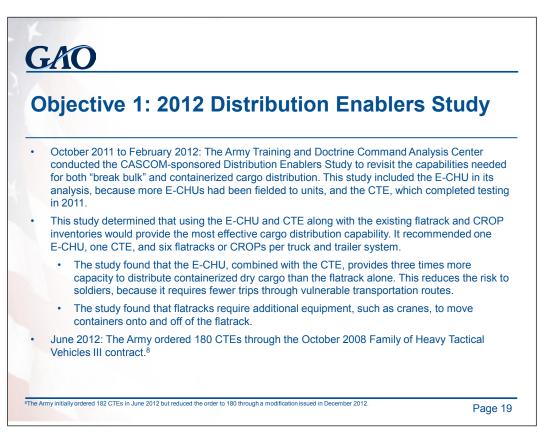


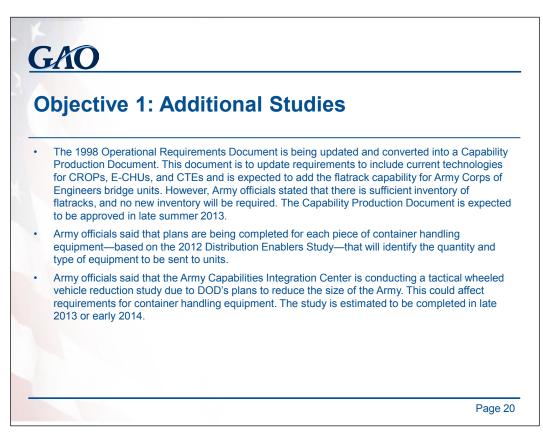


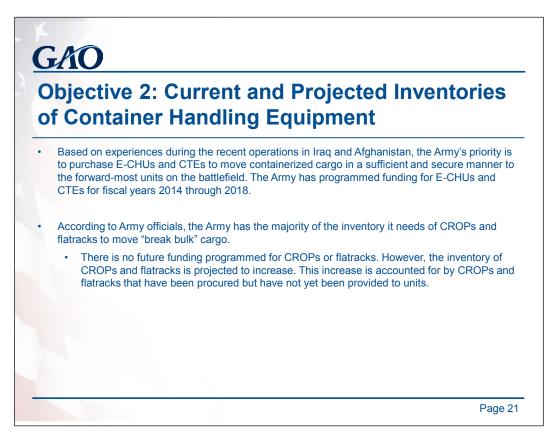


GAO-13-719R Army Logistics









# GAO Objective 2: Current and Projected Inventories of Container Handling Equipment

Category	Inventory as of June 2013	Projected inventory through fiscal year 2018
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Source: Army G-8 data. Notes: Projected inventory includes (1) the current inv procured but have not yet been provided to ur programmed for in the 2014 through 2018 Pro Army budgetary decisions.	its using fiscal year 2011 through fiscal year 2	013 funds, and (3) E-CHUs and CTEs
CHUs have been replaced by E-CHUs and no	additional inventory of CHUs is projected.	
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