Department of Homeland Security Office of Inspector General

Transportation Security Administration Logistics Center – Inventory Management





OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

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APR 26 2013

MEMORANDUM FOR: John W. Halinski Deputy Administrator Transportation Security Administration FROM: Anne L. Richards Inspector General for Audits

SUBJECT: Transportation Security Administration Logistics Center – Inventory Management

Attached for your action is our final report, *Transportation Security Administration Logistics Center – Inventory Management*. We incorporated the formal comments from the Transportation Security Administration in the final report.

The report contains two recommendations aimed at improving inventory management at the Logistics Center. Your office concurred with one recommendation and partially concurred with the other. As prescribed by the Department of Homeland Security Directive 077-01, Follow-Up and Resolutions for Office of Inspector General Report Recommendations, within 90 days of the date of this memorandum, please provide our office with a written response that includes your (1) agreement or disagreement, (2) corrective action plan, and (3) target completion date for each recommendation. Also, please include responsible parties and any other supporting documentation necessary about the current status of the recommendation. Until your response is received and evaluated, the recommendations will be considered open and unresolved.

Consistent with our responsibility under the *Inspector General Act*, we are providing copies of our report to appropriate congressional committees with oversight and appropriation responsibility over the Department of Homeland Security. We will post the report on our website for public dissemination.

Please call me with any questions, or your staff may contact Mark Bell, Deputy Assistant Inspector General for Audits, at (202) 254-4100.

Attachment



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Abbreviations

Auto EDS	automated explosive detection system
DHS	Department of Homeland Security
EDS	explosive detection system
ETD	explosive trace detection
FFE	furniture, fixtures, and equipment
OIG	Office of Inspector General
PER	peripheral equipment
TSA	Transportation Security Administration
TSE	transportation security equipment



Executive Summary

The Transportation Security Administration (TSA) operates three warehouses in Texas, collectively known as the TSA Logistics Center. The warehouses store various types of Government equipment used at airports to screen passengers and baggage. Equipment used at airports, but not specifically used for screening operations, is also stored in the warehouses. As of May 31, 2012, TSA had more than 17,000 items in its warehouse inventory, with an estimated cost of \$185.7 million. We performed this audit to determine whether TSA effectively managed the Logistics Center.

Although TSA has improved accountability of screening equipment at the Logistics Center, its plans and procedures for inventory management need additional improvements. Specifically, TSA stored unusable or obsolete equipment, maintained inappropriate safety stock levels, and did not develop an inventory management process that systematically deploys equipment. Additionally, TSA did not use all storage space within the Logistics Center. As a result, TSA may be losing utility of equipment as it ages and may be able to put approximately \$800,000 per year—used to lease two warehouses—to better use.

In response to our audit, TSA indicated that it was planning additional improvements to warehouse operations. TSA determined that it will not need one of its three warehouses after January 2013, when the lease expires, and in July 2012 it drafted a plan to reduce leased space. Allowing the lease to expire will reduce TSA's warehouse annual lease costs. Additionally, TSA drafted a revision of its Security Equipment Management Manual to include additional guidance on managing warehouse space and inventory.

We made two recommendations to TSA that, when implemented, should assist the component with managing inventory in its warehouses. TSA concurred with one recommendation and partially concurred with the other.



Background

TSA operated three warehouses in Texas, collectively known as the TSA Logistics Center (Logistics Center).¹ The Logistics Center stored various types of equipment used for screening passengers and baggage. The equipment included x-ray units, metal detectors, explosive trace detection (ETD) units, and explosive detection systems (EDSs). Nonscreening equipment (about 8 percent of the monetary amount of inventory items) stored at the Logistics Center included furniture, equipment cases, conveyors, and floor mats. As of May 31, 2012, TSA had more than 17,000 items, valued at about \$185.7 million, stored at the Logistics Center. Table 1 shows a breakdown of the quantity of items stored by equipment type and the recorded value.

Type of Equipment	Quantity	Dollar Value Recorded
Transportation Security Equipment (TSE)	1,790	\$118,569,244
Peripheral Equipment (PER)	576	\$6,587,254
Furniture, Fixtures, and Equipment (FFE)	10,882	\$4,523,188
Items on Hold	67	\$1,232,864
Transportation Security Equipment Pending Disposal ²	972	\$50,725,044
Non-screening Equipment Pending Disposal	2,717	\$4,040,160
Total	17,004	\$185,677,754

Table 1. Warehouse Inventory as of May 31, 2012

Source: Department of Homeland Security Office of Inspector General analysis of TSA data.

Table 2. Types of Equipments stored at the Logistics Center

Туре	Description	
TSE	Equipment used to screen passengers, baggage, and cargo for threats to the transportation system	
PER	PER Equipment that does not screen for threats but that is deployed and used with other screening equipment (e.g., EDS conveyors and x-ray viewing stations)	
FFE	Miscellaneous ancillary items used in or related to the screening environment (e.g., chairs, tables, stanchions)	
Items on Hold Equipment that has been allocated for a purpose (e.g., deployment) and is therefore not available for other purposes		
TSE Pending Disposal TSE that has been designated for reutilization or disposal		
Non-TSE Pending Disposal	Nonscreening equipment that has been designated for reutilization or disposal	

Source: TSA.

¹ TSA also operates warehouses in New Jersey and Virginia. We plan to conduct audit work on the management of these warehouse facilities in the future.

² Examples of TSE pending disposal include EDS (listed value \$21.7 million), ETD (\$20.6 million), Threat Image Projection x-ray units (\$5.7 million), and Bottle Liquid Scanners (\$2.5 million).



TSA leased three warehouses comprising approximately 443,000 square feet. The annual cost for the warehouses was \$1.8 million. Table 3 shows the Logistics Center lease information. Since 2010, TSA has spent about \$5.5 million to lease warehouse space.

Warehouse	Square Feet	Annual Lease Cost	Lease Expiration
1	233,740	\$1,021,444	September 2014
2	100,000	383,040	January 2013
3	109,750	421,441	September 2014
Total	443,490	\$1,825,925	

Table 3. Logistics Center Lease Information

Source: TSA.

TSA spends an additional \$1.4 million annually on a contract to operate the warehouses and provide inventory support services. The contractor is responsible for warehouse functions such as receiving, staging, storing, distributing, shipping, and disposal. In addition to warehouse operations and management, the contractor conducts an annual inventory.

We performed this audit as a result of a May 2012 congressional hearing on TSA procurement, deployment, and storage of airport security-related equipment. The hearing discussed a report titled *Airport Insecurity: TSA's Failure To Cost-Effectively Procure, Deploy, and Warehouse Its Screening Technologies,* issued by the joint majority staff from the House Committee on Oversight and Government Reform and the House Committee on Transportation and Infrastructure.

The hearing also discussed the Department of Homeland Security (DHS) Office of Inspector General (OIG) report, *Management of the Transportation Security Administration's Logistics Center*, issued in 2009.³ The report concluded that TSA did not efficiently deploy, redeploy, or dispose of transportation security equipment through its Logistics Center. Specifically, the report addressed quantity of equipment and time in storage at the Logistics Center, and it recommended that TSA develop, implement, and monitor procedures for deployment, redeployment, and disposal of transportation security equipment, and periodically assess inventory to make sure inventory is correctly classified. Although TSA developed policies and procedures to address the report's recommendations, we identified similar findings during this review.

³ OIG-10-14, *Management of the Transportation Security Administration's Logistics Center*, November 2009, http://www.oig.dhs.gov.



Results of Audit

TSA has improved accountability of screening equipment at the Logistics Center; however, its plans and procedures for inventory management need additional improvements. Specifically, TSA stored unusable or obsolete equipment, maintained inappropriate safety stock levels, and did not develop an inventory management process that systematically deploys screening equipment. Additionally, TSA did not use all storage space within the Logistics Center. As a result, TSA may be losing utility of equipment as it ages and annually funding approximately \$800,000 of unneeded warehouse space.

TSA Inventory Management

Equipment in Storage

TSA had unusable, obsolete equipment and equipment that exceeded safety stock requirements stored at the Logistics Center. As of May 31, 2012, TSA had 17,004 items stored at the Logistics Center. TSA divides the inventory into three types or categories:

- Transportation Security Equipment (TSE),
- Peripheral Equipment (PER), and
- Furniture, Fixtures, and Equipment (FFE).

Within the inventory categories, TSA designates condition codes for individual items held in

Equipment Condition Codes 1 – new, 4 – used, 7 – used and needs repair, and X – disposal.

Source: TSA

inventory. Items in the warehouse designated "on-hold" are allocated for a specific purpose. Table 4 shows the length of time TSA stored the equipment at the Logistics Center as of May 31, 2012.

Table 4. Length of Time TSA Stored Equipment at the Logistics Center					
Condition Code	≤ 1 year	>1 year and < 2 years	≥ 2 years	Quantity	Dollar Value Recorded

Condition Code	≤1 year	< 2 years	≥ 2 years	Quantity	Recorded
1-New	3,860	1,794	3,238	8,892	\$68,849,602
4 – Used	1,516	916	166	2,598	31,674,397
7 – Needs Repair	1,400	300	58	1,758	29,155,687
On-Hold	49	16	2	67	1,232,864
X – Disposal	2,701	628	360	3,689	54,765,204
Total	9,526	3,654	3,824	17,004	\$185,677,754

Source: DHS OIG analysis of TSA data.



Table 4 shows that TSA stored approximately 22 percent or 3,824 of 17,004 items, in the warehouse for more than 2 years. Appendix C provides additional information by category and condition code on the length of time equipment remained in the warehouse. Table 5 shows that of the equipment stored at the Logistics Center for more than 2 years that was not on hold or pending disposal, 100 items were TSE.

01 Way 51, 2012				
Description	Qty	Storage Time (in months)	Dollar Value Recorded	
Explosive Trace Detector	48	24–60	\$1,632,000	
Enhanced Metal Detector	33	30–69	247,500	
Threat Image Projection Ready X-Ray	11	36–48	375,562	
Explosive Detection System (including three new Auto EDSs)	7	31–47	5,741,500	
Bottle Liquid Scanner	1	35	0	
Total	100		\$7,996,562	

Table 5. TSE Stored at Logistics Center for More Than 2 Years (24 Months) as
of May 31, 2012

Source: DHS OIG analysis of TSA data.

The quantity of TSE stored in the warehouse for more than 2 years accounted for approximately one-half percent of 17,004 items in the warehouse, yet it represented almost \$8 million, or 4 percent of the dollar value recorded for all inventory in the warehouse. This illustrates that increased quantities of TSE stored at the warehouse may significantly increase the dollar value of inventory. Further, this may result in millions of dollars worth of screening equipment becoming obsolete or unusable while stored for an extended period.

With prolonged storage, TSA lost utility of equipment as it aged in storage. As of May 31, 2012, TSA had 12 automated explosive detection system (Auto EDS) units at the warehouse, including three new units stored at the warehouse for more than 3 years. According to one TSA official, the component does not plan to deploy the Auto EDS units that sat in storage. In 2007, TSA awarded contracts to acquire Auto EDSs to provide baggage-screening technology for checkpoints. However, TSA officials explained that other checkpoint technology screened baggage faster and required less space than the Auto EDS, and as of November 2012, TSA removed all Auto EDS units from airports. The recorded value of the eight Auto EDS units stored at the warehouse in November 2012 was approximately \$3.7 million. Upgrades for the Auto EDS units in the warehouse were about \$1 million. The Auto EDS units became obsolete while aging in the warehouse.



TSA also stored nonscreening equipment in the warehouse for long periods. Specifically, TSA stored more than 3,200 FFE items in the warehouse for more than 2 years. Examples include 294 wastebaskets stored for more than 7 years, and 41 empty crates—used for various pieces of screening equipment—stored for more than 2 years. Table 6 shows examples of nonscreening items that TSA stored for more than 2 years.

Table 6. Examples of Non TSE Stored at Logistics Center for Longer Than 2 Years	
(24 Months)	

Description	Condition Code(s)	Qty	Storage Time (Months)
L3 AC Noise Reduction Kit and L3 Remote BVS Kit	1	3	26-88
Wastebasket	1	294	87
Conveyor (Power, Exit, Extension, Entry, Bracket, Extension, and Pedestal)	1 and 4	131	24-67
Reveal Master Control Client Kits and NETGEAR Switches (EDS Ancillary Items)	1 and 4	22	26-60
Rolling Itemiser (ETD) Case	4	17	51-58
Empty Equipment Crates	1 and 4	41	28-55

Source: DHS OIG analysis of TSA data.

TSA's warehouse inventory also included obsolete items. The inventory showed that TSA had 266 Threat Image Projection Ready x-ray units in the warehouse. The machine, used to screen carry-on baggage, is obsolete technology, being replaced by Advanced Technology and Advanced Technology 2 x-rays. TSA also warehoused five new whole body imager training simulators (laptop computers) for more than 3 years. TSA replaced the whole body imager with advanced imaging technology units and never used these laptop simulators.

Safety Stock

TSA did not have appropriate safety stock levels at the Logistics Center to meet its safety stock requirements. TSA relied on nondeployable equipment, had insufficient quantities of some equipment, and excessive quantities for other equipment. TSA holds safety stock as insurance against uncertainties such as equipment failure, emerging requirements, or special events.

Safety Stock: Inventory that is carried to prevent a shortage of critical equipment. TSA does not consider equipment with a known deployment site to be safety stock.

Source: TSA.

Adequate safety stock levels permit TSA to respond to maintenance needs while minimizing the adverse affect on screening operations.



TSA relied on nondeployable screening equipment to meet safety stock requirements. For example, the target safety stock level for one type of bottle liquid scanner was 18 units. The warehouse inventory report for the third quarter of fiscal year 2012 also showed 18 units designated as safety stock; however, 10 of the 18 units needed repair and were nondeployable. Based on the number of bottle liquid scanner units designated as safety stock in inventory and the condition codes assigned to them, only eight units were in redeployment condition. TSA officials said that safety stock quantities and levels are evaluated and updated every quarter in conjunction with the quarterly warehouse disposition process. We identified equipment designated as safety stock stayed at condition code 7, or repair needed, on consecutive warehouse inventory reports.

In February 2012, TSA evaluated safety stock inventory for nine types of EDS and determined that the quantity of safety stock was deficient for six of the nine types. For example, TSA set the level of safety stock for one type of EDS actively under production and deployment at five units. Although TSA had 12 of these units in the warehouse, none were designated as safety stock. TSA's ability to respond to critical failures for this piece of equipment is affected by not having equipment available for safety stock.

TSA also assessed checkpoint technology safety stock in July 2012 and identified equipment with a shortage of warehouse safety stock, as well as equipment in inventory that exceeds the safety stock target. Table 7 shows that TSA's review identified a safety stock shortage for six types of passenger checkpoint screening equipment.

Technology	Quantity in Inventory	Safety Stock Target	Difference
Advanced Imaging Technology-Rapiscan	1	8	-7
Advanced Imaging Technology-L3	1	12	-11
ETD Smiths 500DT	6	25	-19
ETD Itemiser II (Includes Passenger and	69	85	-16
Baggage Screening Units)			
Bottle Liquid Scanner-CEIA	9	22	-13
Advanced Technology X-Ray	1	3	-2

Table 7. Safety Stock Shortage—Checkpoint Technology

Source: TSA.

TSA also stored empty ETD cases (exhibit 1) in quantities that exceed its stated level for safety stock. TSA's July 2012 review showed almost 1,400 more empty cases in inventory than were necessary to meet the target safety stock level of 459. TSA officials explained that after ETD units were placed in service, airports



sent the empty cases to the warehouse for storage. Some of the empty cases were stored in the warehouse for almost 5 years. To optimize existing warehouse space, TSA could have recycled or removed the cases from inventory.



Exhibit 1. Empty ETD Cases

Source: DHS OIG.

Without appropriate safety stock levels, TSA was not prepared to meet equipment emergencies that could affect field operations and national security, or increase travelers' time spent at passenger screening checkpoints.

Inventory Deployment

TSA did not use a systematic inventory method for deploying screening equipment from the warehouse. Instead, according to TSA officials, the component requests equipment from the Logistics Center by serial number. This method does not provide for a disciplined rotation and valuation of warehouse inventory. An example of a systematic inventory deployment process includes first in-first out, which selects screening equipment that has been in the warehouse longest for deployment first. This process ensures that warehouse storage time is minimized.

We identified examples where TSA deployed screening equipment without a logical or systematic method. For example, TSA deployed one EDS unit that was stored in the warehouse for 1 month, even though two additional units had been in storage for 21 and 31 months each. TSA also deployed an enhanced metal detector that had been stored for only 3 months when another had been in the warehouse for more than 4 years. These examples show weak inventory



management and deployment procedures that may lead to a loss of screening equipment utility through long shelf time.

Unused Warehouse Space

TSA did not use all storage space within the Logistics Center. According to an April 2012 TSA report of Logistics Center space usage, TSA did not use all available floor and shelf space at the three facilities. Specifically, TSA did not use 72,074 square feet (about 16 percent) of the approximately 440,000 square feet of floor space. TSA was paying for unused space that equates to an area larger than a football field. Exhibit 2 shows the empty floor space in Logistics Center 2. According to TSA, the component used the empty floor space as a training area for its canine handlers. TSA officials explained that the component will not renew the warehouse lease when it expires in January 2013. In September 2012, TSA notified the warehouse owner that it did not intend to renew the lease; however, TSA could not provide us with documentation of a formal, approved plan for its future warehousing needs.



Exhibit 2. Warehouse 2 Unused Floor Space

Source: DHS OIG.

The April 2012 report also showed that TSA did not use 2,142 (64 percent) of 3,344 available shelves. Exhibit 3 shows unused shelf space.



Exhibit 3. Warehouse 1 Unused Shelf Space



Source: DHS OIG.

Without an effective inventory management process, TSA cannot accurately estimate the space required for equipment storage and minimize warehouse leasing expenses.

Inventory Policies and Procedures

TSA's guidance for inventory management did not clearly articulate inventory procedures. TSA's Personal Property Management Manual and Security Equipment Management Manual did not prescribe detailed guidance for inventory management at the Logistics Center. The Personal Property Management Manual provides overall TSA guidance for management of personal property. It establishes property management principles, such as—

- Maximizing return on investment;
- Managing inventory effectively;
- Minimizing the cost of management systems;
- Making excess property the first source of supply; and
- Maximizing reuse.

TSA's *Personal Property Management Manual* also defines personal property, as well as accountability and capitalization thresholds, and establishes roles and responsibilities.



Additionally, the Office of Security Capabilities issued the *Security Equipment Management Manual*, which describes the processes and procedures to account for personal property throughout its life cycle.⁴ It applies to TSE, PER, and FFE purchased or leased by the Office of Security Capabilities.

Personal Property: Tangible property, such as equipment, materials, and supplies that can be moved from place to place.

Source: TSA.

The Security Equipment Management Manual also describes roles, responsibilities, and warehouse operational procedures, but does not include detailed procedures for warehouse inventory management related to redeployment of warehouse equipment and safety stock requirements. For example, chapter 7 of the manual addresses Logistics Center procedures such as hours of operation, receiving, periodic inventories, and the warehouse property management system. The chapter also addresses selecting, staging, and distributing equipment. It requires the contractor to identify the property for issue and provide documentation to the property custodian to update TSA's property system, but does not address the inventory method the contractor should use to select the requested equipment.

The manual assigns responsibilities for Logistics Center property management to a property custodian, and instructs the property custodian to provide a quarterly inventory list to the equipment contracting officer's representatives for review, and to update records accordingly. Although TSA provided records to show that quarterly reviews occurred, without clear, detailed warehouse inventory management policies and procedures, TSA may be losing utility of equipment as it ages and paying for unused warehouse space.

Planned TSA Actions

Warehouse Leases

In July 2012, TSA drafted plans to reduce the number of warehouses it leased. TSA explained that it would not need warehouse space used for storing *American Recovery and Reinvestment Act of 2009* procurements after January 2013, when the lease agreement expires. This will reduce TSA's warehouse space by 100,000 square feet and annual lease costs by \$383,000. TSA also reported that it expanded the amount of new equipment shipped directly from the manufacturer to airports. This will also reduce storage space requirements.

⁴ Logistics Center operations are managed by the Operations Support Division within TSA's Office of Security Capabilities.



TSA plans to consolidate all equipment into a single warehouse by January 31, 2013, and to review the feasibility of terminating the lease for the third warehouse prior to its scheduled expiration in September 2014. Eliminating the third warehouse would further reduce TSA's storage space by almost 110,000 square feet and leasing costs by approximately \$421,000. By October 2014, TSA should have a lease agreement for one warehouse, reducing the component's costs by approximately \$800,000 per year.

Security Equipment Management Manual

TSA is updating its *Security Equipment Management Manual*, and the updated version will include additional guidance on warehouse management. The revised manual will reflect the Office of Security Capabilities' new organizational structure and provide guidance on safety stock, quarterly reviews, inventory deployment, and disposal.

Recommendations

We recommend that the Deputy Administrator, Transportation Security Administration:

Recommendation #1:

Implement detailed inventory management procedures for equipment at the Transportation Security Administration Logistics Center.

Recommendation #2:

Develop and implement procedures to assess and adjust warehouse space on an annual basis.

Management Comments and OIG Analysis

TSA provided comments to the draft of this report. When appropriate, we made changes to reflect the suggested revisions. According to its response to the draft report, TSA agreed with our recommendations. TSA also provided additional information for four sections of the draft report: Equipment in Storage, Safety Stock, Inventory Deployment, and Unused Warehouse Space. A summary of the responses and our analysis follows. We included a copy of the management comments in their entirety in appendix B.



In its comments to the draft report, TSA asserts that OIG did not sufficiently recognize warehouse space requirements fluctuate. TSA further explained that a 2011 report on warehouse space usage shows only 1 percent of warehouse space was unused. In its comments, TSA did not recognize that the component used the Logistics Center to temporarily store equipment funded by the *American Recovery and Reinvestment Act of 2009* instead of directly shipping the equipment from the manufacturer to the airports. In its February 2013 update to the *Security Equipment Management Manual*, TSA emphasized that component personnel should ship property directly from the manufacturer to the airport sites whenever possible to minimize the use of the Logistics Center as an interim staging location. This process should lessen large fluctuations of equipment in the warehouse.

TSA commented that the Exhibit 2 photograph is misleading, as it does not recognize that TSA intentionally removed equipment from Logistics Center 2 in its efforts to reduce space. TSA also clarified that the component used the empty warehouse space for canine handlers on one occasion. Our report recognizes TSA planned to reduce warehouse space and did not intend to renew the lease for Logistics Center 2. Additionally, while we agree TSA used Logistics Center 2 to store screening equipment, warehouse floor space was set up for canine training during our site visit to the facility in June 2012.

Response to Recommendation #1: TSA concurs. The component adopted and implemented an inventory management policy to issue equipment on the first in-first out basis. Additionally, TSA instituted weekly procedures to identify and highlight for action safety stock not in deployable condition.

OIG Analysis: TSA's actions are partially responsive to the recommendation. Although the component provided actions to improve inventory deployment and management of safety stock, the comments did not fully address actions TSA will take to minimize the storage of unusable or obsolete equipment. The recommendation will remain open and unresolved until TSA provides additional information in response to the recommendation, and we review the implemented policy and procedures to ensure that they comprehensively address the identified concerns.

Response to Recommendation #2: TSA partially concurs. TSA understands the need to reassess warehouse space requirements annually and will implement that portion of the recommendation. However, TSA identified constraints where adjusting leased warehouse space on an annual basis may be infeasible.



OIG Analysis: TSA's planned actions sufficiently address the recommendation. We recognize TSA should honor contractual commitments for agreed-upon periods. With the implementation of annual warehouse space assessments, TSA should be able to better plan for short- and long-term warehousing needs. The recommendation will remain open and unresolved until we examine the approved policy and procedures for conducting annual assessments.



Appendix A Objectives, Scope, and Methodology

The Department of Homeland Security (DHS) Office of Inspector General (OIG) was established by the *Homeland Security Act of 2002* (Public Law 107-296) by amendment to the *Inspector General Act of 1978*. This is one of a series of audit, inspection, and special reports prepared as part of our oversight responsibilities to promote economy, efficiency, and effectiveness within the Department.

The objective of the audit was to determine whether TSA effectively managed the Logistics Center. We reviewed TSA property management policies, procedures, and other memorandums. We also reviewed contracts for leasing the warehouses and related support services. We interviewed TSA staff responsible for the management and operation of the Logistics Center.

We examined the inventory records for equipment stored at the Logistics Center as of May 31, 2012. During our site visit, we performed inventory testing of screening equipment and reviewed selected contracts for purchase of equipment stored in the warehouse to confirm purchase price. We also analyzed records for the equipment disposed of between May 2010 and June 2012.

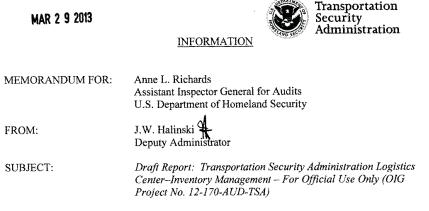
We relied on computer-processed data provided by TSA staff to analyze the length of time equipment had remained at the warehouse. We validated the accuracy of the data by testing a randomly drawn statistical sample of screening equipment to verify correct type, serial number, and bar code for the selected equipment. We determined that the data was sufficiently reliable for the purpose of this report.

We conducted this performance audit between May and December 2012 pursuant to the *Inspector General Act of 1978*, as amended, and according to 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 upon our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based upon our findings and conclusions based upon our audit objectives.



Appendix B Management Comments to the Draft Report

U.S. Department of Homeland Security 601 South 12th Street Arlington, VA 20598



Purpose

This memorandum constitutes the Transportation Security Administration's (TSA) formal Agency response to the subject report. TSA recognizes its responsibility for effective management of Transportation Security Equipment (TSE). We appreciate that the report acknowledged improved accountability at the TSA Logistics Center (TLC) and are grateful for the opportunity to review and provide comments to your draft report.

Background

TSA is charged with countering terrorist threats to aviation security with technologies and procedures that prevent, deter, or render ineffective any attempt to sabotage civil aviation. The development, acquisition, and deployment of TSE are central to TSA's mission to protect U.S. transportation systems. TSA personnel use equipment to screen air passengers, baggage, and cargo, including x-rays, explosives trace detection systems, explosives detection systems (EDS), bottled liquid scanners, and enhanced walk-through metal detectors.

The TLC is a facility used to temporarily stage new and used screening equipment for deployment or redeployment to airports, and for processing surplus and obsolete equipment for disposal. TLC also stores non-screening equipment used at checkpoints and baggage screening operations, such as conveyors, tables, and stanchions.



2

The Office of Inspector General (OIG) performed this audit as a result of a May 2012 Congressional hearing on TSA procurement, deployment, and storage of airport security-related equipment. The hearing discussed a report titled *Airport Insecurity: TSA's Failure to Cost-Effectively Procure, Deploy and Warehouse its Screening Technologies.* It was issued by the joint majority staff from the House Committee on Oversight and Government Reform and the House Committee on Transportation and Infrastructure. The hearing also discussed a U.S. Department of Homeland Security (DHS) OIG report, Management of the Transportation Security Administration's Logistics Center, issued in 2009. The three recommendations from that report have been closed.

The OIG audit results found that TSA has improved accountability of screening equipment at the TLC since 2009 and noted that plans and procedures need additional improvements. Specifically, TSA stored unusable or obsolete equipment, maintained inappropriate safety stock levels, and did not develop an inventory management process that systematically deploys screening equipment. As a result, OIG claims TSA may be losing utility of equipment as it ages and annually funding approximately \$800,000 of unneeded warehouse space.

Discussion

Overall, TSA concurs with OIG's recommendations; however, we are providing clarification and comment on four sections within the report; *Equipment in Storage, Safety Stock, Inventory Deployment, and Unused Warehouse Space.*

Referring to the *Equipment in Storage* section of the report, specifically to the Auto EDS equipment, in September 2012, TSA formally discontinued the Auto EDS technology program, and all pilot units were removed from airports. TSA is now coordinating the transfer and disposal of this equipment from the warehouse. TSA notes that the Auto EDS project was unique to standard checked baggage EDS procurement, and the extended duration of these EDS units in the TSA warehouse is not representative of the majority of EDS units.

The report also states that TSA's warehouse inventory included obsolete items and cited Threat Image Projection Ready X-Rays (TRX). It is true that all TRX will eventually be replaced by AT or AT-2 units. Until such time though, TSA must retain stocks of TRX in case a replacement unit is needed for an airport not yet scheduled for AT or AT-2 deployment. Since the deployment of AT-2 equipment requires training Transportation Security Officers (TSO) on the new technology, it is not feasible to deploy a single AT-2 machine to replace a failed TRX at an airport where TSOs are all trained on TRX. For this reason, TRX safety stock is maintained at the warehouse.

In the *Safety Stock* section, the following change is suggested for the third sentence: "...against uncertainties such as equipment failure, emerging requirements such as new airport terminals, or special events (e.g. Super Bowl temporary screening)". TSA does not hold safety stock for "supplier shortages."

The *Safety Stock* section identified equipment designated as safety stock that was assigned a property condition code indicating it was not ready for deployment. TSA agrees that this is an



area for improvement and, as a result, has instituted a weekly report to identify and highlight for appropriate action all safety stock not in deployable condition.

Table 7 identified checkpoint technology with a shortage of safety stock that could hinder TSA's ability to respond to critical failures by not having equipment available. Table 7 included some of TSA's newest technologies (e.g. L3 Advanced Imaging Technology (AIT), 500DT Explosives Trace Detection (ETD) units), as well as legacy equipment such as Itemiser II ETDs. TSA's deployment strategy for new technologies is to get these improved capabilities to airports first and backfill safety stocks afterward. Given that all airports scheduled to receive these technologies have not yet been completed, it is appropriate at this time for safety stock to be below the designated level. Also, since all legacy equipment procurements are complete and no more are planned, TSA's options are limited for filling legacy safety stock shortfalls. An initiative underway to re-verify airport ETD requirements is expected to identify some quantities of legacy units that are excess and may be used to fill warehouse safety stock levels.

In the section on *Inventory Deployment*, the report states that TSA did not use a systematic inventory method for deploying screening equipment from the warehouse. TSA agrees this is an area for improvement. As a result, TSA incorporated an inventory policy into the Security Equipment Management Manual (SEMM) approved February 13, 2013, which defines the factors, in priority order, for determining which inventory is issued. First In First Out (FIFO) will be used for issuing inventory of a specific technology, model, and configuration needed to fulfill airport screening requirements. The following change to the second sentence of the *Inventory Deployment* section is recommended: "Instead, the agency requests inventory from the Logistics Center by serial number." Requests come from the Headquarters Program Management Office (PMO) instead of field users.

In the section on *Unused Warehouse Space*, the report states that TSA was not using about 16 percent of warehouse floor space in April 2012, citing a TSA report of space usage. The OIG concludes that TSA was, "paying for unused space that equates to an area larger than a football field." The OIG report did not recognize that warehouse operations are dynamic and space requirements temporarily rise and fall based on the pace of shipping and receiving operations. For instance, a TSA report of warehouse space usage dated February 2011 shows only 1 percent of floor space was unused at that time. Further, Exhibit 2 shows a misleading photograph of unused floor space in warehouse #2. TSA was intentionally reducing the amount of equipment stored in this warehouse because the lease was lapsing in January 2013. TSA would like to clarify the statement in the report that "the agency used the empty floor space as a training area for its canine handlers." On one occasion, TSA did allow canine handlers to use the warehouse for a brief training exercise. The purpose for Warehouse #2 was storage of screening equipment, not canine training.

The section on *Inventory Policies and Procedures* states that the Security Equipment Management Manual (SEMM) "does not address the inventory method the contractor should use to select the requested equipment." Section 7.3.2 of the SEMM does define the factors, in priority order, used by TSA Headquarters for determining which inventory to issue first. Once a technology type, model, and configuration are identified to fulfill an airport's screening needs, a FIFO inventory policy is followed.

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Overall, your recommendations will help us continue to strengthen policies and procedures for inventory management and warehouse use at the TLC. We concur with your recommendations and have already taken steps to address them.

<u>Recommendation 1</u>: Implement detailed inventory management procedures for equipment at the Transportation Security Administration's Logistics Center.

TSA Concurs: TSA has adopted and implemented an inventory management policy to issue equipment on the basis of First In First Out (FIFO). In addition, a new weekly procedure has been instituted to identify and highlight for appropriate action all safety stock not in deployable condition to ensure TSA's ability to respond quickly to critical deployment requirements.

<u>Recommendation 2</u>: Develop and implement procedures to assess and adjust warehouse space on an annual basis.

TSA Partially Concurs: The current warehouse leases expire on September 30, 2014, and planning for the next lease began in March 2013 (the TSA Office of Field Real Estate Services [FRES] requires 12-18 months for new leases or renewals). Space requirements for the follow-on lease will be based on the best available projections of equipment safety stock levels, deployments, and equipment life cycle replacement activity. TSA plans to lease one warehouse with the capacity to satisfy storage requirements (versus two warehouses currently) to reduce labor costs for warehouse personnel and facility-related costs such as security system installation.

TSA understands the need to reassess warehouse space requirements and will do so on an annual basis. There are considerations, however, that may make <u>adjusting</u> warehouse space annually infeasible. First of all, lease costs per square foot often vary depending on the length of the lease period. Generally, shorter leases cost more. While short lease periods provide more flexibility for adjusting space requirements, the cost savings associated with a longer lease may provide better value to the Government. TSA property personnel will work closely with agency real estate professionals to determine the optimum lease period that best balances cost versus flexibility provided no significant changes in space requirements are forecast for the proposed lease period. Once a lease is signed, TSA will honor its contractual commitment for the stated period.

As stated previously, the pace of shipping and receiving operations may cause temporary fluctuations in storage requirements. Unless unforeseen events cause significant and lasting reductions in the warehouse space requirement forecast, it is not practical to modify leases to accommodate temporary space reductions. TSA's annual assessment of warehouse space requirements will inform Agency management officials whether adjustments are warranted, so appropriate action may be taken.

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Appendix C Warehouse Inventory Aging

Logistics Center Inventory as of May 31, 2012									
Condition Code	Category	≤1year	>1 year and < 2 years	≥ 2 years	Quantity	Dollar Value Recorded			
1 – New	TSE	479	218	4	701	\$61,076,693			
	PER	197	91	107	395	4,215,363			
	FFE	<u>3,184</u>	<u>1,485</u>	<u>3,127</u>	<u>7,796</u>	3,557,546			
New Subtotal		3,860	1,794	3,238	8,892	\$68,849,602			
4 – Used	TSE	61	88	40	189	28,950,015			
	PER	130	19	25	174	2,294,611			
	FFE	<u>1,325</u>	<u>809</u>	<u>101</u>	<u>2,235</u>	<u>\$429,771</u>			
Used Subtotal		1,516	916	166	2,598	\$31,674,397			
7 – Needs Repair	TSE	611	233	56	900	28,542,536			
	PER	7	0	0	7	77,280			
	FFE	<u>782</u>	<u>67</u>	<u>2</u>	<u>851</u>	<u>535,871</u>			
Needs Repair Subtotal		1,400	300	58	1,758	\$29,155,687			
On-Hold	TSE	49	16	2	67	\$1,232,864			
X – Pending Disposal	TSE	925	38	9	972	50,725,044			
	non-TSE	1,776	590	351	2,717	4,040,160			
Pending Disposal Subtotal		2,701	628	360	3,689	\$54,765,204			
Total		9,526	3,654	3,824	17,004	\$185,677,754			

Logistics Center Inventory as of May 31, 2012

Source: DHS OIG analysis of TSA data.



Appendix D Major Contributors to This Report

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