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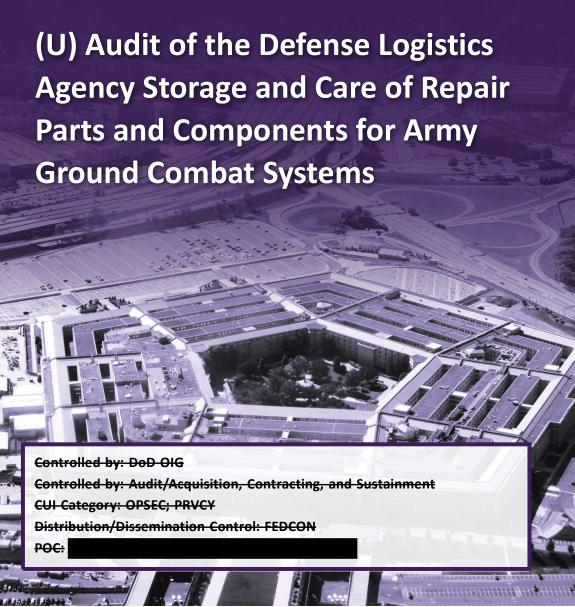


# INSPECTOR GENERAL

U.S. Department of Defense

**OCTOBER 13, 2023** 





INTEGRITY ★ INDEPENDENCE★ EXCELLENCE





# (U) Results in Brief

(U) Audit of the Defense Logistics Agency Storage and Care of Repair Parts and Components for Army Ground Combat Systems

#### October 13, 2023

### (U) Objective

(U) The objective of this audit was to determine whether the Defense Logistics Agency (DLA) properly stored and cared for repair parts and components for Army Ground Combat Systems (GCS) in accordance with DoD policies and guidelines.

#### (U) Background

(U) Army GCS provide movement, protection, and firepower on the battlefield. Army GCS include the Stryker Armored Combat Vehicle and Abrams Tank. GCS repair parts and components include engines, transmissions, and vehicular track shoes. The Army is responsible for establishing requirements for storage and care of GCS materiel.

(U) The DLA is the combat support agency responsible for providing worldwide logistics support to the DoD, other Federal agencies, and partner nations. DLA Distribution is responsible for protecting materiel from environmental conditions by providing proper storage facilities, preservation, packing, marking, or a combination of those measures and for the execution of the Care of Supplies in Storage (COSIS) program. As of July 7, 2022, DLA Distribution Centers stored 2.17 million individual GCS repair parts and components valued at \$3.87 billion.

### (U) Finding

- (U) The DLA did not store and care for Army GCS repair parts and components in accordance with DoD policies and guidelines. Specifically, of the repair parts and components we reviewed, valued at \$1.96 billion, we identified that:
  - (U) 259,397 of the items, valued at \$1.31 billion (67 percent), had critical COSIS deficiencies;
  - (U) 434,722 of the items, valued at \$300.22 million (15 percent), had major COSIS deficiencies;
  - (U) 185,224 of the items, valued at \$192.72 million (10 percent), had minor COSIS deficiencies; and
  - (U) 130,530 of the items, valued at \$158.54 million (8 percent), had no COSIS deficiencies.
- (U) The improper storage and care of Army GCS repair parts and components occurred because the DLA did not have adequate guidance and training, and the Army did not adequately oversee its material in DLA storage.
- (U) As a result, Army GCS repair parts and components, valued at \$1.80 billion (92 percent), were deteriorating or at increased risk of deterioration. This includes \$1.31 billion in GCS repair parts and components that were in immediate danger of degrading. Furthermore, the improper storage and care of Army GCS repair parts and components created safety hazards that could result in injury to DLA personnel.

#### (U) Recommendations

(U) We made several recommendations to the DLA Director to correct the COSIS deficiencies identified in this report, update guidance for COSIS inspections and warehousing, and implement a formal training program to ensure adequate COSIS. We also recommend that the Commanding General of the Army Tank-Automotive Armaments Command require materiel managers to conduct periodic visual inspections of GCS materiel in DLA storage.



## (U) Results in Brief

(U) Audit of the Defense Logistics Agency Storage and Care of Repair Parts and Components for Army Ground Combat Systems

## (U) Management Comments and Our Response

(U) The DLA Logistics Operations Deputy Director, responding for the DLA Director, agreed with all 11 recommendations. The DLA completed actions for two recommendations, described actions planned to address six recommendations, and did not address the specifics for three recommendations. Therefore, two recommendations are closed, six are resolved but will remain open, and three recommendations are unresolved. We will close resolved recommendations once we verify that the DLA has completed the agreed-upon actions. We request that the DLA provide comments on the unresolved recommendations within 30 days.

- (U) The DLA Logistics Operations Deputy Director disagreed with the identified potential monetary benefit of up to \$1.31 billion. Therefore, we request that the DLA provide additional comments on the potential monetary benefit within 30 days.
- (U) The Commanding General, Army Tank-Automotive Armaments Command, agreed with all four recommendations and described actions planned to resolve the recommendations. Therefore, these recommendations are resolved but will remain open. We will close the recommendations once we verify that the Army has completed the agreed-upon actions.
- (U) Please see the Recommendations Table on the next page for the status of recommendations.

#### (U) Recommendations Table

(U) Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
Director, Defense Logistics Agency	1.b.4, 1.b.5, 1.b.6	1.a, 1.b.1, 1.c.1 – 1.c.4	1.b.2, 1.b.3
Commanding General, Army Tank-Automotive Armaments Command	None	2.a, 2.b, 2.c, 2.d	None (U)

- (U) Please provide Management Comments by November 13, 2023.
- (U) Note: The following categories are used to describe agency management's comments to individual recommendations.
  - (U) Unresolved Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
  - (U) Resolved Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
  - (U) Closed DoD OIG verified that the agreed upon corrective actions were implemented.





#### OFFICE OF INSPECTOR GENERAL **DEPARTMENT OF DEFENSE**

4800 MARK CENTER DRIVE ALEXANDRIA, VIRGINIA 22350-1500

October 13, 2023

#### MEMORANDUM FOR DIRECTOR, DEFENSE LOGISTICS AGENCY AUDITOR GENERAL, DEPARTMENT OF THE ARMY

- SUBJECT: (U) Audit of the Defense Logistics Agency Storage and Care of Repair Parts and Components for Army Ground Combat Systems (Report No. DODIG-2024-001)
- (U) This final report provides the results of the DoD Office of Inspector General's audit. We previously provided copies of the draft report and requested written comments on the recommendations. We considered management's comments on the draft report when preparing the final report. These comments are included in the report.
- (U) This report contains three recommendations that are considered unresolved because despite agreeing with the recommendations, the Defense Logistics Agency's Logistics Operations Deputy Director did not discuss action the agency would take to address the recommendations. Therefore, as discussed in the Recommendations, Management Comments, and Our Response section of this report, the recommendations remain open. We will track these recommendations until the Defense Logistics Agency has agreed to take actions that we determine to be sufficient to meet the intent of the recommendations and management officials submit adequate documentation showing that all agreed-upon actions have been completed.
- (U) This report contains six recommendations to the Defense Logistics Agency Director and four recommendations to the Commanding General, Army Tank-Automotive Armaments Command that are considered resolved. Therefore, as described in the Recommendations, Management Comments, and Our Response section of this report, we will close those recommendations when the Defense Logistics Agency and the Army provide us evidence and documentation showing that they have completed all agreed-upon actions to implement the recommendations.
- (U) This report contains two recommendations to the Defense Logistics Agency Director that are considered closed. Management comments and associated actions addressed those recommendations.
- (U) This report identified up to \$1.31 billion in potential monetary benefits that could be put to better use. While the Commanding General, Army Tank-Automotive Armaments Command, agreed with the potential monetary benefit amount, the Defense Logistics Agency Logistics Operations Deputy Director did not. Therefore, as discussed in the Recommendations, Management Comments, and Our Response section of this report, we request additional comments from the Defense Logistics Agency on the potential monetary benefit.

- (U) DoD Instruction 7650.03 requires that recommendations be resolved promptly. For the unresolved recommendations, please provide us within 30 days your response concerning specific actions in process or alternative corrective actions proposed on the recommendations. Please send your response for the unresolved recommendations to audacs@dodig.mil. For the resolved recommendations, please provide us documentation showing you have completed the agreed-upon actions within the estimated completion dates. Please send your documentation for the resolved recommendations as a PDF to followup@dodig.mil. In addition, we request further comments from the Defense Logistics Agency on the potential monetary benefits within 30 days. Please send your comments on the potential monetary benefits to audacs@dodig.mil.
- (U) We appreciate the cooperation and assistance received during the audit. If you have any questions, please contact me at

FOR THE INSPECTOR GENERAL:

Carmen J. Malone

Assistant Inspector General for Audit Acquisition, Contracting, and Sustainment

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## (U) Introduction

#### (U) Objective

(U) The objective of this audit was to determine whether the Defense Logistics Agency (DLA) properly stored and cared for repair parts and components for Army Ground Combat Systems (GCS) in accordance with DoD policies and guidelines. See Appendix A for a discussion on the scope, methodology, and prior coverage related to the audit objective.

#### (U) Background

(U) The DLA is the combat support agency responsible for providing worldwide logistics support to the DoD, other Federal agencies, and partner nations. The DLA manages the DoD's supply chain from procurement, storage, and distribution of equipment and supplies, to disposal of equipment and supplies that require demilitarization. Within the DLA, DLA Distribution personnel are responsible for visual inspections of equipment in storage; minor repair based on visual inspection results; preservation and packing of equipment; and movement of equipment to perform those tasks. As of July 7, 2022, DLA Distribution Centers stored 2.17 million individual GCS repair parts and components, such as engines, transmissions, and vehicular track shoes, valued at about \$3.87 billion.<sup>2</sup>

(U) Army GCS provide movement, protection, and firepower on the battlefield. Examples of Army GCS include the Bradley Fighting Vehicle, Stryker Armored Combat Vehicle, and Abrams Tank. Figure 1 is an example of some of the Army GCS.



<sup>1 (</sup>U) Demilitarization is the process that leads to dismantling and destructing military equipment.

 <sup>(</sup>U) Data provided by the Army Tank-Automotive Armaments Command and Army Program Executive Office for GCS.
 (U) Repair parts include any parts that may be needed to repair and maintain any vehicles and equipment. A component is a combination of parts mounted together during manufacturing that may be tested, replaced as a unit, or repaired.

Introduction <del>CUI</del>

(U) Examples of GCS repair parts and components are tank engines, transmissions, vehicular track shoes, rubber wheels, and electrical components such as distribution boxes. Figure 2 is a picture of a turbine engine for Army GCS stored at a DLA Distribution Center.



(U) The Army Materiel Command (AMC) is responsible for managing and sustaining the Army's equipment. The AMC delegated GCS management responsibilities to the Army Tank-Automotive Armaments Command (TACOM).<sup>3</sup>

### (U) Storage and Care of Army GCS

(U) The Army and DLA both have responsibilities related to the storage and care of Army GCS. Specifically, the Army prescribes the storage requirements for GCS items, and the DLA is responsible for ensuring that its storage methods meet those requirements. The Army and DLA then care for Army GCS items through the Care of Supplies in Storage (COSIS) program, which requires the DLA to regularly inspect material in storage and remediate identified deficiencies.

#### (U) Storage Requirements and Responsibilities for Army GCS

(U) The Army assigns codes to its equipment to inform Army and DLA personnel of the equipment's storage requirements. The codes specify requirements such as the storage temperature, whether the equipment should be stored indoors or outdoors, the type of packaging that should be used, and the labels that should be applied to the equipment.

<sup>&</sup>lt;sup>3</sup> (U) TACOM is a major subordinate command of the AMC.

- (U) DoD Manual 4140.01, volume 5, states that storage activities, such as DLA Distribution Centers, are responsible for protecting equipment from the environmental conditions by providing proper storage facilities, preservation, packing, marking, or a combination of those measures. Army materiel managers are also responsible for ensuring that the equipment in storage is protected from environmental elements to prevent deterioration. For example, Army materiel managers should review and approve packaging and storage deviations submitted by DLA Distribution Centers. Once items are identified as excess, the Army materiel managers are responsible for providing the DLA with disposition instructions, which allows the DLA to dispose of the equipment in its custody.
- (U) The AMC has delegated the Army Sustainment Command's (ASC) Packaging, Storage, and Containerization Center (PSCC), as the Army technical expert for packing and storage, the responsibility of conducting onsite reviews of Army equipment in DLA storage.<sup>5</sup> In this role, the ASC PSCC conducts onsite reviews at DLA Distribution Centers; observes whether Army equipment, including GCS items, is being stored and cared for in accordance with requirements; and documents any identified deficiencies in a trip report.

#### (U) Care Requirements and Responsibilities for Army GCS

- (U) DoD Manual 4140.01, volume 5, states that a COSIS program consists of processes and procedures to ensure that serviceable materiel in storage is preserved and maintained in an issuable condition and to prevent unnecessary deterioration of unserviceable materiel.6 The Manual states that storage activities, such as DLA Distribution Centers, are responsible for the COSIS program. The COSIS program includes the following functions.
  - (U) The DLA's receiving personnel are responsible for ensuring that items entering a DLA Distribution Center are properly packaged and labeled. If items they receive are not properly packaged and labeled, then receiving personnel should ensure that the deficiency is remediated by DLA packaging personnel before storing the items in a DLA location.
  - (U) The DLA's warehousing personnel are responsible for taking items from receiving or packaging and placing them into storage, or re-warehousing items in storage to optimize the use of warehouse space.

<sup>(</sup>U) A materiel manager is any activity or agency that has been assigned materiel management responsibilities for the DoD. Materiel management responsibility includes requirements determination and validation, prioritization of procurement, distribution, redistribution of excess materiel, and disposal of materiel.

<sup>&</sup>lt;sup>5</sup> (U) The ASC is a major subordinate command of the AMC.

<sup>(</sup>U) DoD Manual 4140.01, "DoD Supply Chain Materiel Management Procedures: Delivery of Materiel," Volume 5, February 10, 2014.

<sup>(</sup>U) Serviceable GCS repair parts and components are new, used, repaired, or reconditioned materiel, which is ready to issue without restriction. Unserviceable GCS repair parts and components are economically repairable materiel restricted from issue, which require repair, overhaul, reconditioning or additional parts.

Introduction

- (U) The DLA's stock readiness inspectors are responsible for performing regular inspections of items in storage to ensure that they are stored in accordance with the Army's storage requirements.
- (U) The DLA's packaging personnel are responsible for correcting any packaging or labeling deficiencies identified by DLA personnel, including stock readiness inspectors, receiving personnel, or warehousing personnel.

#### (U) COSIS Deficiency Levels

(U) The DLA's Joint Service Regulation (JSR) 4145.04 states that if DLA Distribution officials discover any storage, packaging, or labeling deficiencies during their COSIS inspections, such as packaging or materiel deterioration, they categorize the level of deterioration as a critical, major, or minor COSIS deficiency.<sup>7</sup>

- (U) Critical Materiel is deteriorating and in immediate danger of moving to a lower condition code.8 A common example of a critical deficiency is engines stored in long-life reusable containers (LLRCs) with humidity indicators exceeding the required level.9 If the humidity indicator shows that the moisture level inside an LLRC exceeds the required level, DLA Distribution officials must remediate the deficiency by replacing the desiccant inside the LLRC 10
- (U) Major Materiel is deteriorating and is likely to be in a lower condition code at the next COSIS inspection. An example of a major deficiency is a damaged wooden box that is no longer providing adequate protection to the materiel.
- (U) Minor Materiel has unreadable, incorrect, incomplete, or missing markings or labels, which could lead to degradation to a lower condition code or to a non-issuable status. A minor deficiency, if not corrected in a timely manner, could become a critical or major deficiency. An example of a minor deficiency is labeling that contains incomplete markings, such as labeling for vehicular track shoes that is missing shelf-life expiration dates. In this example, the expired track shoes could still be issued.

<sup>(</sup>U) DLA JSR 4145.04, "Department of Defense (DoD) Stock Readiness Program," October 21, 2020.

<sup>(</sup>U) Condition codes are assigned to classify material in terms of readiness for issue or to identify type of action required to bring to issuable condition. Common condition codes of the items we reviewed were condition code A, which indicates that the item is serviceable and issuable to all customers without qualification, and condition code F, which indicates that the item is unserviceable, but can be repaired and then issued to a customer.

<sup>(</sup>U) An LLRC is a container designed to provide physical protection and to create a barrier from moisture to prevent any corrosion or deterioration of the asset such as engines or transmissions. The humidity indicator provides external monitoring of moisture levels inside an LLRC.

<sup>(</sup>U) Technical Manual 38-8145-709, "Care of Supplies in Storage (COSIS) for Army Material," January 28, 2020, states that a pink humidity indicator has an unacceptable humidity level of 40 percent or higher.

<sup>(</sup>U) Desiccant is a drying agent used to absorb moisture inside an LLRC.

#### (U) Remediation of Deficiencies

(U) If DLA Distribution officials identify any deficiencies during a COSIS inspection or during other operations, they then determine whether the item requires minor or major remediation. Minor remediation refers to repairs that DLA officials can complete within 1 hour and includes replacing desiccant, labels, bolts, or hardware on containers. Major remediation refers to repairs within the DLA's ability that take more than 1 hour to remediate and includes repairing wood crates or correcting labels for a significant number of stored items. For major remediation, the DLA places the item in a suspended status in the Distribution Standard System (DSS) and notifies the materiel manager of the deficiency. Army materiel managers are responsible for approving the DLA's proposed major remediation efforts on Army GCS items.

(U) If DLA Distribution officials are unable to meet the storage requirements set by the Army, JSR 4145.04 requires the DLA to complete a packaging and storage deviation request form and send it to the Army materiel managers for approval.

#### (U) Army GCS Repair Parts and Components Reviewed

(CUI) As of July 7, 2022, Army officials identified that the Army had GCS repair parts and components, valued at about \$3.87 billion, stored at 23 DLA Distribution Centers.

\$3.59 billion (93 percent); therefore, we focused our review at those two DLA Distribution Centers. According to Army officials:

- (CUI) had 2,201 line items of GCS repair parts and components with a total quantity of 284,892, valued at about \$2.50 billion (65 percent); and
- (CUI) had 734 line items of GCS repair parts and components with a total quantity of 1,814,745, valued at about \$1.10 billion (28 percent).<sup>12</sup>

<sup>(</sup>U) The DSS is an automated information system that manages all functional business processes of the DLA's warehouse operations. These processes include receiving, storage, consolidation, packing, shipping, inventory, inspection, and workload management.

<sup>(</sup>U) A line item is a data set from the Army Logistics Modernization Program that identifies information such as national item identification number, nomenclature, quantity, price, condition code, DLA site, and supply class information for specific GCS parts and components. The Logistics Modernization Program is an Army information system that includes business processes for maintenance, repair, and overhaul; planning, acquisition; and supply of materiel to Soldiers.

Introduction CUI

(CUI) From the universe of repair parts and components, we nonstatistically selected and reviewed 66 line items of serviceable and unserviceable GCS repair parts and components, including engines, transmissions, vehicular track shoes, cannon tubes, and power packs. At the time of our site visits to the 66 line items of GCS repair parts and components had a total quantity of 1,009,873 items stored across 375 locations, with a value of about \$1.96 billion.<sup>13</sup>

- (CUI) We reviewed 39 line items of repair parts and components at that had a total value of \$1.30 billion. The 39 line items, with a total quantity of 8,619 items, were stored across 136 locations at
- (CUI) We reviewed 27 line items of repair parts and components at that had a total value of \$654.12 million. The 27 line items, with a total quantity of 1,001,254 items, were stored across 239 locations at
- (U) We selected line items of repair parts and components that individually had a total value of \$10 million or higher and were categorized by the Army as essential to the operation of GCS. For example, an engine—consisting of multiple parts—is an essential component to the operation of a combat vehicle. We also selected line items of repair parts and components that Army officials identified as high risk for degradation, regardless of total value.

CUI

<sup>(</sup>CUI) A location is a unique, numbered storage space within a warehouse or outside area. The number described the exact space where materiel is stored. Each of the 375 locations is specific to one of our 66 line items. One line item of repair parts and components can be stored at multiple locations. For example, stored engines in LLRCs at four different locations.

## (U) Finding

# (U) DLA Distribution Officials Did Not Properly Store and Care for Army GCS Repair Parts and Components

(U) DLA Distribution officials did not store and care for Army GCS repair parts and components we reviewed in accordance with DoD policies and guidelines. Specifically, of the repair parts and components we reviewed, valued at \$1.96 billion, we identified that:

- (U) 259,397 of the items, valued at \$1.31 billion (67 percent), had critical COSIS deficiencies;
- (U) 434,722 of the items, valued at \$300.22 million (15 percent), had major COSIS deficiencies;
- (U) 185,224 of the items, valued at \$192.72 million (10 percent), had minor COSIS deficiencies; and
- (U) 130,530 of the items, valued at \$158.54 million (8 percent), had no COSIS deficiencies.

(U) The improper storage and care of Army GCS repair parts and components occurred because the DLA did not have adequate guidance and training and the Army did not adequately oversee its materiel in DLA storage. Adequate DLA guidance and training and Army oversight are required to ensure that serviceable materiel in storage is maintained in ready-for-issue condition and to prevent further deterioration of unserviceable materiel.

(CUI) DLA Distribution's improper storage and care of Army GCS items resulted in the deterioration and increased risk of deterioration of \$1.80 billion in GCS repair parts and components, or 92 percent of the \$1.96 billion in GCS repair parts and components we reviewed. This includes \$1.31 billion in GCS repair parts and components that were in immediate danger of moving to a lower condition code. The continued improper storage and care of GCS items may result in increased restoration or replacement costs, which would require additional funding and time, and negatively impact operational readiness. For example, Army officials identified that improper storage of 313 engines resulted in the Army spending \$10.92 million in 2021 to perform unnecessary repairs so that the engines could be restored to an issuable condition.

Finding

<del>(CUI)</del>

Furthermore, the improper storage and care of Army GCS repair parts and components created safety hazards that could result in potential injury to DLA Distribution personnel.

### (U) Improper Storage and Care of GCS Repair Parts and Components

(CUI) DLA Distribution officials did not store and care for Army GCS repair parts and components in accordance with DoD policies and guidelines. Specifically, we identified critical, major, and minor COSIS deficiencies for items valued at \$1.80 billion (92 percent), of the items reviewed. There were no COSIS deficiencies for items valued at \$158.54 million (8 percent). Table 1 summarizes review results for GCS repair parts and components stored at

(CUI) Table 1. Summary of Review Results for GCS Repair Parts and Components Stored

(CUI) Severity of COSIS Deficiencies	1	2	Total <sup>3</sup>
Critical COSIS Deficiencies	50 Locations 3,179 Items \$1.03 Billion	41 Locations 256,218 Items \$277.49 Million	91 Locations 259,397 Items 1.31 Billion
Major COSIS Deficiencies	27 Locations 1,264 Items \$85.45 Million	77 Locations 433,458 Items \$214.77 Million	104 Locations 434,722 Items \$300.22 Million
Minor COSIS Deficiencies	17 Locations 383 Items \$88.47 Million	46 Locations 184,841 Items \$104.24 Million	63 Locations 185,224 Items \$192.72 Million
No COSIS Deficiencies	42 Locations 3,793 Items \$100.92 Million	75 Locations 126,737 Items \$57.61 Million	117 Locations 130,530 Items \$158.54 Million <del>(CUI)</del>

<sup>&</sup>lt;sup>1</sup> (CUI) See Appendix B for more information on the review results, including details of the critical, major, and minor COSIS deficiencies.

<sup>&</sup>lt;sup>2</sup> (CUI) See Appendix C for more information on the review results, including details of the critical, major, and minor COSIS deficiencies.

<sup>&</sup>lt;sup>3</sup> (U) This table contains rounded dollar figures. Totals for minor and no COSIS deficiencies do not sum exactly due to rounding.

<sup>(</sup>U) Source: The DoD OIG.

#### (U) Critical COSIS Deficiencies

(COSIS deficiencies for 259,397 items that we reviewed. These items were stored at 91 unique locations at and were valued at \$1.31 billion. The DLA's JSR 4145.04 states that materiel with critical COSIS deficiencies is deteriorating and in immediate danger of moving to a lower condition code. The items included engines, transmissions, power packs, cannon tubes, generators, wired housing assemblies, and vehicular track shoes. Critical COSIS deficiencies that we identified included repair parts and components that were not stored in LLRCs; humidity indicators on LLRCs exceeding the required level; and packaging and storage locations that did not meet the Army's requirements. Some examples of the critical deficiencies we identified at specific locations are in the sections below.

# (U) Gas Turbine Engines Improperly Stored with Humidity Indicators Exceeding the Required Level

(CUI) officials improperly stored 80 gas turbine engines (national item identification number [NIIN] 15482910), valued at \$89.16 million, outside in LLRCs.<sup>14</sup> The engines were classified as condition code A (issuable materiel), or materiel that is intended to be issued to the Army without qualification. According to the materiel storage code, officials should have stored the engines in a shed. However, the DLA stored the items outside. stated that they stored the engines outside because they did not see a storage code in their system. officials did not coordinate with the respective Army materiel manager to obtain the correct storage information. Because officials did nothing to fix the storage code issue, these engines have been stored outside without a storage deviation approved by the respective Army materiel manager since 2020. In addition, we identified that the DLA did not properly care for the engines, as more than 31 percent of the LLRCs had humidity indicators exceeding the required level, which demonstrated an increased level of moisture inside the LLRCs that exposed the engines to increased corrosion and deterioration. Increased humidity inside LLRCs may occur for various reasons, such as the LLRCs being stored outside and exposed to the environment for an extended period of

<sup>(</sup>U) Each repair part and component has a NIIN. The type of storage such as non-climate controlled indoor, shed, or outdoor determines the frequency of COSIS inspections. The DLA's JSR requires COSIS inspections every 30 months for non-climate controlled indoor, every 24 months for a shed, and every 6 months for outdoor.

Finding CUI

(CUI) time, desiccant not being replaced, LLRCs having bad seals, or a combination of these reasons. If officials were providing proper care to these LLRCs, the increased humidity levels could have been detected and remediated. Figure 3 shows gas turbine engines improperly stored outside at



#### (U) Transmission Assemblies Stored Without Any Packaging

officials improperly stored 278 transmission assemblies (NIIN 12821224), valued at \$25.94 million, without any packaging. The transmissions were classified as condition code F (repairable materiel), or materiel that should be repaired before being issued to the Army. The Army requires that transmissions be packaged and stored in LLRCs with desiccant. However, all of the transmissions were on open pallets without any packaging, increasing the transmissions' risk of corrosion and deterioration. When asked why these items were not in the required LLRCs, DLA officials stated that the materiel was received from Army's field units in incorrect packaging. However, a DLA receiving official stated that (returned) unserviceable materiel goes to packaging for verification of the materiel condition and repackage. If for any reasons DLA officials could not repackage (returned) materiel according to requirements, the officials should have coordinated remediation with the respective Army materiel manager or requested a packaging and storage deviation from the manager. However, DLA officials did not have any documentation

(CUI) to show that they had requested remediation or an approved packaging and storage deviation from the Army for the deficiency, indicating that the DLA did not properly care for the transmission assemblies. Figure 4 shows transmission assemblies at without any packaging.



#### (U) Vehicular Track Shoes Improperly Stored

officials improperly stored 117,534 vehicular track shoes (NIIN 06929316), valued at \$68.29 million. The track shoes were classified as condition code F (repairable materiel), and the materiel storage code was inside storage. An approved deviation was in place to store the track shoes officials did not comply with the deviation's mitigation outside; however, measures, which stated that the DLA would store the track shoes in crates, sleeves, or containers to provide protection from environmental elements. Specifically, all of the track shoes were stored outside and not protected, demonstrating that the DLA did not properly care for the track shoes.

CUI Finding

> (CUI) DLA Distribution officials stated that they are ordering crates, sleeves, or containers. Figure 5 shows vehicular track shoes stored outside at without any packaging.



#### (U) Hydraulic Transmissions Improperly Stored with Humidity Indicators Exceeding the Required Level

officials improperly stored 135 hydraulic transmissions (NIIN 14131885), valued at \$12.60 million, outside. Specifically, the transmissions were classified as condition code F (repairable materiel) and were required to be stored in a shed, but officials stored the transmissions outside. officials stated that there was not enough inside space for the transmissions, but did not have an approved packaging and storage deviation request form. In addition, we identified that the DLA did not properly care for the engines, as 50 percent of the LLRCs with visible humidity indicators exceeded the required level. Figure 6 shows hydraulic transmissions stored outside at



<del>(CUI)</del> In addition, we asked officials to open an LLRC containing one of the hydraulic transmissions (NIIN 14131885) so that we could visually inspect its condition. The opened LLRC contained a large amount of water and oil at the bottom, exposing the transmission to accelerated deterioration. Figure 7 shows the opened LLRC and hydraulic transmission from an outside storage location The second picture on the right shows the liquid accumulated at the bottom of the LLRC.



(CUI) Figure 7. LLRC and Hydraulic Transmission from the Outside Storage Location at (U) Source: The DoD OIG.

#### (U) Major COSIS Deficiencies

(CUI) DLA Distribution officials' improper storage and care resulted in major COSIS deficiencies for 434,722 items that we reviewed. These items were stored at 104 unique locations at and were valued at \$300.22 million. The DLA's JSR 4145.04 states that materiel with major COSIS deficiencies is deteriorating and will likely be in a lower condition at the next COSIS inspection. The items included engines, transmissions, pumps, cannon equilibrators and tubes, interconnecting boxes, distribution boxes, range finders, digital computer units, fire control computers, wire assemblies, rubber wheels, and vehicular track shoes. Major COSIS deficiencies identified included items that were in packaging and storage locations that did not meet the Army's requirements, had damaged packaging, were missing hardware, had improper seals, or were in containers that provided inadequate protection. Some examples of the major deficiencies we identified at specific locations are in the sections below.

Finding CUI

#### (U) Interconnecting Boxes Lacked Required Packaging

officials improperly stored 124 condition code F interconnecting boxes (NIIN 15371808), valued at \$16.79 million, in incorrect packaging or without any packaging at all. The Army's storage requirements state that the interconnecting boxes be packed in a sealed, rigid container. However, the interconnecting boxes were not consistently packaged and stored. Specifically, some of the interconnecting boxes were not stored in sealed containers, or were not stored in containers at all. officials did not have an approved packaging and storage deviation request form and stated that they had no explanation for why the interconnecting boxes were stored this way, demonstrating that the DLA did not properly care for the items. Figure 8 shows interconnecting boxes in storage at that lacked the required packaging.



#### (U) Solid Rubber Wheels Improperly Stored or Packaged

officials improperly stored 2,777 solid rubber wheels (NIIN 011393748), valued at \$0.46 million, and did not properly package 3,434 solid rubber wheels, valued at \$0.57 million. The solid rubber wheels were classified as condition code A (issuable materiel), and the materiel storage code was inside storage. Additionally, the materiel packaging instruction requires solid rubber wheels to be strapped securely to a pallet. However, officials improperly stored solid rubber wheels in a shed, and some had broken strapping.

<sup>(</sup>U) An interconnecting box connects wires or cables.

(CUI) did not have an approved packaging and storage deviation request form for improperly storing the solid rubber wheels, demonstrating that the DLA did not properly care for the wheels. Figure 9 shows solid rubber wheels improperly stored or with damaged strapping at



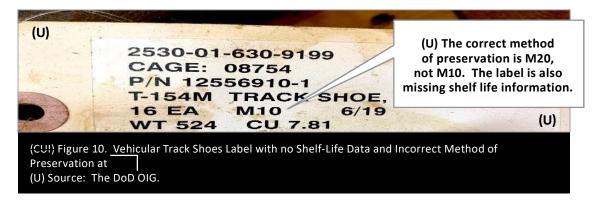
#### (U) Minor COSIS Deficiencies

(CUI) DLA Distribution officials' improper storage and care resulted in minor COSIS deficiencies for 185,224 items that we reviewed. These items were stored at 63 unique locations at and were valued at \$192.72 million. The DLA's ISR 4145.04 and the Army's Technical Manual 38-8145-709 state that materiel with minor COSIS deficiencies is in incorrect packaging or has incomplete markings that could lead to either degradation of condition or to a non-issuable status. The items included engines, transmissions, interconnecting boxes, distribution boxes, rubber wheels, vehicular track shoes, direct current motors, wire assemblies, and laser range finders. Minor COSIS deficiencies that we identified included labels that were incorrect, illegible, incomplete, or missing.

<del>(CUI)</del> For example, officials improperly stored 29,620 condition code A vehicular track shoes (NIIN 016309199), valued at \$12.26 million, with incorrect labels. Specifically, we found that the track shoes' labels did not have the required shelf-life data and contained the incorrect method of preservation for the materiel. Shelf-life data are required on materiel that has a limited useful life, and the

Finding

(CUI) method of preservation identifies the requirement necessary to preserve the materiel. Figure 10 shows a vehicular track shoes label with no shelf-life data and incorrect method of preservation at



#### (U) No COSIS Deficiencies

(CUI) DLA Distribution officials' proper storage and care resulted in no COSIS deficiencies for 130,530 items that we reviewed. These items were stored at 117 unique locations at and were valued at \$158.54 million. Some of the items with no COSIS deficiencies included engines, transmissions, wire assemblies, diesel cylinder heads, equilibrator cannons, electronic components, sight units, distribution boxes, rubber wheels, and vehicular track shoes.

(CUI) For example, officials properly stored 10 gas turbine engines (NIIN 15482910), valued at \$11.15 million. The engines were stored inside, and the humidity indicators on the LLRC were blue, indicating an acceptable humidity level, which prevents corrosion and deterioration. Figure 11 shows a gas turbine engine with a blue humidity indicator stored inside at



#### (U) Correction of Identified COSIS Deficiencies

(CUI) While we were at DLA officials stated that they would address all of the identified COSIS deficiencies to ensure that the Army GCS repair parts and components, valued at \$1.80 billion, are not at risk of further degradation. Timely correction of COSIS deficiencies will minimize unnecessarily increased repair or replacement costs. Therefore, the DLA Director should ensure that all COSIS deficiencies identified in this report are corrected.

### (U) Inadequate DLA Distribution Guidance and Training

(U) The improper storage and care of Army GCS repair parts and components occurred because DLA Distribution did not have adequate guidance and training to ensure that its staff fully understood their responsibilities for protecting serviceable materiel in storage from environment elements and to prevent unnecessary deterioration of unserviceable materiel.

#### (U) Inadequate Guidance

(U) DLA Distribution did not provide adequate guidance to its personnel who are responsible for or support COSIS. The DLA's COSIS Standard Operating Procedure (SOP) 4145.87 outlines guidance for stock readiness inspectors to perform visual inspection of the materiel in storage. 16 However, the SOP does not include the details necessary to ensure that stock readiness inspectors understand their responsibilities and perform adequate visual inspections of the materiel in storage and proper remediation of identified deficiencies. Specifically, many of the COSIS deficiencies we identified occurred because the DLA's COSIS SOP lacked detailed guidance. For example, the SOP does not include guidance on:

- (U) recording inspection results (for example, humidity readings or storage issues);
- (U) reading LLRC humidity indicators;
- (U) understanding when and how to replace LLRC desiccant;
- (U) requesting major remediation, including repair of LLRCs;
- (U) categorizing the level of COSIS deficiencies as critical, major, or minor; and
- (U) requesting packaging and storage deviations from materiel managers.

 $<sup>^{16}\,\,</sup>$  (U) DLA SOP 4145.87, "COSIS Inspection Process," April 1, 2019.

Finding CUI

(U) In addition, we identified that the DLA Warehousing SOP 4145.002, which is intended to provide DLA employees with a working knowledge of warehousing responsibilities, was inadequate.<sup>17</sup> Specifically, the SOP did not define proper storage requirements for the stacking and spacing of materiel for warehousing personnel to follow. Detailed guidance for warehousing personnel is essential to the COSIS process because adequate stacking and spacing of materiel makes COSIS inspections and applicable remediation feasible and efficient. We identified numerous instances where it was impossible to perform adequate COSIS inspections due to improper stacking and spacing of materiel. Figure 12 shows LLRCs with inadequate spacing and over-stacked 15 feet high.



- (U) Adequate guidance, including COSIS and Warehousing SOPs, helps DLA employees perform proper COSIS inspections and determine the next courses of action on remediation, if required, to minimize any further deterioration. Therefore, the DLA Director should update guidance, including the COSIS and Warehousing SOPs, with the proper requirements. At a minimum, the guidance should include the specifics on how to:
  - (U) record inspection results;
  - (U) read humidity indicators and understand when and how to replace desiccant;
  - (U) request major remediation for LLRCs when humidity levels cannot be restored to an acceptable range with minor remediation;
  - (U) categorize identified COSIS deficiencies as critical, major, or minor;
  - (U) request storage and packaging deviations from materiel managers; and
  - (U) stack and space materiel to facilitate COSIS inspections and remediation.

<sup>17 (</sup>U) DLA SOP 4145.002, "Warehousing Stow (Put Away)," August 20, 2020.

#### (U) Inadequate Training

- (U) DLA Distribution did not have formalized training for the receiving, packaging, warehousing, or inspection personnel who are responsible for the storage and care of Army GCS materiel. Without a formal training program, DLA officials relied on staff reading SOPs, which were incomplete and inadequate, and on-the-job training that our results showed to be ineffective. Furthermore, there were no training certifications or assessments to determine whether staff fully understood the requirements or to document that personnel were trained.
- (U) DLA officials' reliance on incomplete and inadequate SOPs and on-the-job training resulted in DLA staff not fully understanding how to perform their duties. Adequately trained DLA personnel with proper working knowledge of the COSIS program are critical to preserving and maintaining serviceable materiel in storage in an issuable condition and in preventing unnecessary deterioration of repairable unserviceable materiel. Therefore, the DLA Director should develop and implement a formal routine and recurring training program. At a minimum, the formal training should ensure that DLA Distribution personnel understand that:
  - (U) receiving personnel are responsible for ensuring that incoming items are properly packaged and labeled before sending materiel to storage locations;
  - (U) packaging personnel are responsible for knowing how to properly package and label materiel in order to correct any packaging or labeling deficiencies identified by receiving personnel, warehousing personnel, or stock readiness inspectors;
  - (U) warehousing personnel are responsible for taking items from receiving or packaging personnel and properly stacking and spacing them into storage and ensuring that stored items remain properly stored; and
  - (U) stock readiness inspectors are responsible for visually inspecting items to ensure that they are properly packaged, labeled, and stored; and humidity indicators are at an acceptable level. Stock readiness inspectors are also responsible for minor remediation and coordination with Army materiel managers on major remediation. This coordination should include providing sufficient information about deficiencies, including pictures.

# (U) Inadequate Army Oversight of GCS Repair Parts and Components in DLA Storage

(U) The improper storage and care of Army GCS repair parts and components occurred because the Army did not adequately oversee its materiel in DLA storage. Specifically, Army GCS materiel managers did not have the visibility necessary to properly oversee their materiel and did not properly manage the disposition of excess unserviceable materiel.

# (U) Visibility of GCS Repair Parts and Components in DLA Storage

- (U) The Army materiel managers did not have the visibility necessary to ensure that GCS repair parts and components stored at DLA Distribution Centers had the proper packaging and storage required to protect them from environmental conditions. DoD Manual 4140.01, volume 5, requires Army materiel managers to ensure that serviceable materiel in DLA storage is maintained in ready-for-issue condition and to prevent further deterioration of unserviceable materiel. To carry out this responsibility, materiel managers need to understand both how their materiel is being stored and the true condition of their materiel. However, during interviews, materiel managers demonstrated a lack of knowledge on how their items were being stored and on the actual condition of their materiel. Instead, materiel managers relied exclusively on what they were told by DLA officials, did not confirm storage and packaging requirements in the systems or with DLA officials, and did not have any awareness of the Army Sustainment Command's (ASC) Packaging, Storage, and Containerization Center (PSCC) trip reports that had previously identified improper storage and care of GCS equipment.
- (U) Army materiel managers having greater visibility of DLA storage of GCS items should reduce materiel deterioration and ensure that materiel is available to the Army in the best possible condition when needed. Therefore, the Commanding General of TACOM should require materiel managers to:
  - (U) conduct periodic site visits and quality monitoring activities at DLA
    Distribution Centers to visually inspect their materiel to ensure that it
    is properly stored and cared for, and take appropriate corrective action
    when applicable;
  - (U) periodically review whether all Army GCS materiel in DLA Distribution Centers have proper packaging and storage codes to prevent deterioration of materiel; and
  - (U) obtain and review ASC PSCC trip reports and coordinate with DLA Distribution Centers to ensure storage and packaging deficiencies are addressed.

#### (U) Management of Excess Unserviceable Materiel

(CUI) The Army materiel managers did not effectively manage excess unserviceable materiel by providing disposition instructions to the DLA Distribution Centers. DoD Manual 4140.01, volume 5, requires that materiel managers evaluate the DLA on the timely and accurate handling of materiel issues, including disposal. During DLA officials expressed concern with the amount of our visits to excess unserviceable materiel at their limited storage space. Specifically, DLA officials discussed the need for the Army materiel managers to assess materiel inventory and dispose of materiel that the Army does not need. This would allow the DLA to better prioritize its space and possibly store more critical items indoors. During our site visits, we observed various GCS repair parts and components that were stored outdoors and rusted. For example, Figure 13 shows corroded diesel engines that we identified at an outdoor storage location. We contacted the materiel manager for the engines to discuss whether the engines were still repairable and, after seeing a picture of the engines, the materiel manager stated that they were unsure whether any of the engines were in a condition that they could still be repaired.



(U) Figure 13. Excess Unserviceable Diesel Engines Exposed to Environmental Elements (U) Source: The DoD OIG.

(CUI) Our analysis also showed that the DLA may be storing excess unserviceable materiel that the Army will likely never use. For example, one of the materiel managers we interviewed provided a September 2022 report on excess materiel that showed that eight of our sample line items, including at transmissions, laser range finders, interconnecting boxes, vehicular

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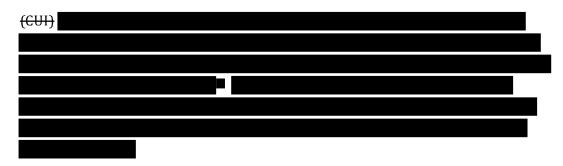
> (CUI) track shoes, and axial piston pumps, had excess unserviceable materiel valued at \$124.86 million. In another example, the Army had 278 unserviceable transmissions stored at the DLA, but forecasted a need to repair only 24 transmissions per year. At a rate of 24 transmissions per year, the Army would need more than 11 years to repair all 278 unserviceable transmissions.

- (U) In addition to the stress that excess unserviceable material placed on the DLA's limited space, DLA stock readiness inspectors performed unnecessary COSIS inspections on excess unserviceable materiel. The DSS generates the DLA's COSIS inspection workload monthly based on the type of storage such as non-climate controlled indoor, shed, or outdoor. Therefore, under the current COSIS program, DLA stock readiness inspectors gave the same priority to inspecting excess unserviceable materiel stored outdoors as they do for more valuable engines and transmissions stored outdoors in LLRCs. Disposing of excess unserviceable materiel would allow the DLA to use its staffing more effectively and prioritize its COSIS inspections of higher-priority materiel.
- (U) Minimizing excess unserviceable materiel will help ensure that limited storage space is available for higher-priority materiel and that DLA officials can better prioritize COSIS inspections of higher-priority materiel. Therefore, the Commanding General of TACOM should require materiel managers to review unserviceable materiel in storage at DLA Distribution Centers to determine whether it is excess that could be disposed of or discontinue COSIS inspections.

#### (U) Deterioration of GCS Repair Parts and Components

(U) DLA Distribution's improper storage and care of Army GCS items resulted in the deterioration and increased risk of deterioration of \$1.80 billion in GCS repair parts and components, or 92 percent of the \$1.96 billion in GCS repair parts and components we reviewed. This includes \$1.31 billion in GCS repair parts and components that were in immediate danger of moving to a lower condition code. The improper storage may result in increased restoration or replacement costs, which would require additional funding and time, and negatively impact operational readiness. For example, Army officials identified that improper storage of 313 engines resulted in the Army spending \$10.92 million in 2021 to perform unnecessary repairs so that the engines could be restored to an issuable condition. If the DLA had properly stored and cared for Army GCS repair parts and components, then millions of dollars in repair and replacement costs could have been avoided.<sup>18</sup> See Appendix D for details of the potential monetary benefits if the DLA had properly stored and cared for GCS repair parts and components.

<sup>&</sup>lt;sup>18</sup> (U) Replacement cost is the amount of funds needed to replace a deteriorating item that could not be repaired resulting from improper storage and care.



(U) Furthermore, the improper storage and care of Army GCS repair parts and components also created safety hazards that could result in potential injury to DLA personnel. For example, DLA officials stored crates, containers, and vehicular track shoes precariously, resulting in leaning and unstable stacks of equipment.

## (U) Notice of Concern, the DLA's Comments, and Our Response

(U) To ensure that the DLA Director was informed of safety hazards we identified during the audit in a timely manner, we issued a notice of concern in October 2022. In their November 2022 response to our memorandum, the Deputy Commander of DLA Distribution recognized our concerns and took immediate action to correct the identified hazards.

#### (U) Notice of Concern

(CUI) On October 18, 2022, we issued a memorandum to notify the DLA Director of safety hazards identified during our site visits to DoD Instruction 6055.01 requires DoD Components to protect personnel from accidental death or injury, including providing a workplace that is free of known dangers.<sup>20</sup> During both site visits, we identified that:

- (U) crates, containers, and vehicular track shoes were precariously stacked, which resulted in a leaning and unstable stack of equipment;
- (U) numerous combat vehicle track shoes and other containers were stacked approximately 10 to 20 feet from the ground on crushed or degraded supporting pallets; and
- (U) metal strapping was loose, which can result in injury to DLA employees from the metal's sharp edges.

<sup>19</sup> (CUI)

<sup>(</sup>U) DoD Instruction 6055.01, "DoD Safety and Occupational Health Program," October 14, 2014, (Incorporating Change 3, April 21, 2021).

(U) We suggested that DLA officials correct all safety hazards in a timely manner and establish effective interim controls to lessen the severity or probability of injury until the hazard can be permanently corrected. See Appendix E for the memorandum issued to the DLA Director.

#### (U) Deputy Commander of DLA Distribution's Comments

(CUI) On November 16, 2022, the Deputy Commander for DLA Distribution, responding for the DLA Director, stated that teams took actions to correct the safety hazards. The Deputy Commander stated that teams re-warehoused crates to ensure that they were stacked safely, downstacked leaning pallets of materiel to minimize any further degradation of the pallets below, replaced pallet shoes, added thick hard wood runners, and replaced loose metal banding. Additionally, the Deputy Commander stated that the DLA instituted additional routine inspections and quality checks across all operation areas to identify any similar potential risks. See Appendix F for the Deputy Commander for DLA Distribution's response to our memorandum.

#### (U) Our Response

(U) Comments from the Deputy Commander addressed our suggested actions. Therefore, the Director is not required to provide additional comments related to the notice of concern.

# (U) Other Management Actions Taken to Address Identified COSIS Deficiencies

(CUI) On October 28, 2022, the Deputy Commander for DLA Distribution provided a memorandum summarizing the corrective actions DLA Distribution officials were taking to address other storage and care deficiencies we identified during our visits to In their memorandum, the Deputy Commander identified the following corrective actions that officials were taking.

- (CUI) DLA Distribution officials at were completing inspections submitted during the audit site visits, and the materiel is being remediated, or forwarded to the materiel manager for decision.
- (CUI) DLA Distribution officials at were working with their respective teams to ensure that these issues are caught and mitigated when they are identified.

- (CUI) DLA Distribution officials at will repurpose an existing warehouse and move repair parts and components inside that are currently stored outside. Also, officials drafted a COSIS checklist for conducting COSIS inspections and were developing COSIS visual inspection training.
- <del>(CUI)</del> officials received two new warehouses and were working to re-warehouse stored repair parts and components.

## (U) Recommendations, Management Comments, and Our Response

#### (U) Recommendation 1

- (U) We recommend that the Director of the Defense Logistics Agency:
  - a. (U) Ensure that all Care of Supplies in Storage deficiencies identified in this report are corrected. The timely review and correction of critical Care of Supplies in Storage deficiencies could result in up to \$1.31 billion in potential monetary benefits (funds put to better use) because proper storage and packaging minimizes unnecessary repair and replacement costs.

#### (U) Defense Logistics Agency Comments

(U) The DLA Logistics Operations Deputy Director, responding for the DLA Director, agreed with the recommendation. The Deputy Director stated that the DLA is in the process of correcting all COSIS deficiencies identified in this report and provided photographs showing the progress made. The DLA estimated a completion date of March 31, 2024.

#### (U) Our Response

(U) Comments from the DLA Logistics Operations Deputy Director addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once the DLA provides evidence that it has corrected all COSIS deficiencies identified in this report.

#### (U) Management Comments on Potential Monetary Benefits

(U) Both the DLA and Army provided comments on the potential monetary benefits. A summary of management comments and our response are in Appendix D. We request that the DLA Director provides additional comments on the potential monetary benefit within 30 days of the final report.

- b. (U) Update guidance, including the care of supplies in storage and warehousing standard operating procedures, with the proper requirements. At a minimum, the guidance should include the specifics on how to:
  - 1. (U) Record inspection results.

#### (U) Defense Logistics Agency Comments

(U) The DLA Logistics Operations Deputy Director, responding for the DLA Director, agreed with the recommendation. The Deputy Director stated that the current Stock Readiness SOPs include guidance on performing and recording inspections. In addition, the Deputy Director stated that DLA Distribution is developing an inspection program, which will include a requirement for validating the inspection results. The DLA estimated a completion date of December 31, 2023.

#### (U) Our Response

- (U) Comments from the DLA Logistics Operations Deputy Director addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once the DLA provides documentation that it has implemented the inspection program.
  - 2. (U) Read humidity indicators and understand when and how to replace desiccant.

#### (U) Defense Logistics Agency Comments

(U) The DLA Logistics Operations Deputy Director, responding for the DLA Director, agreed with the recommendation. The Deputy Director stated that they have updated the COSIS SOPs for inspections of humidity indicators and the replacement of desiccant.

#### (U) Our Response

(U) Comments from the DLA Logistics Operations Deputy Director and the updated COSIS SOP addressed all specifics of the recommendation. We verified that the agreed-upon corrective action was implemented; therefore, the recommendation is closed.

3. (U) Request major remediation for long life reusable containers when humidity levels cannot be restored to an acceptable range with minor remediation.

### (U) Defense Logistics Agency Comments

(U) The DLA Logistics Operations Deputy Director, responding for the DLA Director, agreed with the recommendation. The Deputy Director stated that the SOP and DLA JSR 4145.04 require materiel in affected containers to be suspended pending remediation approval or instructions from the Army materiel manager.

### (U) Our Response

- (U) Comments from the DLA Logistics Operations Deputy Director meet the intent of the recommendation. We reviewed the updated COSIS SOP and verified that the agreed-upon corrective action was implemented; therefore, the recommendation is closed.
  - 4. (U) Categorize identified care of supplies in storage deficiencies as critical, major, and minor.

### (U) Defense Logistics Agency Comments

(U) The DLA Logistics Operations Deputy Director, responding for the DLA Director, agreed with the recommendation. However, the Deputy Director stated that the Army is responsible for the classification of materiel (for example, condition code A), not the DLA.

### (U) Our Response

(U) The Deputy Director did not address the specifics of the recommendation. The intent of our recommendation is for the DLA to update its SOPs to outline the responsibilities to categorize the severity of storage and packaging deficiencies as critical, major, and minor, as required by DLA JSR 4145.04. Furthermore, the DLA categorizing the severity of identified deficiencies is important to the Army in providing timely and appropriate disposition instructions. Therefore, the recommendation is unresolved. We request that the DLA Director provide additional comments in regards to updating the SOPs that specify DLA responsibilities related to categorizing the severity of identified storage and packaging within 30 days of the final report.

5. (U) Request storage and packaging deviations from materiel manager.

### (U) Defense Logistics Agency Comments

(U) The DLA Logistics Operations Deputy Director, responding for the DLA Director, agreed with the recommendation. The Deputy Director stated that DLA JSR 4145.04 allows the Army or DLA to request storage and packaging deviations as-needed.

### (U) Our Response

(U) Comments from the DLA Logistics Operations Deputy Director did not address the specifics of the recommendation related to updating the SOPs with specific guidance on how to request storage and packaging deviations from materiel managers. Although DLA JSR 4145.04 requires the DLA to obtain materiel managers' approval for any storage and packaging deviations, many of the COSIS deficiencies we identified did not have an approved storage and packaging deviation and the SOPs lack the specific guidance. Therefore, the recommendation is unresolved. We request that the DLA Director provide additional comments in regards to updating the SOPs with specific guidance on how to request storage and packaging deviations within 30 days of the final report.

6. (U) Stack and space materiel to facilitate care of supplies in storage inspections and remediation.

### (U) Defense Logistics Agency Comments

(U) The DLA Logistics Operations Deputy Director, responding for the DLA Director, agreed with the recommendation. The Deputy Director stated that they are taking actions to improve the stacking and spacing of materiel. The DLA estimated a completion date of December 31, 2023.

### (U) Our Response

(U) We commend the actions the DLA is taking to improve the stacking and spacing of materiel. However, the DLA Logistics Operations Deputy Director's response did not address the specifics of the recommendation to update the Warehousing SOP on stacking and spacing of materiel to facilitate COSIS inspections and remediation; therefore, the recommendation is unresolved. We request that the DLA Director provide additional comments in regards to updating the Warehousing SOP with specific guidance on the proper stacking and spacing of materiel to facilitate COSIS inspections and remediation within 30 days of the final report.

- c. (U) Develop and implement a formal routine and recurring training program. At a minimum, the formal routine and recurring training program should ensure that Defense Logistics Agency Distribution personnel understand that:
  - 1. (U) Receiving personnel are responsible for ensuring that incoming items are properly packaged and labeled before sending materiel to storage locations.
  - 2. (U) Packaging personnel are responsible for knowing how to package and label materiel in order to correct any packaging or labeling deficiencies identified by receiving personnel, warehousing personnel, or stock readiness inspectors.
  - 3. (U) Warehousing personnel are responsible for taking items from receiving or packaging personnel and properly stacking and spacing them into storage and ensuring that stored items remain properly stored.
  - 4. (U) Stock readiness inspectors are responsible for visually inspecting items to ensure that they are properly packaged, labeled, stored; and humidity indicators are at an acceptable level. Stock readiness inspectors are also responsible for minor remediation and coordination with Army materiel managers on major remediation. This coordination should include sufficient information about deficiencies, including pictures.

### (U) Defense Logistics Agency Comments

(U) The DLA Logistics Operations Deputy Director, responding for the DLA Director, agreed with the recommendations. The Deputy Director stated that DLA Distribution provides mandatory training for all warehouse personnel based on specific job duties. Additional training is scheduled in the Learning Management System by supervisors based on the employee's position. The DLA estimated that it would complete implementing the recommendations by March 31, 2024.

### (U) Our Response

(U) Comments from the DLA Logistics Operations Deputy Director meet the intent of the recommendations; therefore, the recommendations are resolved but will remain open. We will close the recommendations once the DLA provides documentation, showing it has implemented the training program that addresses the responsibilities of the receiving personnel, packaging personnel, warehousing personnel, and stock readiness inspectors.

### (U) Recommendation 2

- (U) We recommend that the Commanding General of the Army Tank-Automotive and Armaments Command require materiel managers to:
  - a. (U) Conduct periodic site visits and quality monitoring activities at Defense Logistics Agency Distribution Centers to visually inspect their materiel to ensure that it is properly stored and cared for, and take appropriate corrective action when applicable.

### (U) Army Tank-Automotive and Armaments Command Comments

(U) The TACOM Commanding General agreed with the recommendation. The Commanding General stated that TACOM will conduct quality monitoring activities and participate in the ASC's PSCC inspections of TACOM-owned materiel, including GCS items, at DLA Distribution Centers. The Commanding General stated that TACOM will contribute to the PSCC's analysis and reports, track due outs from the inspections, and provide identified deficiencies to the DLA for corrective action. TACOM estimated a completion date of August 30, 2024.

### (U) Defense Logistics Agency Comments

(U) Although not required to comment, the DLA provided comments on the recommendation. The DLA Logistics Operations Deputy Director, responding for the DLA Director, stated that the ASC's PSCC and the DLA currently perform joint yearly inspections at the sites. The Deputy Director stated that if materiel managers attend these onsite inspections, then that would satisfy the intent of the recommendation.

### (U) Our Response

- (U) Comments from TACOM as well as the comments from the DLA addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once TACOM provides evidence that it is conducting quality-monitoring activities of TACOM-owned materiel, including GCS items, at DLA Distribution Centers.
  - b. (U) Periodically review whether all Army Ground Combat Systems materiel in Defense Logistics Agency Distribution Centers have proper packaging and storage codes to prevent deterioration of materiel.

### (U) Army Tank-Automotive and Armaments Command Comments

(U) The TACOM Commanding General agreed with the recommendation. The Commanding General stated that TACOM will conduct biannual reviews of GCS equipment packaging and storage codes and retain copies of taskers to correct any coding issues. In addition, the Commanding General stated that TACOM will receive the ASC's PSCC reports that identify coding discrepancies and require action. TACOM estimated a completion date of August 30, 2024.

### (U) Our Response

- (U) Comments from TACOM addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once TACOM provides evidence it is conducting biannual reviews of GCS packaging and storage codes.
  - c. (U) Obtain and review Army Sustainment Command Packaging Storage and Containerization Center trip reports and coordinate with Defense Logistics Agency Distribution Centers to ensure storage and packaging deficiencies are addressed.

### (U) Army Tank-Automotive and Armaments Command Comments

(U) The TACOM Commanding General agreed with the recommendation. The Commanding General stated that TACOM will review the ASC's PSCC trip reports that identify discrepancies, provide responses and corrections to identified deficiencies, and retain the records. In addition, the Commanding General stated that as a member of the Army Packaging Policy Working Group, TACOM communicates routinely with the ASC on packaging related issues. TACOM estimated a completion date of August 30, 2024.

### (U) Our Response

(U) Comments from TACOM addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once TACOM provides evidence they are reviewing the ASC's PSCC trip reports and taking corrective action on deficiencies.

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d. (U) Review unserviceable materiel in storage at Defense Logistics Agency Distribution Centers to determine whether it is excess that could be disposed of or discontinue Care of Supplies in Storage inspections.

### (U) Army Tank-Automotive and Armaments Command Comments

(U) The TACOM Commanding General agreed with the recommendation. The Commanding General stated that TACOM will routinely review materiel levels for GCS equipment. In addition, the Commanding General stated that TACOM will send an annual tasker to materiel managers to review excess materiel and initiate materiel disposal where required. TACOM estimated a completion date of August 30, 2024.

### (U) Our Response

(U) Comments from TACOM addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once TACOM provides evidence of its review of materiel levels and disposal actions.

### (U) Army Materiel Command Comments

(U) Although not required to comment, the Executive Deputy to the Commanding General stated that they agreed with the report findings and recommendations and endorsed TACOM's response. For the full text of the Executive Deputy's comments, see the Management Comments section of the report.

## (U) Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Comments

(U) Although not required to comment, the Deputy for Acquisition and Systems Management provided the official Army position by stating that they concur with the recommendation and endorsed the AMC's response. For the full text of the Deputy's comments, see the Management Comments section of the report.

## (U) Appendix A

## (U) Scope and Methodology

(U) We conducted this performance audit from May 2022 through July 2023 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

### (U) Army GCS Repair Parts and Components Selected for Review

(CUI) As of July 7, 2022, Army officials identified that they had GCS repair parts and components, valued at \$3.87 billion, stored at 23 different DLA Distribution stored GCS repair parts and components valued at Centers. \$3.59 billion (93 percent); therefore, we focused our review at those two DLA Distribution Centers. According to Army officials:

- stored 2,201 line items of GCS repair parts and components with a total quantity of 284,892, valued at about \$2.50 billion (65 percent); and
- stored 734 line items of GCS repair parts and components with a total quantity of 1,814,745, valued at about \$1.10 billion (28 percent).

(CUI) From the universe of repair parts and components at we nonstatistically selected and reviewed 66 line items of GCS repair parts and components, including engines, transmissions, vehicular track shoes, cannon tubes, and power packs. At the time of our site visits to items of GCS repair parts and components had a total quantity of 1,009,873 items stored across 375 locations, with a value of about \$1.96 billion.

- (CUI) We reviewed 39 line items of repair parts and components at that had a total value of \$1.30 billion. The 39 line items, with a total quantity of 8,619 items, were stored across 136 locations at
- (CUI) We reviewed 27 line items of repair parts and components at that had a total value of \$654.12 million. The 27 line items, with a total quantity of 1,001,254 items were stored across 239 locations at
- (U) We selected line items of repair parts and components that individually had a total value of \$10 million or higher and categorized by the Army as essential to the operation of GCS. For example, an engine—consisting of multiple parts—is an

(U) essential component to the operation of a combat vehicle. We also selected line items of repair parts and components that Army officials identified as high risk for degradation, regardless of total value.

(CUI) We selected the nonstatistical sample based on our professional judgment. We did not use results of the testing to draw a conclusion for the entire population. Appendixes B and C include details of the 1,009,873 Army GCS repair parts and components that we reviewed across 375 locations at

# (CUI) Physical Inspections of Selected GCS Repair Parts and Components

(CUI) To determine whether the DLA properly stored and cared for repair parts and components for Army GCS in accordance with DoD policies and guidelines, we conducted site visits to where we performed physical inspections of the storage and packaging of the selected items. For identified storage and packaging deficiencies, we followed the DLA JSR in conjunction with the Army Technical Manual to categorize the COSIS deficiencies as critical, major, or minor. Army and DLA officials accompanied us during the physical inspections. For locations with deficiencies, we considered the entire location to be deficient due to the pervasiveness of the DLA's improper storage and care of GCS repair parts and components.

### (U) Review of Guidance and Documentation, and Interviews

- (U) Before the physical inspections, we obtained an understanding of the storage and packaging requirements for each sample line item. We reviewed guidance and documentation pertaining to storage and packaging. For example, we reviewed:
  - (U) Defense Logistics Manual 4000.25, Volume 2, "Supply Condition Codes," April 9, 2022;
  - (U) Defense Logistics Agency Joint Service Regulation 4145.04, "Department of Defense (DoD) Stock Readiness Program," October 21, 2020;
  - (U) Department of the Army Pamphlet 708-2, "Cataloging and Supply Management Data Procedures for the Army Enterprise Material Master," March 26, 2020;
  - (U) Technical Manual 38-8145-709, "Care of Supplies in Storage (COSIS) for Army Material," January 28, 2020;
  - (U) DoD Manual 4140.27, Volume 1, "DoD Shelf-Life Management Program: Program Administration," July 6, 2016 (Incorporating Change 2, December 11, 2019);

- (U) DoD Military Standard 129R, "Department of Defense Standard Practice: Military Marking for Shipment and Storage," February 18, 2014 (Incorporating Change 2, September 27, 2019);
- (U) DoD Military Standard 2073-1E, "Standard Practice for Military Packaging," May 23, 2008 (Incorporating Change 4, April 22, 2019);
- (U) DoD Manual 4140.01, Volume 5, "DoD Supply Chain Materiel Management Procedures: Delivery of Materiel," February 10, 2014 (Incorporating Change 1, September 17, 2018);
- (U) Special Packaging Instructions for Army Repair Parts and Components;
- (U) Packaging and Storage Deviation Request Forms; and
- (U) the Army Sustainment Command's Packaging, Storage, and Containerization Center Trip Reports.

(CUI) We conducted onsite interviews with officials to understand their COSIS processes and operations. In addition, we interviewed Army materiel managers to understand their roles and responsibilities as related to how DLA officials store and care for their equipment. Finally, we held discussions with ASC PSCC officials to understand the types of reviews they perform and the storage and packaging deficiencies they are identifying.

(U) This report was reviewed by the DoD Components associated with this oversight project to identify whether any of their reported information, including legacy FOUO information, should be safeguarded and marked in accordance with the DoD CUI Program. In preparing and marking this report, we considered any comments submitted by the DoD Components about the CUI treatment of their information. If the DoD Components failed to provide any or sufficient comments about the CUI treatment of their information, we marked the report based on our assessment of the available information.

### (U) Internal Control Assessment and Compliance

(U) We assessed internal controls and compliance with laws and regulations necessary to satisfy the audit objective. In particular, we assessed internal controls for guidance, training, and oversight to ensure that materiel in DLA storage was properly stored and cared for. However, because our review was limited to these internal control components and underlying principles, it may not have disclosed all internal control deficiencies that may have existed at the time of this audit.

## (U) Use of Computer-Processed Data

(CUI) We used computer-processed data provided by Army and DLA officials to nonstatistically select 66 line items of GCS repair parts and components. These selected GCS repair parts and components were stored across 375 locations Army and DLA officials used various systems, such as the Logistics Modernization Program and the DSS, to plan, acquire, receive, store, and supply materiel to Soldiers.<sup>21</sup> For the purpose of this audit, we performed physical inspections of materiel in storage at 375 locations. When feasible, we performed inventory counts of materiel at those locations. While we identified some discrepancies due to real-time inventory movement, we determined that the overall inventory data were sufficiently reliable for this report. We confirmed through physical inspections, the materiel number, nomenclature, location, and storage and packaging condition to draw conclusions and make recommendations related to COSIS deficiencies that we identified.

## (U) Prior Coverage

(U) We identified that the DoD Office of Inspector General (DoD OIG) issued two reports that discussed DLA management of excess items in long-term storage (LTS). Unrestricted DoD OIG reports can be accessed at http://www.dodig.mil/reports.html/.

### (U) DoD OIG

- (U) Report No. DODIG-2019-121, "Followup Audit of the Defense Logistics Agency's Management of Excess Items in Long-Term Storage," September 9, 2019
  - (U) DLA officials implemented the recommendations from Report No. DODIG-2016-036. DLA officials improved the LTS inventory management system by clarifying inventory retention requirements, establishing inventory disposal, disposing of inventory that exceeded historical demand levels, and specifying categories of inventory previously excluded for reuse by the automated recoupment process.
- (U) Report No. DODIG-2016-036, "Management of Items in the Defense Logistics Agency's Long-Term Storage Needs Improvement," December 22, 2015
  - (U) The DLA did not effectively manage LTS inventory items, by storing items that exceeded historical demand and, therefore, were not justified for retention. The ineffective DLA management of LTS inventory occurred because DoD

<sup>(</sup>U) The Logistics Modernization Program is an Army information system that includes business processes for maintenance, repair, and overhaul; planning; acquisition; and supply of materiel to Soldiers. The DSS is an automated information system that manages all functional business processes of the DLA's warehouse operations. These processes include receiving, storage, consolidation, packing, shipping, inventory, inspection, and workload management.

- (U) policy did not specify how to determine acceptable inventory levels for those items. As a result, the DLA unnecessarily incurred costs to store 768,571 LTS inventory items, valued at \$169.5 million, that far exceeded the historical demand.
- (U) In addition, in 2014, the DLA's automated process did not identify 87,135 LTS inventory items for reuse. This occurred because the DLA inappropriately excluded 12 categories of LTS inventory from the automated process, and the process did not identify all LTS items eligible for recoupment. As a result, in 2014, the DLA missed opportunities to offset or reduce purchases for items valued at \$17.9 million that were already in LTS inventory.

Appendixes CUI

## (U) Appendix B

## (CUI) Results of Storage and Care of Army GCS Repair Parts and Components

(CUI) We reviewed Army GCS repair parts and components stored across 136 locations at Table 2 shows audit results as to whether properly stored repair parts and components at those 136 locations for Army GCS. In calculating our totals at the bottom of the table, we counted only the most severe deficiency identified at each storage location. For example, if we identified a critical, major, and minor deficiency at the same storage location, we counted only the critical deficiency in our total. The bold "Xs" represent the deficiencies included in our totals at the bottom of the table. The non-bold "Xs" were not included in our total at the bottom of the table, but were deficiencies we identified during our audit.

(CUI) Table 2. Results of Storage and Care of Army GCS Repair Parts and Components

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
1	F05A33150	001245387	Engine With Container	119	\$43,223,299	x		Х	
2	F05A322150	001407531	Transmission And Container	178	\$33,776,746	x	x	х	
3	26122020	010730076	Axial Piston Pumps	142	\$3,042,634		X		
4	26128010	010730076	Axial Piston Pumps	373	\$7,992,271		X		
5	362220150802	010730076	Axial Piston Pumps	2	\$42,854		X		
6	362220160801	010730076	Axial Piston Pumps	3	\$64,281		X		
7	362222190201	010730076	Axial Piston Pumps	3	\$64,281		X		
8	362225200201	010730076	Axial Piston Pumps	2	\$42,854		X	Х	
9	3623210702BA	010730076	Axial Piston Pumps	3	\$64,281		X		
10	3624060202BB	010730076	Axial Piston Pumps	24	\$514,248		X		
11	3624060302BB	010730076	Axial Piston Pumps	21	\$449,967		X		
12	3624060802BB	010730076	Axial Piston Pumps	2	\$42,854		х		
13	F01A1127D	012029865	Hydraulic Transmission	80	\$48,797,040	х	Х	Х	(U)

(CUI) Table 2. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency <sup>2</sup>	Minor Deficiency³	No Deficiency
14	248HB08202F	012812869	Full Up Power Pack	8	\$14,985,472	х	Х	Х	
15	248HB07101A	012812869	Full Up Power Pack	10	\$18,731,840	х	Х	Х	
16	248JC021A	012821224	Transmission Assembly	278	\$25,941,848	X		Х	
17	248E0001F	013138943	Cannon Tube	35	\$5,088,545	х	X		
18	248F0001F	013138943	Cannon Tube	38	\$5,524,706	х	X		
19	248LA0004C	013138943	Cannon Tube	18	\$2,616,966	X	X		
20	F05A8943F	013138943	Cannon Tube	32	\$4,652,384	х	X		
21	127024579G	013354579	Diesel Engine	36	\$3,802,284	х			
22	248JB0190A	013354579	Diesel Engine	154	\$16,265,326	X		Х	
23	248JC0190G	013354579	Diesel Engine	32	\$3,379,808	X		Х	
24	F06A4579G	013354579	Diesel Engine	93	\$9,822,567	Х		Х	
25	034201018A	013354579	Diesel Engine	5	\$528,095	Х			
26	36117010	013354579	Diesel Engine	17	\$1,795,523	X			
27	F05A223150	013354579	Diesel Engine	121	\$12,779,899	Х	Х	Х	
28	F05A4579F	013354579	Diesel Engine	26	\$2,746,094	X	Х	Х	
29	24319010	013657042	Cannon Equilibrator	56	\$5,824,616		Х		
30	24338010	013657042	Cannon Equilibrator	3	\$312,033	Х	Х		
31	27311150	013657042	Cannon Equilibrator	24	\$2,496,264				Х
32	F01A1074F	013971074	Hydraulic Transmission	124	\$19,945,276	Х	Х		
33	F01A2112A	013971074	Hydraulic Transmission	246	\$39,568,854	Х	Х		
34	361608431	013971074	Hydraulic Transmission	69	\$11,098,581	Х			
35	361612330	013971074	Hydraulic Transmission	44	\$7,077,356	Х			
36	361623420	013971074	Hydraulic Transmission	36	\$5,790,564	X			(u

(CUI) Table 2. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
37	361641051	013971074	Hydraulic Transmission	6	\$965,094	Х			
38	F01A1105FMS	014087048	Gas Turbine Engine	4	\$1,884,168	х	Х	Х	
39	F01A1109A	014087048	Gas Turbine Engine	91	\$42,864,822	X	Х	Х	
40	F01A1148MC	014087048	Gas Turbine Engine	1	\$471,042	X	Х	Х	
41	122128150	014087048	Gas Turbine Engine	47	\$22,138,974	х		Х	
42	122123150	014087048	Gas Turbine Engine	26	\$12,247,092	X		Х	
43	361612380	014087048	Gas Turbine Engine	1	\$471,042	X		Х	
44	36107150	014122715	Diesel Engine	56	\$4,997,104	X	Х	Х	
45	F02B02010	014122715	Diesel Engine	293	\$26,145,562	X	Х	Х	
46	122014315F	014122715	Diesel Engine	5	\$446,170		Х		
47	F01A1885F	014131885	Hydraulic Transmission	41	\$3,825,956	X			
48	F01A2108A	014131885	Hydraulic Transmission	135	\$12,597,660	X	X		
49	36109010	014131885	Hydraulic Transmission	16	\$1,493,056	х			
50	36321050	014131885	Hydraulic Transmission	34	\$3,172,744	X			
51	F01A546821Q	014146821	Diesel Engine	2	\$1,655,638		X		
52	F05A209150	014146821	Diesel Engine	69	\$57,119,511	Х		Х	
53	361619030	014146821	Diesel Engine	7	\$5,794,733			х	
54	361641160	014146821	Diesel Engine	30	\$24,834,570			х	
55	025106150	014224184	Diesel Cylinder Head	612	\$3,418,020				х
56	025108050	014224184	Diesel Cylinder Head	1524	\$8,511,540				Х
57	025110150	014224184	Diesel Cylinder Head	192	\$1,072,320				Х
58	025122150	014224184	Diesel Cylinder Head	72	\$402,120				Х
59	025211040	014224184	Diesel Cylinder Head	348	\$1,943,580				<b>X</b> (U)

(CUI) Table 2. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency		
60	025220150	014224184	Diesel Cylinder Head	180	\$1,005,300				X		
61	033201150	014224184	Diesel Cylinder Head	12	\$67,020				Х		
62	248A4317F	014654317	Hydraulic Transmission	184	\$112,233,192	X		Х			
63	248K0317J	014654317	Hydraulic Transmission	45	\$27,448,335			X			
64	024238140	014657017	Electronic Components	129	\$10,445,388		х				
65	3622020403CB	014657017	Electronic Components	8	\$647,776				х		
66	F05A43150	014657020	Power Pack With Container	22	\$41,210,048	x	х	х			
67	F05A7020F	014657020	Power Pack With Container	3	\$5,619,552	х					
68	37301150	014979758	Laser Range Finder	87	\$6,167,952		х	Х			
69	025136010	015248672	Paladin Digital Computer Unit	110	\$10,560,110		x				
70	025207010	015248672	Paladin Digital Computer Unit	24	\$2,304,024				x		
71	A5212025C	015248672	Paladin Digital Computer Unit	20	\$1,920,020				x		
72	023243010	015371808	Interconnecting Box	55	\$7,449,200		Х				
73	023311010	015371808	Interconnecting Box	20	\$2,708,800		х				
74	024337020	015371808	Interconnecting Box	33	\$4,469,520		х				
75	A3302006C	015371808	Interconnecting Box	16	\$2,167,040		х				
76	024107150	015373765	Interconnecting Box	28	\$2,961,252			X			
77	024116010	015373765	Interconnecting Box	42	\$4,441,878			X			
78	024140050	015373765	Interconnecting Box	57	\$6,028,263			Х			
79	024317150	015373765	Interconnecting Box	30	\$3,172,770			X	(U)		

(CUI) Table 2. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

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(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency		
80	034204050	015373765	Interconnecting Box	9	\$951,831			X			
81	034238110	015373765	Interconnecting Box	50	\$5,287,950			X			
82	112109160	015384216	Sight Unit	11	\$885,379				x		
83	112117160	015384216	Sight Unit	20	\$1,609,780				x		
84	112127160	015384216	Sight Unit	20	\$1,609,780				x		
85	112130160	015384216	Sight Unit	20	\$1,609,780				x		
86	112132160	015384216	Sight Unit	20	\$1,609,780				x		
87	112134160	015384216	Sight Unit	20	\$1,609,780				x		
88	112135160	015384216	Sight Unit	20	\$1,609,780				x		
89	112138150	015384216	Sight Unit	18	\$1,448,802				x		
90	112138160	015384216	Sight Unit	8	\$643,912				x		
91	112147160	015384216	Sight Unit	2	\$160,978				x		
92	112150160	015384216	Sight Unit	14	\$1,126,846				x		
93	112151150	015384216	Sight Unit	2	\$160,978				x		
94	112151160	015384216	Sight Unit	7	\$563,423				x		
95	112215160	015384216	Sight Unit	20	\$1,609,780				х		
96	112219150	015384216	Sight Unit	20	\$1,609,780				x		
97	112220160	015384216	Sight Unit	13	\$1,046,357				x		
98	112223160	015384216	Sight Unit	20	\$1,609,780				x		
99	112232060	015384216	Sight Unit	20	\$1,609,780				х		
100	112232160	015384216	Sight Unit	7	\$563,423				x		
101	112233060	015384216	Sight Unit	20	\$1,609,780				X		
102	112233160	015384216	Sight Unit	20	\$1,609,780				<b>X</b> (U)		

(CUI) Table 2. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

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(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency		
103	112236060	015384216	Sight Unit	20	\$1,609,780				х		
104	361608070	015482910	Gas Turbine Engine	96	\$106,997,952	x		Х			
105	361608180	015482910	Gas Turbine Engine	11	\$12,260,182	x		Х			
106	3616EFLD02	015482910	Gas Turbine Engine	80	\$89,164,960	х		Х			
107	127SEC22910D	015482910	Gas Turbine Engine	10	\$11,145,620				x		
108	12701910F	015482910	Gas Turbine Engine	1	\$1,114,562				х		
109	F01A1136FMS	015482910	Gas Turbine Engine	1	\$1,114,562	х	Х				
110	F01A2910F	015482910	Gas Turbine Engine	91	\$101,425,142	х		Х			
111	12220452F	015559351	Thermal Sight	165	\$12,220,395				Х		
112	033138010	015651117	Distribution Box	108	\$9,597,204				x		
113	024233040	015651117	Distribution Box	6	\$533,178			х			
114	024315020	015651117	Distribution Box	12	\$1,066,356		х	Х			
115	024325150	015651117	Distribution Box	56	\$4,976,328			х			
116	024329150	015651117	Distribution Box	21	\$1,866,123		х	Х			
117	024335010	015651117	Distribution Box	4	\$355,452		х	Х			
118	3615141402BB	015651117	Distribution Box	5	\$444,315			Х			
119	3615141601AA	015651117	Distribution Box	5	\$444,315			Х			
120	3615151403CB	015651117	Distribution Box	1	\$88,863			Х			
121	3615151404DB	015651117	Distribution Box	6	\$533,178			Х			
122	3615190802BA	015651117	Distribution Box	5	\$444,315		х	Х			
123	3615201402BA	015651117	Distribution Box	5	\$444,315			х			
124	3615210503CB	015651117	Distribution Box	1	\$88,863			Х			
125	025309150	015721096	Fire Control Computer	100	\$13,060,800		Х	Х	(U)		

(CUI) Table 2. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
126	3623191703CA	015721096	Fire Control Computer	9	\$1,175,472		х		
127	3623200201AB	015721096	Fire Control Computer	25	\$3,265,200		X		
128	3582A0901	016288229	Wire Race Ring Kit	35	\$3,599,995				Х
129	3583A0401	016288229	Wire Race Ring Kit	51	\$5,245,707				X
130	3583B03010	016288229	Wire Race Ring Kit	35	\$3,599,995				X
131	3584A0701	016288229	Wire Race Ring Kit	17	\$1,748,569				Х
132	3584B0101	016288229	Wire Race Ring Kit	13	\$1,337,141				X
133	F01A0145F	016558112	Hydraulic Transmission	30	\$18,298,890	X		Х	
134	F05A8112K	016558112	Hydraulic Transmission	3	\$1,829,889	X	Х	Х	
135	F05H01AUS	016558112	Hydraulic Transmission	1	\$609,963	x	Х	Х	
136	033120150	016761595	Generator With Container	35	\$10,578,225	x		х	
					Total Locations	50	27	17	42
					Total Quantity	3,179	1,264	383	3,793
					Total Value	\$1,029,987,490	\$85,448,677	\$88,474,937	\$100,924,410 (U

<sup>&</sup>lt;sup>1</sup> (U) Critical deficiencies - Materiel that is deteriorating and in immediate danger of moving to a lower condition classification.

<sup>&</sup>lt;sup>2</sup> (U) Major deficiencies - Materiel that is deteriorating and is likely to be in a lower condition classification at the next COSIS inspection.

<sup>&</sup>lt;sup>3</sup> (U) Minor deficiencies - Materiel that is in incorrect packaging or has incomplete markings or labels, which could lead to degradation to lower condition classification or to a non-issuable status.

<sup>(</sup>U) Source: The DoD OIG.

## (U) Appendix C

## (CUI) Results of Storage and Care of Army GCS Repair Parts and Components

(CUI) We reviewed Army GCS repair parts and components stored across 239 locations at Table 3 shows audit results as to whether officials properly stored repair parts and components at those 239 locations for Army GCS. In calculating our totals at the bottom of the table, we counted only the most severe deficiency identified at each storage location. For example, if we identified a critical, major, and minor deficiency at the same storage location, we included only the critical deficiency in our total. The bold "Xs" represent the deficiencies included in our totals at the bottom of the table. The non-bold "Xs" were not included in our total at the bottom of the table, but were deficiencies we identified during our audit.

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency¹	Major Deficiency²	Minor Deficiency³	No Deficiency
1	53924506A	000782908	Vehicular Track Shoe	6,820	\$1,548,140				x
2	52914106A	000782908	Vehicular Track Shoe	2,960	\$671,920				x
3	52914806A	000782908	Vehicular Track Shoe	1,614	\$366,378			X	
4	52915506A	000782908	Vehicular Track Shoe	1,580	\$358,660			Х	
5	52915606A	000782908	Vehicular Track Shoe	4,018	\$912,086			Х	
6	53712809A	000782908	Vehicular Track Shoe	64	\$14,528				x
7	53911509A	000782908	Vehicular Track Shoe	17,024	\$3,864,448			X	
8	53912606A	000782908	Vehicular Track Shoe	1,369	\$310,763			Х	
9	53912906A	000782908	Vehicular Track Shoe	3,121	\$708,467				х
10	53913306A	000782908	Vehicular Track Shoe	7,296	\$1,656,192			х	
11	53920206A	000782908	Vehicular Track Shoe	8,291	\$1,882,057			Х	
12	T0113406A	000782908	Vehicular Track Shoe	5,376	\$1,220,352			Х	
13	53910906A	001505897	Vehicular Track Shoe	11,017	\$8,538,175			x	(U)

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
14	53923609A	001505897	Vehicular Track Shoe	22,312	\$17,291,800			х	
15	534OSN10103A	006929316	Vehicular Track Shoe	6,536	\$3,797,416	Х			
16	87110222A	006929316	Vehicular Track Shoe	3,818	\$2,218,258	Х		Х	
17	87111022A	006929316	Vehicular Track Shoe	82,270	\$47,798,870	х		Х	
18	87122006A	006929316	Vehicular Track Shoe	12,208	\$7,092,848	х		Х	
19	87126502A	006929316	Vehicular Track Shoe	19,238	\$11,177,278	Х		Х	
20	88119401A	006929316	Vehicular Track Shoe	15,041	\$8,738,821	х		Х	
21	52521506A	006929316	Vehicular Track Shoe	96	\$55,776			х	
22	52522409A	006929316	Vehicular Track Shoe	3,659	\$2,125,879		X	Х	
23	52912506A	006929316	Vehicular Track Shoe	672	\$390,432				х
24	52913009A	006929316	Vehicular Track Shoe	5,248	\$3,049,088				x
25	52913609A	006929316	Vehicular Track Shoe	4,176	\$2,426,256				x
26	52914209A	006929316	Vehicular Track Shoe	3,296	\$1,914,976				х
27	52914609A	006929316	Vehicular Track Shoe	3,138	\$1,823,178				х
28	53311209A	006929316	Vehicular Track Shoe	3,875	\$2,251,375				х
29	53314006A	006929316	Vehicular Track Shoe	1,152	\$669,312		X	Х	
30	53314909A	006929316	Vehicular Track Shoe	4,109	\$2,387,329		X	Х	
31	53320309A	006929316	Vehicular Track Shoe	1,136	\$660,016			Х	
32	53320509A	006929316	Vehicular Track Shoe	2,176	\$1,264,256			Х	
33	53324306A	006929316	Vehicular Track Shoe	1,344	\$780,864			Х	
34	53712309A	006929316	Vehicular Track Shoe	1,104	\$641,424				X
35	53712709A	006929316	Vehicular Track Shoe	1,737	\$1,009,197				X
36	53912809A	006929316	Vehicular Track Shoe	1,696	\$985,376			X	(U)

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
37	53914706A	006929316	Vehicular Track Shoe	2,080	\$1,208,480			х	
38	53921806A	006929316	Vehicular Track Shoe	2,832	\$1,645,392			X	
39	95Z5PDLQ3P7J	006929316	Vehicular Track Shoe	320	\$185,920				X
40	95Z5PH0LSHBV	006929316	Vehicular Track Shoe	16	\$9,296				x
41	95Z6P0Q3YBXZ	006929316	Vehicular Track Shoe	96	\$55,776				x
42	95Z6PTCRFN5M	006929316	Vehicular Track Shoe	160	\$92,960				X
43	T0114006A	006929316	Vehicular Track Shoe	1,144	\$664,664				X
44	M03110230301	011505852	Direct Current Motor	24	\$599,808			X	
45	M05130520403	011505852	Direct Current Motor	3	\$74,976			X	
46	Q010717404TMP	011505852	Direct Current Motor	23	\$574,816			X	
47	Q010718567TMP	011505852	Direct Current Motor	5	\$124,960			X	
48	Q010719341TMP	011505852	Direct Current Motor	4	\$99,968			X	
49	Q010720054TMP	011505852	Direct Current Motor	382	\$9,546,944			X	
50	53410113A	013102237	Solid Rubber Wheel	429	\$232,518				X
51	52710109A	013102237	Solid Rubber Wheel	1,296	\$702,432				X
52	52711123A	013102237	Solid Rubber Wheel	1,785	\$967,470				X
53	52712323A	013102237	Solid Rubber Wheel	864	\$468,288		X		
54	52812609A	013102237	Solid Rubber Wheel	2,639	\$1,430,338		X		
55	52912106A	013102237	Solid Rubber Wheel	792	\$429,264				X
56	52912906A	013102237	Solid Rubber Wheel	252	\$136,584				X
57	52912909A	013102237	Solid Rubber Wheel	448	\$242,816				X
58	52913106A	013102237	Solid Rubber Wheel	418	\$226,556				Х
59	53014909A	013102237	Solid Rubber Wheel	1,728	\$936,576				<b>X</b> (U

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency <sup>2</sup>	Minor Deficiency³	No Deficiency
60	53410001A	013102237	Solid Rubber Wheel	224	\$121,408				х
61	53413413A	013102237	Solid Rubber Wheel	1,512	\$819,504				х
62	53415819A	013102237	Solid Rubber Wheel	56	\$30,352			X	
63	53710409A	013102237	Solid Rubber Wheel	1,732	\$938,744				x
64	53711109A	013102237	Solid Rubber Wheel	1,224	\$663,408				x
65	53711206A	013102237	Solid Rubber Wheel	1,632	\$884,544				x
66	53712106A	013102237	Solid Rubber Wheel	648	\$351,216				x
67	53913509A	013102237	Solid Rubber Wheel	799	\$433,058				x
68	T0110109A	013102237	Solid Rubber Wheel	1,296	\$702,432				x
69	T0111306A	013102237	Solid Rubber Wheel	1,004	\$544,168				x
70	T0111409A	013102237	Solid Rubber Wheel	322	\$174,524				x
71	T0112109A	013102237	Solid Rubber Wheel	1,087	\$589,154		Х		
72	T0113806A	013102237	Solid Rubber Wheel	633	\$343,086				x
73	T0211706A	013102237	Solid Rubber Wheel	1,288	\$698,096		Х		
74	T0212106A	013102237	Solid Rubber Wheel	1,008	\$546,336		X		
75	T0213206A	013102237	Solid Rubber Wheel	1,728	\$936,576				x
76	595SP14630A	014230929	Diesel Engine	81	\$12,067,785	х			
77	595SP14662A	014230929	Diesel Engine	71	\$10,577,935	x			
78	595SP14670A	014230929	Diesel Engine	15	\$2,234,775	х			
79	595SP22524A	014230929	Diesel Engine	30	\$4,469,550	Х		Х	
80	595SP22558A	014230929	Diesel Engine	36	\$5,363,460	X			
81	595SP23801A	014230929	Diesel Engine	24	\$3,575,640	Х		Х	
82	595SPCOSIS2	014429686	Vehicular Track Shoe	3,193	\$753,548	X	Х	Х	(U)

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
83	941340120101	014429686	Vehicular Track Shoe	1	\$236				х
84	A130S10105A	014429686	Vehicular Track Shoe	38,576	\$9,103,936	х	Х	Х	
85	52913306A	014429686	Vehicular Track Shoe	2,373	\$560,028			х	
86	52915109A	014429686	Vehicular Track Shoe	768	\$181,248		X	Х	
87	53710806A	014429686	Vehicular Track Shoe	7,512	\$1,772,832		х	Х	
88	53710909A	014429686	Vehicular Track Shoe	2,048	\$483,328			х	
89	53711409A	014429686	Vehicular Track Shoe	96	\$22,656				X
90	53711706A	014429686	Vehicular Track Shoe	192	\$45,312			Х	
91	53715709A	014429686	Vehicular Track Shoe	3,520	\$830,720				X
92	53721309A	014429686	Vehicular Track Shoe	2,680	\$632,480				Х
93	53910209A	014429686	Vehicular Track Shoe	6,128	\$1,446,208				Х
94	53914109A	014429686	Vehicular Track Shoe	7,140	\$1,685,040			Х	
95	53915006A	014429686	Vehicular Track Shoe	7,008	\$1,653,888		x	Х	
96	53915709A	014429686	Vehicular Track Shoe	1,624	\$383,264		X	Х	
97	53921006A	014429686	Vehicular Track Shoe	7,536	\$1,778,496		х		
98	53921809A	014429686	Vehicular Track Shoe	12,410	\$2,928,760				Х
99	53922206A	014429686	Vehicular Track Shoe	7,334	\$1,730,824				Х
100	53923306A	014429686	Vehicular Track Shoe	4,919	\$1,160,884			Х	
101	53924206A	014429686	Vehicular Track Shoe	992	\$234,112				Х
102	26110401A	014663753	Hydraulic Transmission	11	\$5,082,594			X	
103	71111609A	014663753	Hydraulic Transmission	24	\$11,089,296	Х			
104	71120907A	014663753	Hydraulic Transmission	4	\$1,848,216				X
105	71120926A	014663753	Hydraulic Transmission	2	\$924,108	x		Х	(υ

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
106	595SP21357A	014663753	Hydraulic Transmission	5	\$2,310,270	Х			
107	71120626A	014663753	Hydraulic Transmission	8	\$3,696,432	x			
108	71121407A	014663753	Hydraulic Transmission	3	\$1,386,162				x
109	71121619A	014663753	Hydraulic Transmission	1	\$462,054	x			
110	71122926A	014663753	Hydraulic Transmission	19	\$8,779,026	х	Х		
111	53910106A	014964444	Track Shoe Assembly	9,516	\$2,569,320		X	Х	
112	53911906A	014964444	Track Shoe Assembly	9,479	\$2,559,330			X	
113	53912309A	014964444	Track Shoe Assembly	8,000	\$2,160,000		X	Х	
114	53913706A	014964444	Track Shoe Assembly	5,820	\$1,571,400		x	Х	
115	53913809A	014964444	Track Shoe Assembly	3,272	\$883,440			X	
116	53920409A	014964444	Track Shoe Assembly	2,272	\$613,440		X	Х	
117	53920706A	014964444	Track Shoe Assembly	1,350	\$364,500			X	
118	53921209A	014964444	Track Shoe Assembly	7,570	\$2,043,900		x	Х	
119	53923006A	014964444	Track Shoe Assembly	3,681	\$993,870				х
120	53923906A	014964444	Track Shoe Assembly	328	\$88,560			X	
121	53925309A	014964444	Track Shoe Assembly	9,582	\$2,587,140		X	Х	
122	A1011728A	014964444	Track Shoe Assembly	69,392	\$18,735,840	х	Х	Х	
123	94111223A	014979758	Laser Range Finder	71	\$5,033,616	х	Х		
124	94111506A	015371406	Wired Housing Assembly	161	\$12,014,464	x		X	
125	941340120102	015371406	Wired Housing Assembly	10	\$746,240	x		x	
126	941370100102	015371406	Wired Housing Assembly	5	\$373,120	x		Х	(U)

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
127	53323706A	015876141	Vehicular Track Shoe	4,007	\$1,771,094		х	Х	
128	53323909A	015876141	Vehicular Track Shoe	5,924	\$2,618,408			X	
129	53324406A	015876141	Vehicular Track Shoe	2,304	\$1,018,368			X	
130	53324809A	015876141	Vehicular Track Shoe	5,845	\$2,583,490		х	Х	
131	53711609A	015876141	Vehicular Track Shoe	6,720	\$2,970,240		Х	Х	
132	53712009A	015876141	Vehicular Track Shoe	5,878	\$2,598,076		х	Х	
133	53713009A	015876141	Vehicular Track Shoe	5,462	\$2,414,204		Х	Х	
134	53720309A	015876141	Vehicular Track Shoe	1,392	\$615,264		х	Х	
135	53720806A	015876141	Vehicular Track Shoe	22,110	\$9,772,620		х	Х	
136	53722409A	015876141	Vehicular Track Shoe	4,352	\$1,923,584		х	Х	
137	53723209A	015876141	Vehicular Track Shoe	4,352	\$1,923,584		Х	Х	
138	53910809A	015876141	Vehicular Track Shoe	13,361	\$5,905,562		Х	Х	
139	53914609A	015876141	Vehicular Track Shoe	3,616	\$1,598,272		Х	Х	
140	53915109A	015876141	Vehicular Track Shoe	8,800	\$3,889,600		х	Х	
141	53920809A	015876141	Vehicular Track Shoe	18,183	\$8,036,886		Х	Х	
142	53921506A	015876141	Vehicular Track Shoe	6,672	\$2,949,024			Х	
143	53922709A	015876141	Vehicular Track Shoe	2,208	\$975,936		Х	Х	
144	53923109A	015876141	Vehicular Track Shoe	3,072	\$1,357,824				Х
145	72112231B	015885668	Wired Housing Assembly	72	\$5,372,928	x		×	
146	72120610A	015885668	Wired Housing Assembly	9	\$671,616	x		×	
147	72120610AA	015885668	Wired Housing Assembly	222	\$16,566,528	x		х	(U)

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(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(555)	e 5. Results of				- F				
(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency <sup>2</sup>	Minor Deficiency³	No Deficiency
148	72120909A	015885668	Wired Housing Assembly	5	\$373,120	x		X	
149	72120911C	015885668	Wired Housing Assembly	3	\$223,872				x
150	72120919B	015885668	Wired Housing Assembly	4	\$298,496				x
151	72122508C	015885668	Wired Housing Assembly	3	\$223,872	х		х	
152	72123223A	015885668	Wired Housing Assembly	35	\$2,611,840				x
153	72123228A	015885668	Wired Housing Assembly	10	\$746,240				x
154	72123228C	015885668	Wired Housing Assembly	2	\$149,248				x
155	72123229A	015885668	Wired Housing Assembly	1	\$74,624				x
156	82114204A	015885668	Wired Housing Assembly	18	\$1,343,232	x		x	
157	82122212C	015885668	Wired Housing Assembly	1	\$74,624	х			
158	82122516B	015885668	Wired Housing Assembly	8	\$596,992				x
159	82124223B	015885668	Wired Housing Assembly	6	\$447,744				x
160	82124223C	015885668	Wired Housing Assembly	12	\$895,488	x			
161	82124631A	015885668	Wired Housing Assembly	22	\$1,641,728	х			(U)

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency <sup>2</sup>	Minor Deficiency³	No Deficiency
162	M03110190302	015885668	Wired Housing Assembly	6	\$447,744		×		
163	M03120250401	015885668	Wired Housing Assembly	3	\$223,872				x
164	M03180151001	015885668	Wired Housing Assembly	1	\$74,624				x
165	M03190470501	015885668	Wired Housing Assembly	1	\$74,624		×		
166	71123709A	016237417	Diesel Engine	90	\$5,910,175	x		Х	
167	71121424A	016237417	Diesel Engine	2	\$131,337	х	Х		
168	26110801A	016265061	Hydraulic Transmission	96	\$44,357,184	х			
169	595SP20162A	016265061	Hydraulic Transmission	3	\$1,386,162	x			
170	71121406AA	016265061	Hydraulic Transmission	25	\$11,551,350			х	
171	71123219A	016265061	Hydraulic Transmission	4	\$1,848,216	х			
172	53711806A	016309199	Vehicular Track Shoe	2,912	\$1,205,568				X
173	53712406A	016309199	Vehicular Track Shoe	11,152	\$4,616,928		X	Х	
174	53713506A	016309199	Vehicular Track Shoe	4,800	\$1,987,200		X	Х	
175	53720206A	016309199	Vehicular Track Shoe	7,996	\$3,310,344		X	Х	
176	53721909A	016309199	Vehicular Track Shoe	7,776	\$3,219,264			X	
177	53723506A	016309199	Vehicular Track Shoe	8,256	\$3,417,984			X	
178	53724006A	016309199	Vehicular Track Shoe	6,288	\$2,603,232			Х	
179	53724709A	016309199	Vehicular Track Shoe	3,744	\$1,550,016			Х	
180	53725309A	016309199	Vehicular Track Shoe	3,556	\$1,472,184			Х	
181	T0110509A	016309199	Vehicular Track Shoe	9,844	\$4,075,416		X	Х	
182	T0110606A	016309199	Vehicular Track Shoe	10,169	\$4,209,966		X	Х	(U

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
183	T0111806A	016309199	Vehicular Track Shoe	8,197	\$3,393,558		х	Х	
184	T0112509A	016309199	Vehicular Track Shoe	11,232	\$4,650,048		X	Х	
185	T0113709A	016309199	Vehicular Track Shoe	13,712	\$5,676,768		X	Х	
186	T0210106A	016309199	Vehicular Track Shoe	320	\$132,480				x
187	T0210109A	016309199	Vehicular Track Shoe	13,042	\$5,399,388				x
188	T0211206A	016309199	Vehicular Track Shoe	1,856	\$768,384				x
189	T0211209A	016309199	Vehicular Track Shoe	16,064	\$6,650,496			Х	
190	T0212506A	016309199	Vehicular Track Shoe	1,597	\$661,158				x
191	T0213006A	016309199	Vehicular Track Shoe	4,800	\$1,987,200	х		Х	
192	T0214509A	016309199	Vehicular Track Shoe	2,752	\$1,139,328				x
193	52521309A	014355175	Track Shoe Assembly	1,814	\$1,219,008		X	Х	
194	52522006A	014355175	Track Shoe Assembly	1,718	\$1,154,496		X	Х	
195	52522906A	014355175	Track Shoe Assembly	8,348	\$5,609,856		X	Х	
196	52910209A	014355175	Track Shoe Assembly	24,624	\$16,547,328		X	Х	
197	52912609A	014355175	Track Shoe Assembly	3,408	\$2,290,176		X	Х	
198	52915806A	014355175	Track Shoe Assembly	12,752	\$8,569,344		X	Х	
199	53310206A	014355175	Track Shoe Assembly	8,080	\$5,429,760		X	Х	
200	53310209A	014355175	Track Shoe Assembly	3,456	\$2,322,432		Х	Х	
201	53310709A	014355175	Track Shoe Assembly	8,832	\$5,935,104		X	Х	
202	53311506A	014355175	Track Shoe Assembly	3,272	\$2,198,784		X	Х	
203	53311609A	014355175	Track Shoe Assembly	12,576	\$8,451,072		X	Х	
204	53312206A	014355175	Track Shoe Assembly	6,912	\$4,644,864		X	Х	
205	53313109A	014355175	Track Shoe Assembly	6,480	\$4,354,560		x	Х	(U)

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
206	53313609A	014355175	Track Shoe Assembly	2,256	\$1,516,032		х	Х	
207	53314206A	014355175	Track Shoe Assembly	5,952	\$3,999,744		X	Х	
208	53314309A	014355175	Track Shoe Assembly	1,762	\$1,184,064		X	Х	
209	53314509A	014355175	Track Shoe Assembly	3,648	\$2,451,456		X	Х	
210	53315106A	014355175	Track Shoe Assembly	5,904	\$3,967,488		X	Х	
211	53315606A	014355175	Track Shoe Assembly	5,040	\$3,386,880		X	Х	
212	53320009A	014355175	Track Shoe Assembly	455	\$305,760		X	Х	
213	53320806A	014355175	Track Shoe Assembly	1,136	\$763,392		X	Х	
214	533208906A	014355175	Track Shoe Assembly	528	\$354,816		X	Х	
215	53320906A	014355175	Track Shoe Assembly	4,608	\$3,096,576		X	Х	
216	53320909A	014355175	Track Shoe Assembly	2,880	\$1,935,360		X	Х	
217	53321109A	014355175	Track Shoe Assembly	4,176	\$2,806,272		X	Х	
218	53322709A	014355175	Track Shoe Assembly	2,784	\$1,870,848		X	Х	
219	53323406A	014355175	Track Shoe Assembly	2,800	\$1,881,600		X	Х	
220	53324006A	014355175	Track Shoe Assembly	2,496	\$1,677,312		X	Х	
221	53324209A	014355175	Track Shoe Assembly	1,805	\$1,212,960		X	Х	
222	53324906A	014355175	Track Shoe Assembly	3,504	\$2,354,688		X	Х	
223	53714306A	014355175	Track Shoe Assembly	6,832	\$4,591,104		Х	Х	
224	71110941A	016237417	Diesel Engine	24	\$1,576,047	Х			
225	71111824A	016237417	Diesel Engine	2	\$131,337				X
226	04010101A	011393748	Solid Rubber Wheel	2,777	\$463,759		X	Х	
227	52513406A	011393748	Solid Rubber Wheel	229	\$38,243				Х
228	52513509A	011393748	Solid Rubber Wheel	792	\$132,264				<b>X</b> (U

(CUI) Table 3. Results of Storage and Care of Army GCS Repair Parts and Components (cont'd)

(U) Location Number	Specific Location Identifier	National Item Identification Number	Nomenclature	Location Quantity	Total Price	Critical Deficiency <sup>1</sup>	Major Deficiency²	Minor Deficiency³	No Deficiency
229	52520509A	011393748	Solid Rubber Wheel	145	\$24,215			х	
230	52524509A	011393748	Solid Rubber Wheel	72	\$12,024				Х
231	52816009A	011393748	Solid Rubber Wheel	1,006	\$168,002				х
232	52913006A	011393748	Solid Rubber Wheel	704	\$117,568				х
233	53014709A	011393748	Solid Rubber Wheel	2,250	\$375,750		X	Х	
234	53411613A	011393748	Solid Rubber Wheel	508	\$84,836				х
235	53414009A	011393748	Solid Rubber Wheel	1,364	\$227,788				х
236	53414423A	011393748	Solid Rubber Wheel	1,221	\$203,907			х	
237	53415523A	011393748	Solid Rubber Wheel	1,184	\$197,728		X		
238	53710106A	011393748	Solid Rubber Wheel	1,231	\$205,577				х
239	T0111506A	011393748	Solid Rubber Wheel	507	\$84,669				х
	'	'	'		Total Locations	41	77	46	75
					Total Quantity	256,218	433,458	184,841	126,737
					Total Value	\$277,494,043	\$214,771,041	\$104,244,359	\$57,612,715 (U)

<sup>&</sup>lt;sup>1</sup> (U) Critical deficiencies - Materiel that is deteriorating and in immediate danger of moving to a lower condition classification.

<sup>&</sup>lt;sup>2</sup> (U) Major deficiencies - Materiel that is deteriorating and is likely to be in a lower condition classification at the next COSIS inspection.

<sup>&</sup>lt;sup>3</sup> (U) Minor deficiencies - Materiel that is in incorrect packaging or has incomplete markings or labels, which could lead to degradation to lower condition classification or to a non-issuable status. (U) Source: The DoD OIG.

## (U) Appendix D

### (U) Potential Monetary Benefits

- (U) We identified \$1.31 billion in GCS repair parts and components—with critical COSIS deficiencies—that are deteriorating and in immediate danger of moving to a lower condition classification.<sup>22</sup> Consequently, if the DLA does not resolve these critical COSIS deficiencies, the Army could potentially spend taxpayer funds on the unnecessary repair or replacement of the GCS assets before issuing them to an Army unit. Therefore, timely review and correction of the critical COSIS deficiencies we identified in this report could result in up to \$1.31 billion in funds that could be put to better use.<sup>23</sup>
- (U) Table 4 identifies the estimated amount of funds that could be put to better use by minimizing unnecessary repairs and replacement costs caused by the DLA's improper storage and care of Army GCS repair parts and components.

(U) Table 4. Estimated Potential Monetary Benefits Resulting from the DLA's Improper Storage and Care of GCS Repair Parts and Components

(U) Recommendations	Type of Benefits	Amount of Benefits	Appropriations
1.a	Funds put to better use	Up to \$1,307,481,533	Multiple Army appropriations will be impacted (U)

(U) Source: The DoD OIG.

### (U) Defense Logistics Agency Comments

(U) The Deputy Director disagreed with the \$1.31 billion in potential monetary benefits. The Deputy Director stated that the calculation was inflated because the audit team applied condition code A valuations to all the items when most of the items were condition code F. The Deputy Director stated that this calculation does not consider that items requiring only minor repair would cost significantly less to bring to issuable condition.

<sup>(</sup>U) We calculated the \$1.31 billion using Army and DLA unit cost pricing and location quantities obtained before our site visits.

<sup>(</sup>U) The Inspector General Act of 1978, as amended, defines several financial savings categories. One of the categories is funds put to better use, which means recommendations by the Office of Inspector General that funds could be used more efficiently if management took actions to implement and complete the recommendation, including costs not incurred by implementing recommended improvements related to operations.

### (U) Department of the Army Comments

(U) The TACOM Commanding General agreed that the potential monetary benefit could be up to \$1.31 billion. Although not required to comment, the Executive Deputy to the AMC Commanding General agreed with the report findings and recommendations and endorsed TACOM's response. Furthermore, the Deputy for Acquisition and Systems Management, Office the Assistant Secretary of the Army (Acquisition, Logistics, and Technology), provided the official Army position by endorsing the AMC's response.

### (U) Our Response

(U) We disagree with the DLA Logistics Operations Deputy Director's statement that the potential monetary benefit calculation is inflated. We identified COSIS deficiencies for \$1.80 billion of GCS items resulting from the DLA's improper storage and care. However, for the potential monetary benefit reporting, we focused the calculation on only items with critical deficiencies that were at significant risk of degradation. We calculated the potential monetary benefit based on unit price data from the Army Master Data File (AMDF).<sup>24</sup> AMDF unit prices represent the replacement pricing of the materiel and does not differentiate unit price value based on whether the Army classifies an item as condition code A or condition code F. If the DLA does not correct critical COSIS deficiencies and the items degrade beyond repair, this would require the Army to replace the items at the AMDF price. Because we recognize that repair costs to bring items to issuable condition could be less than the AMDF price, we report that the potential monetary benefit could be up to \$1.31 billion. The Army concurs with the use of the AMDF price and that the amount of potential monetary benefit could be up to \$1.31 billion.

(U) We also recognize that when the DLA corrects the critical COSIS deficiencies identified in this report, the potential monetary benefit will be reduced or eliminated. We request that the DLA Director reconsider the DLA's position and provide additional comments on the potential monetary benefit within 30 days of the final report. We do not require additional comments on the potential monetary benefit from the Army.

 $<sup>^{24}</sup>$  (U) The AMDF is the official source of logistics management data within the Army.

## (U) Appendix E

## (U) Notice of Concern Memorandum on Safety Hazards

CUI



#### **INSPECTOR GENERAL**

DEPARTMENT OF DEFENSE 4800 MARK CENTER DRIVE ALEXANDRIA, VIRGINIA 22350-1500

October 18, 2022

#### MEMORANDUM FOR DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: (U) Safety Hazards Identified During the Audit of Defense Logistics Agency Storage of Army Ground Combat Systems Equipment (Project No. D2022-D000AU-0139.000)

(U) We are issuing this memorandum to notify you of safety concerns identified during our audit of Defense Logistics Agency (DLA) Storage of Army Ground Combat Systems Equipment. The audit is ongoing and being conducted in accordance with generally accepted government auditing standards. The objective of the audit is to determine whether the DLA properly stored repair parts and components for Army Ground Combat Systems in accordance with DoD policies and guidelines. The work conducted on the audit is preliminary, and there is additional work ongoing to satisfy the audit objective. We are providing this memorandum for your comments and action before the completion of the audit.

(CUI) (U) During the audit, we conducted a site visit to the

in August 2022 and to the

September 2022. At both sites, we identified the following safety hazards in the storage areas, which could potentially result in injury to DLA employees.

- (U) Crates, containers, and track shoes were precariously stacked, which resulted in an unstable and leaning stack of equipment. The equipment was often 10 or more feet from the ground, creating the potential for the heavy items to fall onto DLA employees. See the photos in Appendix A for examples of the stacked equipment we observed.
- (U) Numerous combat vehicle track shoes and other containers were stacked approximately 10 to 20 feet from the ground on crushed or degraded supporting pallets. The crushed and degraded supporting pallets created an unstable track shoe or container stack, which sometimes resulted in a significant lean that could potentially collapse and injure DLA employees. See the photos in Appendix B for examples of the crushed or degraded supporting pallets we observed.

Controlled by: DoD OIG CUI Category: PRVCY POC: Assistant Inspector General for Audit/C

## (U) Notice of Concern Memorandum on Safety Hazards (cont'd)

CHI

(U) Loose metal strapping can result in injury to DLA employees from the metal's sharp edges. See the photos in Appendix C for example of the loose metal strapping we observed.

(U) DoD Instruction 6055.01 requires DoD Components to protect personnel from accidental death or injury, including providing a workplace that is free of known dangers. <sup>1</sup> The DoD Instruction also states that commanders, managers, and supervisors at all levels are responsible for the safety and protection of personnel, resources, and mission capability under their supervision. DLA Instruction 6055.01, which implements the DoD Instruction, requires DLA supervisors to furnish employees with a place of employment that is free from recognized hazards.<sup>2</sup> Both Instructions require supervisors to correct all hazards in a timely manner and to establish effective interim controls to lessen the severity or probability of injury until the hazard can be permanently corrected.

(CUI) (U) We immediately reported the safety hazards to the DLA officials who accompanied us to senior officials before we left each site. Please the storage warehouses and to provide us with the actions you have taken to address the safety hazards we identified at by November 18, 2022. Your response should describe the interim controls or corrective actions taken to address the safety hazards and any ongoing or planned actions. This memorandum and your response will be included in our final report.

(CUI) If you have any questions, please contact

Carol N. Gorman
Carol N. Gorman

Assistant Inspector General for Audit Cyberspace Operations & Acquisition, Contracting, and Sustainment

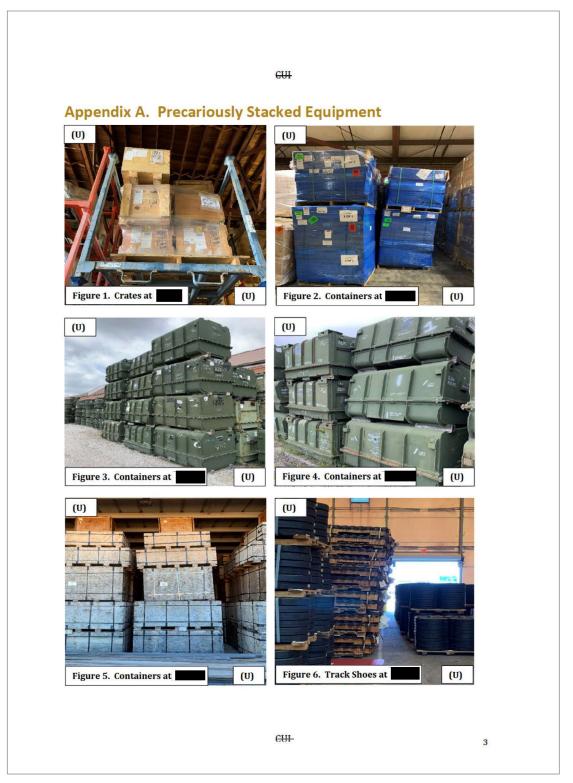
CUI

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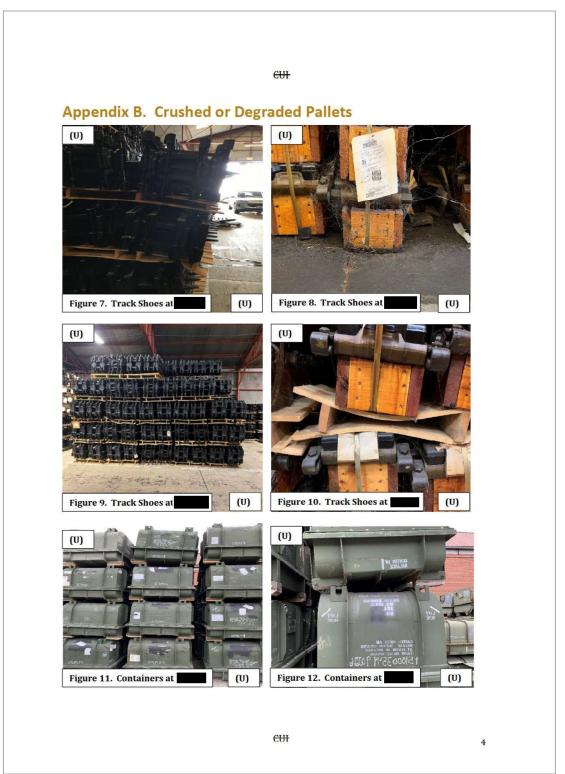
<sup>1 (</sup>U) DoD Instruction 6055.01, "DoD Safety and Occupational Health Program," October 14, 2014, (Incorporating Change 3, April 21, 2021).

<sup>&</sup>lt;sup>2</sup> (U) DLA Instruction 6055.01, "Occupational Safety and Health Program," December 9, 2014.

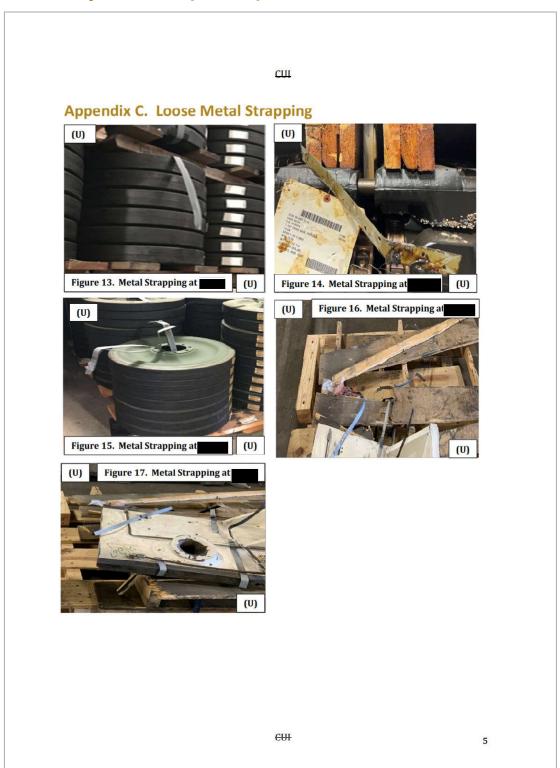
## (U) Notice of Concern Memorandum on Safety Hazards (cont'd)



# (U) Notice of Concern Memorandum on Safety Hazards (cont'd)



## (U) Notice of Concern Memorandum on Safety Hazards (cont'd)



## (U) Appendix F

### (U) DLA Response to Notice of Concern Memorandum

CIII



**DEFENSE LOGISTICS AGENCY** DISTRIBUTION **5430 MIFFLIN AVENUE** NEW CUMBERLAND, PENNSYLVANIA 17070-5004

NOV 16 2022

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDIT

(U) SUBJECT: Safety Hazards Identified During the Audit of Defense Logistics Agency Storage of Army Ground Combat Systems Equipment (Project No. D2022-D000AU-0139.000)

(U) The following provides the corrective actions and associated practices which were immediately implemented after receiving your Safety Notice of Concern (Project No. D2022-D000AU-0139.000). Items noted within the memorandum are identified below in order with a response of actions taken following

Item #1: (U) Crates, containers, and track shoes were precariously stacked, which resulted in an unstable and leaning stack of equipment. The equipment was often 10 or more feet from the ground, creating the potential for the heavy items to fall onto DLA employees. See the photos in Appendix A for examples of the stacked equipment we observed.

(CUI) Response: Immediately upon notification our teams at both initiated actions to correct the identified unstable or leaning materials. The small crates in location were re-warehoused to ensure they were stacked safely and to eliminate any overhang. Similarly the leaning pallets of material were downstacked to minimize any further degradation of the cardboard due to the weight of the second pallet stacked on top. The large metal containers were immediately downstacked to minimize the height and efforts to replace the wooden "shoes" were completed. The large wooden crates/containers were observed to be leaning as the upper crates/containers in the stack created a point load on the crates/containers below since the weight was supported primarily by the plywood cover. This caused sagging overtime as the wood became weathered by rain, moisture, and humidity in the area. To correct this, thick hard wood runners that span the entire length of the material width were added to ensure a stable and more robust surface. This eliminates the potential for sagging due to point load. Lastly, the stacks of track shoes at were also re-warehoused and down stacked to ensure stability as well as to minimize the potential for surface slippage that may occur when they are stacked at a greater height.

Item #2: (U) Numerous combat vehicle track shoes and other containers were stacked approximately 10 to 20 feet from the ground on crushed or degraded supporting pallets. The crushed and degraded supporting pallets created an unstable track shoe or container stack, which sometimes resulted in a significant lean that could potentially collapse and injure DLA employees. See the photos in Appendix B for examples of the crushed or degraded supporting pallets we observed.

## (U) DLA Response to Notice of Concern Memorandum (cont'd)

CIII

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(U) Response: Areas identified as storing track shoes on degraded/bending pallets or where stacks of the material were observed leaning have been re-warehoused. Pallets holding this material were replaced and the material was re-positioned on the pallet to give it additional support from the runner boards to minimize future bending/degradation. Storage areas for this material are routinely checked to ensure no further issues arise as the Center continues to work a process change to utilize more robust pallets/skids. As noted in response #1, the medium sized containers were immediately downstacked to minimize the height and efforts to replace the wooden "shoes" were completed.

Item #3: (U) Loose metal strapping can result in injury to DLA employees from the metal's sharp edges. See the photos in Appendix C for example of the loose metal strapping we observed.

- (U) Response: All loose metal banding that was observed during the inspection has been removed. The metal banding has also been replaced to ensure that the material remains secure during both storage and any movement. Additionally, the metal banding identified on the track shoe material has been reattached and if no longer needed the banding was removed from the material to eliminate any potential sharp edges which employees may inadvertently come in contact with.
- (U) We appreciate the efforts by your team and their due diligence in bringing these items to our attention. DLA Distribution has worked tirelessly to build a safety culture and continues to integrate safety into the entirety of all of our mission tasks. To further improve our processes and be proactive we have instituted additional routine inspections and quality checks across all of our operational areas to ensure we identify any similar potential risks.

(CUI) Thank you for allowing us the opportunity to respond as to what we have, and continue to do, to mitigate risks across DLA Distribution. My point of contact for this effort is

> PERRY L. KNIGHT, SES Deputy Commander

Enclosure

(U) 1. Photos of corrective actions

CUI

Appendixes <del>CUI</del>

## (U) DLA Response to Notice of Concern Memorandum (cont'd)

### CUI

#### ENCLOSURE 1

(U) Track shoe storage and crushed pallet corrections





CUI

## (U) DLA Response to Notice of Concern Memorandum (cont'd)

(U) Wooden containers (arrows show installed runner boards) and large metal can corrections





CUI

Appendixes <del>CUI</del>

# (U) DLA Response to Notice of Concern Memorandum (cont'd)



## (U) Management Comments

## (U) Defense Logistics Agency



**DEFENSE LOGISTICS AGENCY HEADQUARTERS** 8725 JOHN J. KINGMAN ROAD FORT BELVOIR, VIRGINIA 22060-6221

August 29, 2023

MEMORANDUM FOR INSPECTOR GENERAL (ACQUISITION, CONTRACTING AND SUSTAINMENT)

SUBJECT: Response to Office of Inspector General Draft Report on "Audit of the Defense Logistics Agency Storage and Care of Repair Parts and Components for the Army Ground Combat Systems" (Project No. D2022-D000AU-0139.000)

DLA disagrees with recommendation 1a in the DoDIG subject report that discusses the \$1.31B calculation. The report asserts funding could be put to better use based on storage of Army Ground Combat Systems materiel under DLA's care. The Army materiel reviewed in this audit included a combination of issuable items (Condition Code A) and repairable items (Condition Code F); however, the audit team applied a Condition Code A valuation to the entire population when the items reviewed were mostly Condition Code F. This calculation implies that all items would be or would become unusable and does not consider that items requiring only minor repair would cost significantly less to bring to issuable condition. As a result, the audit team reported a misleading and inflated calculation of funds that could be put to better use.

Reference the other recommendations, DLA has made significant progress in closing the vulnerabilities that are cited in the report.

The point of contact for this audit is

KNAPP

Kristin K. French Deputy Director **DLA Logistics Operations** 

Attachment:

Individual responses to each of the report recommendations

## (U) Defense Logistics Agency (cont'd)

DOD OIG DRAFT REPORT DATED JULY 27, 2023
"AUDIT OF THE DEFENSE LOGISTICS AGENCY STORAGE AND CARE OF
REPAIR PARTS AND COMPONENTS FOR THE ARMY GROUND COMBAT
SYSTEMS" (PROJECT NO. D2022-D000AU-0139.000)

## DEFENSE LOGISTICS AGENCY'S RESPONSE TO THE DOD OIG RECOMMENDATION

**RECOMMENDATION 1**: We recommend that the Director of Defense Logistics Agency:

**RECOMMENDATION 1.a:** Ensure that all Care of Supplies in Storage deficiencies identified in this report are corrected. The timely review and correction of critical Care of Supplies in Storage deficiencies could result in up to \$1.31 billion in potential monetary benefits (funds put to better use) because proper storage and packaging minimizes unnecessary repair and replacement costs.

**DLA RESPONSE**: Disagree on the inclusion of the inflated calculation of funds that could be put to better use but agree on the intent of recommended action. The identified items are in the process of being corrected and all corrective actions are estimated to be completed by March 31, 2024. Photos representing actions completed and the current state of warehouse storage have been provided to DoD OIG under separate cover. **Estimated Completion Date: March 31, 2024** 

**RECOMMENDATION 1.b:** Update guidance, including the care of supplies in storage and warehousing standard operating procedures, with the proper requirements. At a minimum, the guidance should include the specifics on how to:

- 1. Record inspection results.
- 2. Read humidity indicators and understand when and how to replace desiccant.
- 3. Request major remediation for long life reusable containers when humidity levels cannot be restored to an acceptable range with minor remediation.
- 4. Categorize identified care of supplies in storage deficiencies as critical, major, and minor.
- 5. Request storage and packaging deviations from materiel manager.
- Stack and space materiel to facilitate care of supplies in storage inspections and remediation.

**DLA RESPONSE**: Agree. The current Stock Readiness SOPs already provide guidance on performing and recording inspections in location. In response to this audit, DLA is taking the following additional steps.

- The Command Inspection Program being developed by DLA Distribution will include a requirement for validating the inspection results. The Command Inspection Program is expected to be completed by December 31, 2023.
- COSIS SOPs have been updated with specific guidance for inspections of humidity indicators and the replacement of desiccant, as well as specific guidance for the visual inspection of vehicles for overt issues, and inspection guidance for packaging and labeling of all materiel, including shelf life.

## (U) Defense Logistics Agency (cont'd)

#### DOD OIG DRAFT REPORT DATED JULY 27, 2023 "AUDIT OF THE DEFENSE LOGISTICS AGENCY STORAGE AND CARE OF REPAIR PARTS AND COMPONENTS FOR THE ARMY GROUND COMBAT SYSTEMS" (PROJECT NO. D2022-D000AU-0139.000)

- 3. As stated in the SOP and JSR 4145.04, materiel in affected containers is suspended pending remediation approval or instructions from the Army Materiel Manager in the form of disposition on the Supply Discrepancy Report (SDR).
- 4. Classification of materiel is a responsibility of the Army. Our system does not support action to categorize or classify materiel, since this is not a requirement of DLA in the JSR. SDRs serve to document the deficiency only, as Distribution Center personnel are not technical experts qualified to make that determination.
- 5. As stated in the JSR 4145.04, the Army or DLA can request the storage and packaging deviations on an as-needed basis under the SDR process.
- 6. Actions to improve the stacking and spacing of materiel, as best as available storage space permits, is already in progress. Documentation of the current state of warehouse storage has been provided to DoD OIG under separate cover. Estimated Completion Date: December 31, 2023

RECOMMENDATION 1c: Develop and implement a formal routine and recurring training program. At a minimum, the formal routine and recurring training program should ensure that Defense Logistics Agency Distribution personnel understand that:

- 1. Receiving personnel are responsible for ensuring that incoming items are properly packaged and labeled before sending materiel to storage locations.
- 2. Packaging personnel are responsible for knowing how to package and label materiel in order to correct any packaging or labeling deficiencies identified by receiving personnel, warehousing personnel, or stock readiness inspectors.
- 3. Warehousing personnel are responsible for taking items from receiving or packaging personnel and properly stacking and spacing them into storage and ensuring that stored items remain properly stored.
- 4. Stock readiness inspectors are responsible for visually inspecting items to ensure that they are properly packaged, labeled, stored; and humidity indicators are at an acceptable level. Stock readiness inspectors are also responsible for minor remediation and coordination with Army materiel managers on major remediation. This coordination should include sufficient information about deficiencies, including pictures.

DLA RESPONSE: Agree. DLA Distribution provides mandatory recurring training for all warehouse personnel on all applicable processes, based on specific job duties. For all functional areas and based on each employee's position description, appropriate training is scheduled by supervisors for employees through the agency's Learning Management System (LMS) at required intervals. Training records are maintained in LMS. Estimated Completion Date: March 31, 2024

**RECOMMENDATION 2.a:** We recommend that the Commanding General of the Army Tank-Automotive and Armaments Command should require materiel managers to conduct periodic

## (U) Defense Logistics Agency (cont'd)

DOD OIG DRAFT REPORT DATED JULY 27, 2023 "AUDIT OF THE DEFENSE LOGISTICS AGENCY STORAGE AND CARE OF REPAIR PARTS AND COMPONENTS FOR THE ARMY GROUND COMBAT SYSTEMS" (PROJECT NO. D2022-D000AU-0139.000)

site visits and quality monitoring activities at Defense Logistics Agency Distribution Centers to visually inspect their materiel to ensure that it is properly stored and cared for and take appropriate corrective action when applicable.

DLA INPUT: While DLA comment was not solicited, we are providing the following suggestion in a joint effort to provide better support to our Army partners. The Army (Packaging Storage and Containerization Center) and DLA currently perform joint yearly inspections at the sites. If Army materiel managers attend these onsite inspections, DLA believes the intention of this recommendation would be satisfied.

### (U) Army Tank-Automotive and **Armaments Command**



DEPARTMENT OF THE ARMY U.S. ARMY TANK-AUTOMOTIVE AND ARMAMENTS COMMAND 6501 EAST 11 MILE ROAD DETROIT ARSENAL, MICHIGAN 48397-5000

AMTA-IR 13 AUG 2023

#### MEMORANDUM THRU

Internal Review & Audit Compliance Office (AMIR), 4400 Martin Road, Redstone Arsenal, AL 35898-5000

Commanding General, U.S. Army Materiel Command (AMCG), 4400 Martin Road, Redstone Arsenal, AL 35898-5000

FOR Department of Defense, Office of Inspector General, 4800 Mark Center Drive, Alexandria, VA 22350-1500

SUBJECT: Draft Report on the Audit of Defense Logistics Agency Storage and Care of Repair Parts and Components for the Army Ground Combat Systems (Project No. D2022-D000AU-0139.000)

- 1. Reference enclosed Department of Defense Office of Inspector General, memorandum (Draft Report on the Audit of Defense Logistics Agency Storage and Care of Repair Parts and Components for the Army Ground Combat Systems (Project No. D2022-D000AU-0139.000), 27 July 2023.
- 2. The U.S. Army Tank-automotive and Armaments Command (TACOM) reviewed the results in the enclosed subject draft report. TACOM concurs Recommendation 2. The official reply to the recommendation is enclosed.
- 3. The information in the draft report does not require Controlled Unclassified Information security markings.

4. The point of contact for this reply is

Encl

MICHAEL B. LALOR Brigadier General, USA Commanding

## (U) Army Tank-Automotive and **Armaments Command (cont'd)**

U.S. Army Tank-automotive and Armaments Command Comments to the Department of Defense Office of Inspector General's Draft Report Titled: Audit of the Defense Logistics Agency Storage and Care of Repair Parts and Components for Army Ground Combat Systems (Project D2022-D000AU-0139.000)

DOD OIG OBJECTIVE: To determine whether the Defense Logistics Agency (DLA) properly stored and cared for repair parts and components for Army Ground Combat Systems (GCS) in accordance with DoD Policies and guidelines.

DOD OIG CONCLUSION: DLA Distribution officials did not store and care for Army GCS repair parts and components we reviewed in accordance with DoD policies and guidelines. Specifically, of the repair parts and components reviewed, valued at \$1.96 billion, we identified that:

- 259,397 of the items valued at \$1.31 billion (67 percent), had critical Care of Supplies in Storage (COSIS) deficiencies;
- 434,722 of the items, valued at \$300.22 million (15 Percent), had major COSIS deficiencies;
- 185,224 of the items, valued at \$192.72 million (10 percent), had minor COSIS deficiencies; and
- 130,530 of the items, valued at \$158.54 million (8 percent), had no COSIS deficiencies.

The improper storage and care of Army GCS repair parts and components occurred because the DLA did not have adequate guidance and training and the Army did not adequately oversee its materiel in DLA storage.

As a result, Army GCS repair parts and components valued at \$1.80 billion (92 percent), were deteriorating or at increased risk of deterioration. This includes \$1.31 billion in GCS repair parts and components that were in immediate danger of degrading. Furthermore, the improper storage and care of Army GCS repair parts and components created safety hazards that could result in injury to DLA personnel.

ADDITIONAL FACTS: Regarding Table 4 (on report page 51), ILSC concurs the amount of potential monetary benefits could be up to \$1,307,481,583 and that it could impact multiple Army appropriations.

Page 1 of 3

## (U) Army Tank-Automotive and **Armaments Command (cont'd)**

#### RECOMMENDATIONS AND REPLIES:

For the Commander, U.S. Army Tank-automotive and Armaments Command

Recommendation 2: The Commanding General of TACOM should require materiel managers to:

- a. Conduct periodic site visits and quality monitoring activities at DLA Distribution Centers to visually inspect their materiel to ensure that it is properly stored and cared for and to take appropriate corrective action when applicable.
- b. Periodically review whether all Army GCS material in DLA Distribution Centers have proper packaging and storage codes to prevent deterioration of materiel.
- c. Obtain and review Army Sustainment Command Packaging Storage and Containerization Center trip reports and coordinate with DLA Distribution Centers to ensure storage and packaging deficiencies are addressed.
- d. Review unserviceable materiel in storage at DLA Distribution Centers to determine whether it is excess that could be disposed of or discontinue Care of Supplies in Storage Inspections.

#### Command Reply: Concur. TACOM stakeholders will:

- a. Conduct quality monitoring activities to include TACOM ILSC (Supply & Packaging) participation in Army Sustainment Command's (ASC's) Packaging Storage and Containerization Center (PSCC) inspections/site-visits of DLA Distribution centers that store TACOM-owned stock, to include GCS assets. TACOM ILSC will also be contributing to PSCC's analysis and reports. Due outs from the inspections will be tracked during the monthly AMC Storage Reform Strategy Integrated Product Team meetings. Deficiencies identified will be provided to DLA for their corrective action.
- b. TACOM Supply & Packaging will conduct bi-annual scans of GCS equipment records to ensure items have packaging and storage coding. TACOM ILSC (Supply & Packaging) will retain copies of any package and storage reports received/pushed from DLA on GCS equipment, as well as copies of any resulting taskers (TACOM or DLA) issued for action. Additionally, TACOM ILSC (Supply and Packaging) receives reports from ASC that identify discrepancies discovered during site visits that require action.
- c. TACOM ILSC (Supply & Packaging) receives/reviews emailed trip reports from PSCC that provides discrepancies identified during site visits which

Page 2 of 3

## (U) Army Tank-Automotive and Armaments Command (cont'd)

require action; responses provided after report review/research that directs deficiencies to be corrected are retained. As a standing member of the Army Packaging Policy Working Group (APPWG), which is led/coordinated by ASC, TACOM communicates routinely with ASC on packaging related issues/concerns.

d. TACOM ILSC materiel managers routinely review asset stockage levels for assigned GCS equipment. An annual tasker will be sent to materiel managers by the ILSC Supply Directorate to officially review for excess assets and initiate disposal actions where required.

Target Completion Date: 30 August 24

Page 3 of 3

## (U) Army Materiel Command



DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY MATERIEL COMMAND
4400 MARTIN ROAD
REDSTONE ARSENAL, AL 35898-5000

**AMIR** 

2 4 AUG 2023

MEMORANDUM FOR Department of Defense Inspector General (DoDIG Program Director for Audit Acquisition, Contracting, and Sustainment, 4800 Mark Center Drive, Alexandria, VA 22350-1500

SUBJECT: Command Comments to Department of Defense Inspector General Draft Report: Audit of the Defense Logistics Agency Storage and Care of Repair Parts and Components for Army Ground Combat Systems, Project: D2022-D000AU-0139.000

1. The U.S. Army Materiel Command concurs with the subject draft report findings and recommendations and endorses the U.S. Army Tank-automotive Armaments Command response. Our specific comments are included at the enclosure.

2. The U.S. Army Materiel Command point of contact is

Encl

MARION G. WHICKER Executive Deputy to the Commanding General

## (U) Assistant Secretary of the Army (Acquisition, Logistics, and Technology)



## DEPARTMENT OF THE ARMY OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY ACQUISITION LOGISTICS AND TECHNOLOGY 103 ARMY PENTAGON WASHINGTON, DC 20310-0103

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MEMORANDUM FOR Department of Defense Inspector General (DoDIG/ Program Director for Audit Acquisition, Contracting, and Sustainment, 4800 Mark Center Drive, Alexandria, VA 22350-1500

SUBJECT: Official Army Position of Department of Defense Inspector General Draft Report: Audit of the Defense Logistics Agency Storage and Care of Repair Parts and Components for Army Ground Combat Systems (Project No. D2022-D000AU-0139.000)

#### 1. References:

- a. Draft DoDIG Report (Audit of the Defense Logistics Agency Storage and Care of Repair Parts and Components for Army Ground Combat Systems (Project No. D2022-D000AU-0139.000), 27 July 2023.
- b. HQ AMC, AMIR memorandum (Command Comments to DoDIG Draft Report: Audit of the Defense Logistics Agency Storage and Care of Repair Parts and Components for Army Ground Combat Systems, Project: D2022-D000AU-0139.000), 24 August 2023.
- U.S. Army Materiel Command (AMC) reviewed reference 1.a. AMC concurs with the findings and recommendations and endorses the U.S. Army Tank-automotive Armaments Command response.
- 3. The Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology) is providing the official Army position. The Office of the Deputy for Acquisition and Systems Management reviewed reference 1.a. and concurs with the DoDIG's recommendation and endorses the AMC response (enclosed).
- 4. The point of contact is

JEHM. LOD

ROBERT M. COLLINS MG, USA Deputy for Acquisition and Systems Management

## (U) Acronyms and Abbreviations

(U) AMC Army Materiel Command (U) AMDF Army Master Data File (U) ASC Army Sustainment Command (U) COSIS Care of Supplies in Storage <del>(CUI)</del> <del>(CUI)</del> (U) DLA Defense Logistics Agency

(U) DSS Distribution Standard System

(U) GCS Ground Combat Systems

(U) JSR Joint Service Regulation

(U) LLRC Long Life Reusable Container

(U) LTS Long Term Storage

(U) NIIN National Item Identification Number

(U) PSCC Packaging, Storage, and Containerization Center

(U) SOP Standard Operating Procedure

(U) TACOM Army Tank-Automotive Armaments Command



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