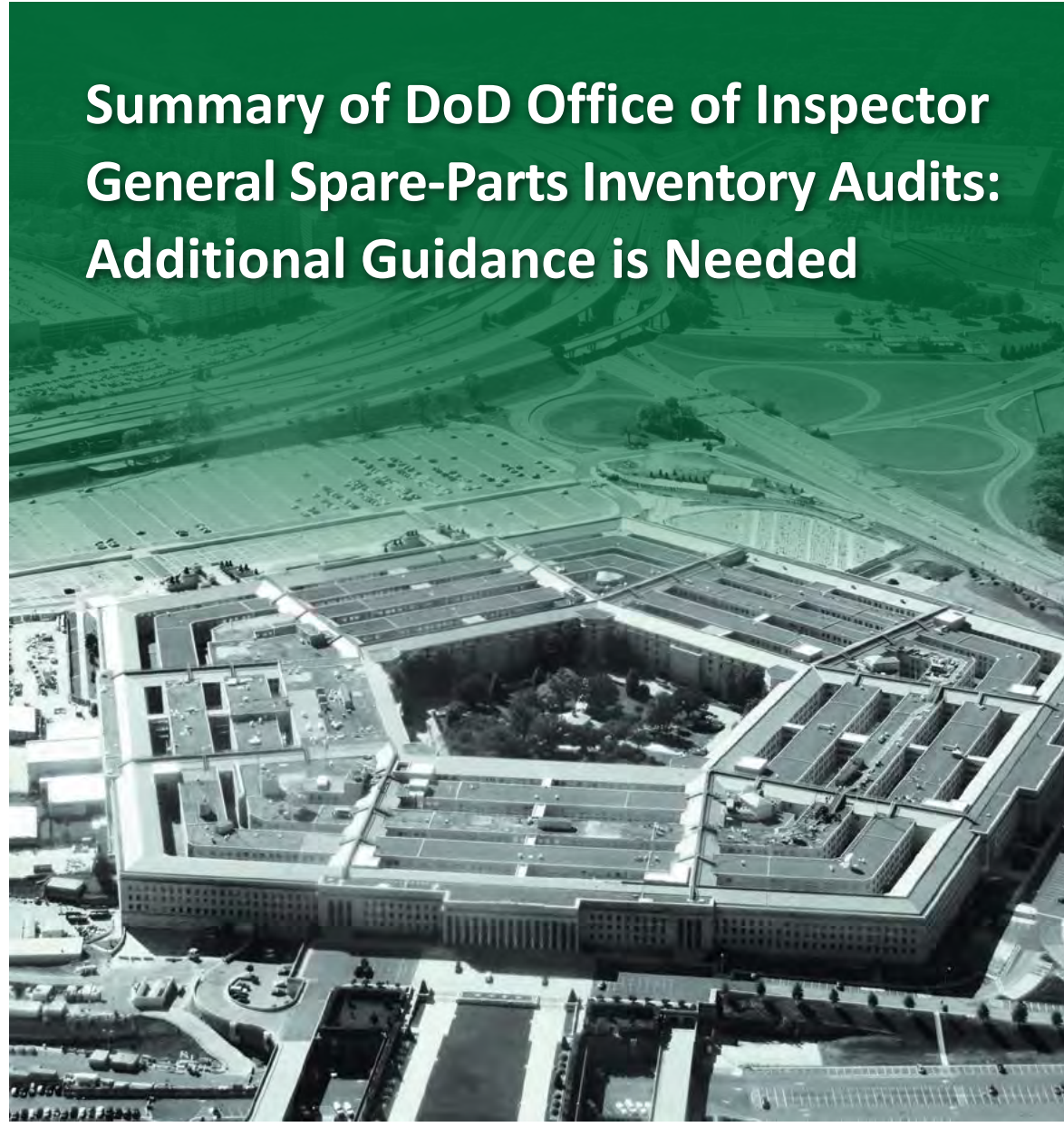


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# INSPECTOR GENERAL

*U.S. Department of Defense*

MARCH 31, 2015



## Summary of DoD Office of Inspector General Spare-Parts Inventory Audits: Additional Guidance is Needed

INTEGRITY ★ EFFICIENCY ★ ACCOUNTABILITY ★ EXCELLENCE

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INTEGRITY ★ EFFICIENCY ★ ACCOUNTABILITY ★ EXCELLENCE

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# Results in Brief

## *Summary of DoD Office of Inspector General Spare-Parts Inventory Audits: Additional Guidance is Needed*

**March 31, 2015**

### Objective

The objective of the audit was to provide DoD information on contracting problems with spare-parts pricing and inventory that the DoD Office of Inspector General (OIG) identified and reported. This report includes contracting problems with spare-parts inventory. Contracting problems with spare-parts pricing is discussed in report number DODIG-2015-103, "Summary of DoD Office of Inspector General Spare-Parts Pricing Audits: Additional Guidance is Needed," March 31, 2015.

### Finding

DoD did not effectively manage its spare-parts inventories. Since 1999, DoD OIG has issued 36 reports related to spare-parts inventory. In 3 of the 36 reports, DLA effectively managed its spare-parts inventories. However, in 33 of the 36 reports, DoD did not effectively manage its spare-parts inventories. This occurred because DoD did not:

- review other existing sources and enforce inventory reduction before it purchased spare parts from private sources;
- verify proper spare-part requirements were established for weapon systems;
- include essential inventory management metrics and use accurate metric data and calculations established in the contract requirements;

### Finding (cont'd)

- provide sufficient oversight and enforce contract requirements; and
- report the inventory on its annual financial statements.

As a result, DoD maintained excess inventory valued at \$1 billion and undervalued the spare-parts inventory on its annual financial statements by more than \$1.65 billion. In addition, DoD OIG identified in 11 of the 36 reports additional, nonrecurring problems with DoD's management of spare-parts inventory.

The Assistant Secretary of Defense for Logistics and Materiel Readiness aligned acquisition strategies and the Military Services efforts to reduce spare-parts inventories in DoD. They issued an inventory management improvement plan, formed a working group to establish inventory management metrics, and issued policy, dealing with supply chain materiel management. The Assistant Secretary also drafted guidance to manage and account for Government-owned spare-parts inventories controlled by contractors, which will be a focus area in 2015.

### Recommendation

We recommend the Assistant Secretary of Defense for Logistics and Materiel Readiness, finalize and issue policy to effectively manage and account for Government-owned spare-parts inventories controlled by contractors.

### Management Comments and Our Response

The Assistant Secretary of Defense for Logistics and Materiel Readiness, addressed the specifics of the recommendation, and no further comments are required. Please see Recommendation Table on the next page.

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***Recommendation Table***

Management	Recommendation Requiring Comment	No Additional Comments Required
Assistant Secretary of Defense for Logistics and Materiel Readiness		None





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

March 31, 2015

**MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,  
TECHNOLOGY, AND LOGISTICS**

**SUBJECT: Summary of DoD Office of Inspector General Spare-Parts Inventory Audits:  
Additional Guidance is Needed (Report No. DODIG-2015-104)**

We are providing this report for your information and use. Since 1999, DoD OIG identified that DoD did not effectively manage its spare-parts inventories. As a result, DoD maintained excess inventory valued at \$1 billion and undervalued the spare-parts inventory in its annual financial statements by more than \$1.65 billion. We conducted this audit in accordance with generally accepted government auditing standards, except for planning and evidence requirements of the field work standards, because this audit summarized previously issued DoD OIG reports.

We considered management comments on a draft of this report when preparing the final report. Comments from the Assistant Secretary of Defense for Logistics and Materiel Readiness addressed the specifics of the recommendation and conformed to the requirements of DoD Directive 7650.3; therefore, we do not require additional comments.

We appreciate the courtesies extended to the staff. Please direct questions to me at (703) 604-9077 (DSN 664-9077).

*Jacqueline L. Wicecarver*  
Jacqueline L. Wicecarver  
Assistant Inspector General  
Acquisition, Parts, and Inventory

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# Introduction

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## Objective

The objective of the audit was to provide DoD information on contracting problems with spare-parts pricing and inventory that the DoD Office of Inspector General (OIG) identified and reported. This report includes contracting problems with spare-parts inventory. Contracting problems with spare-parts pricing are discussed in report number DODIG-2015-103, "Summary of DoD Office of Inspector General Spare-Parts Pricing Audits: Additional Guidance is Needed," March 31, 2015. See Appendix A and B for a discussion of the scope and methodology and prior audit coverage related to the objective.

## Background

DoD is the world's largest purchaser of goods and services. The FY 2015 acquisition funding request for DoD totaled \$153.9 billion to ensure the combined capabilities and performance of U.S. weapon systems are unmatched throughout the world, ensuring that U.S. military forces have the advantage over any adversary.

## *Inventory Management at Risk*

The Government Accountability Office listed DoD Contract Management as a high-risk area in its 2013 High-Risk Series Update. The Government Accountability Office noted that DoD was at risk of potentially paying more than necessary for goods and services. In addition, the DoD OIG FYs 2014 and 2015 Audit Plans identified parts utilization and procurement as a risk area. The Audit Plans identified the effective monitoring of acquisition policies as a priority. Since 1999, DoD OIG audits have reported on DoD's ineffective management of spare-parts inventories, as well as the ineffective monitoring of their spare-parts procurement strategies.

## *Oversight of DoD Inventory Management*

The Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD[AT&L]) supervises and establishes policies for DoD acquisition, logistics, maintenance, and sustainment support. OUSD(AT&L) is supported by the Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD[L&MR]). ASD(L&MR) is the principal logistics officer of DoD and prescribes policies and procedures to conduct logistics, maintenance, materiel readiness, strategic mobility, and sustainment support in the DoD. ASD(L&MR) also monitors and reviews all logistics, maintenance, materiel readiness, strategic mobility, and sustainment support programs within the DoD and maintains authority, direction, and control over the Director, Defense Logistics Agency (DLA).

## ***Inventory Management Responsibilities of the Military Services and Defense Logistics Agency***

DoD procures spare parts to sustain major weapons systems managed by the Army, Marine Corps, Navy, and Air Force. The Military Services could also request DLA to procure their spare parts from Defense contractors. DLA is DoD's largest logistics combat support agency. According to their website,<sup>1</sup> DLA provides the Military Services more than 85 percent of its spare parts. The Military Services and DLA manage a variety of spare parts including spares for:

- engines on fighters, bombers, cargo aircraft, and helicopters;
- airframe and landing gear parts;
- flight safety equipment;
- propeller systems; and
- combat vehicles.

For example, the Air Force Life Cycle Management Center (LCMC) awarded a contract for logistics support of the C-130J airframe shown in Figure 1.



Figure 1. C-130J Super Hercules Aircraft  
Source: [www.defenseimagery.mil](http://www.defenseimagery.mil)

~~(FOUO)~~ Before the spare parts are procured, the Military Services and DLA must determine their requirement for the spare parts to sustain the weapon system by considering current and future year requirements, authorized stock levels, and mobilization reserves.

<sup>1</sup> [www.dla.mil/Pages/ataglance.aspx](http://www.dla.mil/Pages/ataglance.aspx)

The Military Services and DLA should also consider spare-parts inventory levels maintained by DLA. The Military Services, along with DLA, use different types of contracts to procure and maintain weapon systems. According to DoD guidance,<sup>2</sup> Performance-Based Logistics (PBL) contracts are DoD's preferred product support strategy to meet performance goals through long-term support arrangements with clear lines of authority and responsibility. The Military Services use PBLs to obtain logistics support for maintenance, manage spare parts, and provide incentives for contractor performance metrics.

The Military Services and DLA also utilize, for example, other types of contracts including contractor logistics support, requirements contracts, and utilize basic ordering agreements to facilitate the purchase of spare parts from various Defense contractors. Contractor logistics support is broadly defined as contracted weapon system sustainment that occurs over the life of the weapon system. A requirements type contract fills actual purchase requirements of Government activities for supplies or services during a specified contract period. A basic ordering agreement is a written instrument of understanding, negotiated between DoD and a contractor, that contains terms and clauses applied to future orders, descriptions of supplies or services, and methods for future orders.

### ***DoD OIG Spare-Parts Inventory Reports Reviewed***

Starting in 1999, DoD OIG issued 36 reports related to spare-parts inventory. These reports cover spare-parts inventory concerns across DoD and multiple Defense contractors and identified problems with inventory usage, requirements, metrics, monitoring, and accountability. See the Table in Appendix C for detailed descriptions of the reported spare-parts inventory management problems.

## **Review of Internal Controls**

DoD Instruction 5010.40, "Managers' Internal Control Program Procedures," May 30, 2013, requires DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls. We identified that DoD did not review other existing sources and enforce inventory reduction before it purchased spare parts from private sources; verify proper spare-part requirements were established for weapons system; include essential inventory management metrics and use accurate metric data and calculations established in the contract requirements; provide sufficient oversight and enforce contract requirements; and report the inventory on its annual financial statements. We will provide a copy of the report to the senior official responsible for internal controls in OUSD(AT&L).

<sup>2</sup> DoD Regulation 4140.1-R, "DoD Supply Chain Materiel Management Regulation," May 23, 2003. DoD Regulation 4140.1-R, "DoD Supply Chain Materiel Management Regulation," May 23, 2003, was cancelled and reissued in several volumes of DoD Manual 4140.01.

## Finding

### DoD Ineffectively Managed Spare-Parts Inventory

DoD did not effectively manage its spare-parts inventories. Since 1999, DoD OIG has issued 36 reports related to spare-parts inventory. In 3 of the 36 reports, DLA effectively managed its spare-parts inventories. However, in 33 of the 36 reports, DoD did not effectively manage its spare-parts inventories. This occurred because DoD did not:

- review other existing sources and enforce inventory reduction before it purchased spare parts from private sources;
- verify proper spare parts requirements were established for weapon systems;
- include essential inventory management metrics and use accurate metric data and calculations established in the contract requirements;
- provide sufficient oversight and enforce contract requirements; and
- report the inventory on its annual financial statements.

As a result, DoD maintained excess inventory valued at \$1 billion and undervalued the spare-parts inventory in its annual financial statements by more than \$1.65 billion. In addition, DoD OIG identified in 11 of the 36 reports additional, nonrecurring problems with DoD's management of spare-parts inventory.

### Spare-Parts Inventory Concerns Across DoD

DoD did not effectively manage its spare-parts inventories. DoD OIG has issued 36 reports related to spare-parts inventory. In 3 of the 36 reports, DLA effectively managed its spare-parts inventories. In two of the three reports, DLA reduced inventory levels and lowered wait-times for customers. The other report identified that the contractor reduced DLA's inventory by reducing the amount of time to fulfill orders. The contractor also sold excess DoD inventory to its commercial

customers and reimbursed DLA. However, DoD OIG identified in 33<sup>3</sup> of the 36 reports that DoD did not effectively manage their spare-parts inventories. See Appendix D for a list of all 33 reports and the main problem areas discussed in each report. Specifically, DoD did not:

DoD OIG identified in 33 of the 36 reports that DoD did not effectively manage their spare-parts inventories.

- use existing inventories before it purchased additional spare parts in 10 of the 33 reports;
- properly develop inventory requirements for spare parts in 7 of the 33 reports;
- adequately establish or monitor contract performance metrics to efficiently manage spare-parts inventories in 6 of the 33 reports;
- effectively monitor reducing spare-parts inventories in 13 of the 33 reports; and
- properly account for spare-parts inventories managed by contractors in its annual financial statements in 8 of the 33 reports.

Additionally, in 11 of the 36 reports, DoD OIG identified additional, nonrecurring problems with DoD's management of spare-parts inventory. See Appendix E for a list of the 11 reports with the nonrecurring spare-parts inventory problems.

## Inventories Not Used Before Additional Spare Parts Were Purchased

DoD OIG identified in 10 of the 33 reports that DoD did not use existing inventories before it purchased additional spare parts. This occurred because DoD did not review other existing sources and enforce inventory reduction (or drawdown) requirements before it purchased spare parts from private sources. DoD guidance<sup>4</sup> states that DoD Components should review and adjust current materiel requirements and allow sufficient time to decrease DoD inventory when alternative sources have been selected. This guidance identifies a maximum of 2 years of stock based on demand, but there is an exception in which purchases should not result in on-hand inventory exceeding 3 years of operating stock. In addition, other DoD guidance<sup>5</sup> recommends that unique DoD inventory should always be considered

<sup>3</sup> The DoD OIG identified 33 reports that DoD did not effectively manage their spare-parts inventories. The 33 reports identified multiple ineffective management problems that were included in the 6 topic areas. As a result, the number of problems will not add to 33.

<sup>4</sup> DoD Regulation 4140.1-R, "DoD Supply Chain Materiel Management Regulation," May 23, 2003. This regulation was cancelled and reissued as DoD Manual 4140.01, Volume 3 "DoD Supply Chain Materiel Management Procedures: Materiel Sourcing," February 10, 2014.

<sup>5</sup> OUSD(AT&L), "Performance Based Logistics (PBL): A Program Managers Product Support Guide," November 10, 2004. This is a historical reference obtained from a previously issued audit report. DoD has issued updated PBL guidance.



and that a plan for drawdown should be in place before buying spare and repair parts from private sources. However, in 10 of the 33 reports, DoD did not use its inventory before it purchased additional inventory.

For example, in November 2008, DLA's inventory included more than 15,000 vehicular control arm parts, with an annual demand of 1,094 parts in FY 2008. If DLA maintained 3 years of inventory for this part, 11,700 parts were in excess as of November 2008. DLA could have used the \$1.8 million worth of vehicular control arms purchased from the contractor from October 2010 through June 2012 to improve cash flow and reduce storage costs. See Figure 2 for a picture of the excess DLA-owned vehicular control arms.



ASD(L&MR) issued a policy memorandum<sup>6</sup> because DoD OIG reports highlighted the need to review inventories and use of Government-owned repair parts before the same parts were purchased from private contractors through PBL arrangements and partnership agreements. This memorandum reinforced that all PBL arrangements and partnering agreements should use Government-owned inventory and that policy will be strengthened to emphasize the use of Government-owned inventory before contractor-owned inventory is purchased. In the interim, existing arrangements should be reviewed to ensure maximum use of Government-owned inventory to support good business practices.

<sup>6</sup> ASD(L&MR), "Maximum Utilization of Government-Owned Inventory in Performance-Based Logistics Arrangements," December 20, 2010.

DoD updated multiple policies<sup>7</sup> that require DoD Components to maximize the use of inventory before they seek new commercial support. However, this additional guidance has not resulted in a significant change. DoD OIG reports issued from 2011 through 2014 continued to report that existing inventory was not used before contractor-owned inventory was purchased.

(FOUO) For example, Naval Supply Systems Command Weapons System Support officials incorrectly applied the policy stated in the OUSD(AT&L) and the ASD(L&MR) memorandums. The Naval Supply Systems Command Weapons System Support officials did not require a contractor to use existing DLA inventory of [REDACTED] individual parts, valued at approximately \$ [REDACTED], when in the best interest of the Department of the Navy. In another instance, the contractor had an on-hand quantity of [REDACTED] aircraft disc fans, valued at approximately \$ [REDACTED], and DLA had [REDACTED] of those parts available in its inventory.

## Improper Spare-Parts Requirements

DoD OIG identified in 7 of the 33 reports that DoD did not properly develop inventory requirements for spare parts. Specifically, DoD officials:

- did not transfer requirements that were met by a DLA contractor when they transferred inventory as part of a Base Realignment and Closure (BRAC) 2005 supply and storage recommendation;
- split requirements rather than consolidating purchase and sustainment responsibilities; and
- did not properly review data that forecasted spare-parts requirements.

DoD did not properly develop inventory requirements for spare parts.

## Inappropriate Transfer of Spare-Parts Requirements

DoD officials did not transfer requirements that were met by a DLA contractor when it transferred inventory as part of a BRAC 2005 supply and storage recommendation. This occurred because DoD did not verify proper spare-parts requirements were established. Specifically, DoD did not remove consumable items<sup>8</sup> from the contractor logistics support contracts when it transferred the requirement to DLA for management.

<sup>7</sup> DoD updated DoD Directive 4140.1, "Supply Chain Materiel Management Policy," April 22, 2004, which was reissued as DoD Instruction 4140.01, "DoD Supply Chain Materiel Management Policy," December 14, 2011; and DoD updated DoD Regulation 4140.1-R, "DoD Supply Chain Materiel Management Regulation," May 23, 2003, which was reissued in several volumes as DoD Manual 4140.01, "DoD Supply Chain Materiel Management Procedures," February 10, 2014.

<sup>8</sup> Consumable items are items that are discarded when worn out or broken because it is not economical to repair the item. Items include common usage, low-cost supplies and minor parts, such as gaskets, materials, and fasteners; and high-priced, sophisticated spare parts; such as precision valves, micro switches, and miniature components that are vital to operating major weapon systems.

The BRAC 2005 recommendations directed the Services to realign management and related support functions for the procurement of depot-level reparableables to DLA. As an example, one of the consumable items the U.S. Army Aviation and Missile Life Cycle Management Command (AMCOM) officials transferred to DLA Aviation was a linear actuating cylinder piston. In April 2010, DLA had 439 on hand and 1,420 due in from an AMCOM contract, for a total of 1,859 in inventory at \$4,864.50 each or a total of \$9.0 million in inventory. DLA requisitioned only 42 in 2009, and these were requisitioned primarily by AMCOM in the first 2 quarters of the year. A single linear actuating cylinder piston had been requisitioned in the second quarter of 2009 and April 2010.

Therefore, DLA had more than 44 years of inventory for this part because there was almost no demand for the part outside the AMCOM contract. AMCOM officials planned to spend an additional \$4.1 million to procure 868 more of these pistons from a contractor during the 5-year performance period of the follow-on AMCOM contract. The consumable items AMCOM officials transferred to DLA in August 2008 should have remained in the Army system and been waived from BRAC 2005 transfer requirements. Figure 3 shows the linear actuating cylinder piston.



### ***It Was Not Cost Effective to Split Requirements for Consumable Items***

DoD officials split the consumable item requirements rather than consolidating purchase and sustainment responsibilities. This occurred because DoD did not verify that proper spare-parts requirements were established. Specifically, DoD did not develop an effective strategy for consolidating multiple requirements to procure and manage consumable items. The United States Code<sup>9</sup> requires agencies to procure supplies in such quantity that will result in the most advantageous unit and total costs and does not exceed the quantity reasonably expected to be required by the agency. However, the Army, DLA, and contractors simultaneously procured and managed the same items.

For example, in November 2008, AMCOM procured 642 electrical ring assemblies at a unit price of \$8,200. During the same period, the contractor procured parts from the same supplier at increased unit prices. The annual requirement for DoD customers for this item is 349. Since the annual requirement was too low to qualify for economic order quantity discounts, the customer requirements should have been combined to receive a lower, more economical price. Figure 4 shows an electrical ring assembly.



Figure 4. Electrical Ring Assembly  
Source: DoD OIG

<sup>9</sup> Section 2384a, Title 10, United States Code.



### ***DoD Used Inadequate Data to Establish Inventory Levels***

DoD officials did not properly review data that forecasted spare-parts requirements. This occurred because DoD did not verify proper spare-parts requirements were established. Specifically, DoD did not track the reliability data or review the reasonableness of spare parts needed to meet proposed contract requirements. DoD guidance<sup>10</sup> requires DoD Components to develop forecasts based on models that consider only historical demand, combined future program data with historical demand or failure data, and past and future program data.

(~~FOUO~~) For example, AMCOM awarded a contract without reviewing the proposed requirements for quantities of new and used parts. The historical replacement rate for a part (a gear) on the contract was [REDACTED]. However, the contractor proposed a replacement rate of [REDACTED] in the first contract. Based on data for the first [REDACTED] of the remanufactured weapons systems, the actual replacement rate was [REDACTED]. Yet for the second contract, the contractor still proposed a replacement rate of [REDACTED]. Figure 5 shows a picture of the gear.



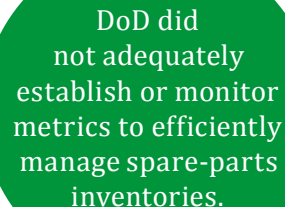
Figure 5. Gear  
Source: DoD OIG

<sup>10</sup> DoD Manual 4140.01, Volume 2, "DoD Supply Chain Materiel Management Procedures: Demand and Supply Planning," February 10, 2014.



## Better Metrics Are Needed

DoD OIG identified in 6 of the 33 reports that DoD did not adequately establish or monitor metrics to efficiently manage spare-parts inventories. Specifically, in 3 of the 6 reports, DoD did not adequately establish metrics to efficiently manage spare-parts inventories. This occurred because DoD did not include essential inventory management metrics in the contract. For example, the contract included a metric for availability but did not include essential metrics relating to use and the amount of inventory on-hand.



DoD did not adequately establish or monitor metrics to efficiently manage spare-parts inventories.

In 2004, OUSD(AT&L) issued guidance<sup>11</sup> that required PBL arrangements be constructed to define contractor performance based on the desired outcomes. The guidance defined performance in terms of military objectives using five measurable criteria. OUSD(AT&L) issued follow-on guidance in 2005<sup>12</sup> that establishes the five performance criteria as the standard set of metrics to evaluate overall total life-cycle systems management. In 2014, ASD(L&MR) issued the PBL guidebook<sup>13</sup> that defines PBLs as contracts with industry that purchase outcomes and incentivize cost reduction.

However, DoD did not include essential inventory management metrics to achieve required outcomes and cost-reduction initiatives. For example, officials from the Project Management Office (PMO) Army Contracting Command (ACC) used a cost-reimbursable services contract to provide logistics support for armored fighting vehicles that included a minimal set of metrics. Additionally, they did not effectively use other metrics to further define contract requirements in clear, specific, and objective terms with measurable outcomes, as required by statute and DoD guidance.<sup>14</sup>

In three additional reports, DoD did not adequately monitor metrics to efficiently manage spare-parts inventories. This occurred because DoD did not use accurate metric data and calculations established in the contract requirements. For example, AMCOM officials overstated repair turnaround time improvements for a contract. AMCOM officials calculated a 46.7-percent performance improvement, but the actual repair turnaround

<sup>11</sup> OUSD(AT&L), "PBL: Purchasing Using Performance Based Criteria," August 16, 2004.

<sup>12</sup> OUSD(AT&L), "Total Life Cycle Systems Management (TLCSM) Metrics," November 22, 2005.

<sup>13</sup> ASD(L&MR) "PBL Guidebook," May 27, 2014.

<sup>14</sup> Section 2330a, Title 10 United States Code; DoD Directive 5000.01, "The Defense Acquisition System," Section E1.1.17, "Performance-Based Logistics"; OUSD(AT&L), "PBL: Purchasing Using Performance Based Criteria," August 16, 2004.

time performance improvement ranged from 26.1-percent to 36.9-percent. Therefore, AMCOM officials paid the contractor a total of \$6.3 million to \$10.9 million for performance improvements that were not achieved.

## DoD Did Not Monitor Spare-Parts Inventories Effectively

DoD did not effectively monitor reducing spare-parts inventories.

DoD OIG identified in 13 of the 33 reports that DoD did not effectively monitor reducing spare-parts inventories. This occurred because DoD did not provide sufficient oversight and enforce contract requirements. For example, an Army contract required the contractor maintain inventory at a level not to exceed 60 days. However, the 60-day inventory requirement did not differentiate between inventories acquired on the current contract versus inventory acquired on previous contracts. As of April 2014, a total of 309,498 spare parts, valued at \$25.4 million, were in excess of the 60-day requirement on the current contract. Based on the consumption data and estimated workload, the Army had 23.5 years of on-hand inventory for blades, valued at \$1.8 million. See Figure 6 for a picture of the blade.



Figure 6. Blade  
Source: Corpus Christi Army Depot

## Spare Parts Not Reported on DoD Financial Statements

DoD OIG identified in 8 of the 33 reports that DoD did not properly account for Government-owned spare-parts inventories managed by contractors on its annual financial statements. This occurred because DoD did not report the inventory on its annual financial statements. The Federal Acquisition Regulation<sup>15</sup> defines Contractor Acquired Property (CAP) as inventory provided by the contractor for performing a contract. DoD is not required to maintain property records for the spare-parts inventory if it is classified as CAP, which would be necessary if the inventory was considered Government-owned.



DoD did not properly account for Government-owned spare-parts inventories managed by contractors on its annual financial statements.

For example, PMO officials did not properly account for Government property procured on the cost-reimbursable services contract for logistics support of armored fighting vehicles. The armored fighting vehicle inventory (spare and repair parts) managed by a contractor had not been assigned a value and recorded in the appropriate Army property accountability and financial accounting systems.

The Defense Federal Acquisition Regulation Supplement<sup>16</sup> states that the Government receives title for all CAP in accordance with specific contract requirements. CAP becomes Government-furnished property upon delivery and acceptance by the Government and when retained by the contractor for continued use under a successor contract. The title will pass to the Government upon acceptance. Additionally, Federal Financial Accounting Standards<sup>17</sup> require that the spare parts be recorded on the financial statement when title passes or when delivered to the Government.

The Military Services introduced initiatives to track and report Government-owned spare-parts inventories managed by contractors on their annual financial statements. In 2013, the Air Force identified that its Government-owned property managed by contractors was not recorded in an accountable property system of record. The Air Force is conducting an initiative to capture this property in its system and report the property on the annual Air Force financial statements by January 31, 2016.

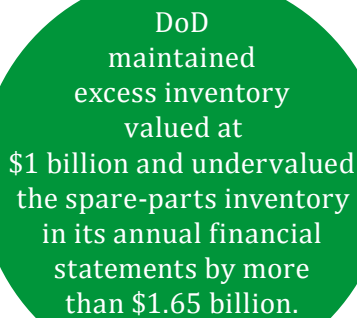
<sup>15</sup> Federal Acquisition Regulation 45.402, "Title to Contractor-Acquired Property," April 2012.

<sup>16</sup> Defense Federal Acquisition Regulation Supplement and Procedures, Guidance, and Information 245.4, "Title to Government Property," February 2013.

<sup>17</sup> Statement of Federal Financial Accounting Standards No. 6, "Accounting for Property, Plant, and Equipment," November 30, 1995.

According to an OUSD(AT&L) official, the Army and Navy also have initiatives to capture and report Government-owned spare-parts inventories managed by contractors on their annual financial statements. Specifically, the Army has begun to audit its accountable property system of record and address the process gaps around establishing accountable records. The Navy recently examined its property procedures and plans to complete discovery of Government-owned spare-parts inventories managed by contractors during FY 2015.

## Ineffective Management of Excess Spare-Parts Inventories and Undervalued Financial Statements



DoD maintained excess inventory valued at \$1 billion and undervalued the spare-parts inventory in its annual financial statements by more than \$1.65 billion.

DoD maintained excess inventory valued at \$1 billion and undervalued the spare-parts inventory in its annual financial statements by more than \$1.65 billion. See Appendix F for report values with excess spare-parts inventories and undervalued financial statements. For example, one contractor was authorized to spend about \$1.453 billion on a contract; however, DoD OIG calculated the operational support costs for armored fighting vehicles at about \$1.117 billion for the first 5 years, which resulted in about \$335.9 million used to accumulate inventory that could have been put to better use.

(FOUO) In another example, Air Force LCMC officials did not report [REDACTED] spare parts, valued at \$ [REDACTED], on the annual Air Force financial statements.

## Nonrecurring Spare-Parts Inventory Management Problems

DoD OIG identified additional, nonrecurring problems with the management of spare-parts inventory in 11 of the 33 reports. The problems identified were nonrecurring and ranged from the acceptance of spare-parts to the implementation of PBL strategies. For example, in one report the Air Force LCMC did not formally accept the spare parts from the contractor because Air Force LCMC officials did not verify that DCMA accepted the spare parts on behalf of the Air Force. See Appendix E for the specific nonrecurring spare-parts inventory problems.

## Report Recommendations to Effectively Manage Spare-Parts Inventories

Since 1999, DoD did not effectively manage its spare-parts inventories. DoD OIG made 237 recommendations in the 36 reports related to spare-parts inventory. Of the 237 recommendations, 180 recommendations addressed management of spare-parts inventories,<sup>18</sup> 56 recommendations addressed nonrecurring problems, and 1 recommendation required OUSD(AT&L) to develop and implement procedures for managing and procuring commercial items when DLA economically and efficiently obtained spare parts from a contractor. See Appendix G for a summary and status of recommendations made by DoD OIG.

## Management Actions Taken

ASD(L&MR) aligned acquisition strategies and the Military Services efforts to reduce spare-parts inventories in DoD. In February 2014, ASD(L&MR) issued policy<sup>19</sup> that:

- establishes sourcing and material acquisition strategies for the Military Services and DLA to minimize life-cycle costs;
- considers best-value selection among support alternatives;
- maximizes the use of existing Government-owned inventory before seeking new commercial support on all PBL and partnering agreements; and
- designates a theater-specific strategy to use local sources of supply when available.

In October 2010, ASD(L&MR) also issued a Comprehensive Inventory Management Improvement Plan (CIMIP) and formed a working group, chaired by the Office of the Deputy Assistant Secretary of Defense for Supply Chain Integration, that establishes inventory management metrics. The plan requires the Military Services and DLA provide the results of their semiannual reviews of inventory management metrics and hold quarterly supply chain management meetings.

ASD(L&MR) officials stated that it will focus on the management and accounting of Government-owned spare-parts inventories controlled by contractors in 2015. ASD(L&MR) developed draft guidance to manage and account for Government-owned spare-parts inventories controlled by contractors. However,

<sup>18</sup> Thirty-nine of the 237 recommendations related to the effective management of spare-parts inventories are still open. Most of the open recommendations are from recently issued reports and DoD has not had enough time to implement the recommendations.

<sup>19</sup> DoD Manual 4140.01, Volume 3 "DoD Supply Chain Materiel Management Procedures: Materiel Sourcing," February 10, 2014.



the guidance has not been finalized and issued as of the date of this report. ASD(L&MR) should finalize and issue policy on the effective management and accountability of Government-owned spare-parts inventories controlled by contractors.

## **Recommendation, Management Comments, and Our Response**

**We recommend Assistant Secretary of Defense for Logistics and Materiel Readiness, finalize and issue policy to effectively manage and account for Government-owned spare-parts inventories controlled by contractors.**

### *Assistant Secretary of Defense for Logistics and Materiel Readiness Comments*

The Assistant Secretary of Defense for Logistics and Materiel Readiness, agreed, stating that he will publish Change 1 to DoD Manual 4140.01, Volume 6 by the third quarter FY2015. Change 1 will require contractors who manage Government inventory under commercial sustainment type contracts to report, on a biannual basis, inventory requirements; existing Government inventory; and any excess Government inventory to the DoD Component. Change 1 will also require contractors to submit a written plan that proposes actions for reuse or disposal of excess Government inventory.

### *Our Response*

Comments from the Assistant Secretary of Defense for Logistics and Materiel Readiness addressed the specifics of the recommendation, and no further comments are required.

## Appendix A

### Scope and Methodology

We conducted this summary audit from August 2014 through March 2015 in accordance with generally accepted government auditing standards, except for planning and evidence requirements of the field work standards, because this audit summarized previously issued DoD OIG reports. To prepare this report, we reviewed DoD OIG reports issued from July 21, 1999, through December 19, 2014. We are providing this summary report to help the DoD acquisition and contracting communities understand the systemic contracting problems related to spare-parts inventory management. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

This report summarized 36 DoD OIG issued reports related to spare-parts inventory management. We reviewed the objectives, internal control weaknesses, criteria, findings, and open and closed recommendations. We did not validate the information or results stated in the reports because our audit objective was to summarize spare-parts inventory problems identified in previously issued DoD OIG reports.

DoD OIG issued 25 reports that included spare-parts inventory management problems and 11 reports that included both spare-parts inventory management and spare-parts pricing problems. Based on our review, we categorized the spare-parts inventory management problems into the following categories:

- Good News,
- Usage,
- Requirements,
- Metrics,
- Monitoring,
- Accountability, and
- Nonrecurring.

The reports included additional problems that did not deal with spare-parts inventory management. We did not include these additional problems in this report.

To accomplish the audit objective, we met with officials from the ASD(L&MR) to discuss the spare-parts inventory management problems identified across DoD and potential recommendations. We reviewed:

- DoD Manual 4140.01, Volume 3, “DoD Supply Chain Materiel Management Procedures: Materiel Sourcing,” February 10, 2014; Enclosure 3;
- DoD Manual 4140.01, Volume 6, “DoD Supply Chain Materiel Management Procedures: Material Returns, Retention, and Disposition,” February 10, 2014; Proposed Policy Change: “Government Inventory Management By Contractors;”
- In-Process Review of CIMIP;
- Supply Chain Executive Steering Committee CIMIP actions and metrics review;
- 2014 CIMIP Working Group, In-Process Review, and the meeting schedule from the Supply Chain Executive Steering Committee;
- CIMIP submission to Congress; and
- Performance Measures (metrics) used to “Monitor the Health of the DoD Supply Chain.”

## **Use of Computer-Processed Data**

We did not use computer-processed data to perform this audit.

## **Use of Technical Assistance**

We did not use technical assistance in conducting this audit.

## Appendix B

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### Prior Coverage

During the last 5 years, the DoD OIG issued 15 reports discussing spare-parts inventory management. Unrestricted DoD OIG reports can be accessed at <http://www.dodig.mil/pubs/index.cfm>.

#### **DoD OIG**

DODIG-2015-053, "Naval Supply Systems Command Needs to Improve Cost Effectiveness of Purchases for the Phalanx Close-In Weapon System," December 19, 2014

DODIG-2015-052, "Air Force Life Cycle Management of F119 Engine Spare Parts Needs Improvement," December 19, 2014

DODIG-2015-050, "Improvement Needed for Inventory Management Practices on the T700 Technical, Engineering, and Logistical Services and Supplies Contract," December 10, 2014

DODIG-2014-119, "Excess Inventory Acquired on Performance-Based Logistics Contracts to Sustain the Air Force's C-130J Aircraft," September 22, 2014

DODIG-2014-106, "Military Sealift Command Oversight of Excess Spare-Parts Inventory and Purchases for Sealift Program Roll-On/Roll-Off Ships Needs Improvement," September 9, 2014

DODIG-2014-064, "Improved Management Needed for F/A-18 Engine Performance-Based Logistics Contracts," April 25, 2014

DODIG-2013-104, "DOD Oversight Improvements Are Needed on the Contractor Accounting System for the Army's Cost-Reimbursable Stryker Logistics Support Contract," July 16, 2013

DODIG-2013-103, "Boeing Overstated Contract Requirements for the CH-47F Helicopter," July 16, 2013

DODIG-2013-073, "Use of Defense Logistics Agency Excess Parts for High Mobility Multipurpose Wheeled Vehicle Depot Repairs Will Reduce Costs," April 25, 2013

DODIG-2013-040, "Critical Information Needed to Determine the Cost and Availability of G222 Spare Parts," January 31, 2013

DODIG-2013-025, "Accountability Was Missing for Government Property Procured on the Army's Services Contract for Logistics Support of Stryker Vehicles," November 30, 2012

DODIG-2012-102, "Better Cost-Control Measures Needed on the Army's Cost-Reimbursable Services Contract for Logistics Support of Stryker Vehicles," June 18, 2012

DODIG-2012-004, "Changes Are Needed to the Army Contract With Sikorsky to Use Existing DoD Inventory and Control Costs at the Corpus Christi Army Depot," November 3, 2011

D-2011-061, "Excess Inventory and Contract Pricing Problems Jeopardize the Army Contract With Boeing to Support Corpus Christi Army Depot," May 3, 2011

D-2010-063, "Analysis of Air Force Secondary Power Logistics Solution Contract," May 21, 2010



## Appendix C

### (FOUO) Reported Spare-Parts Inventory Management Problems

(FOUO)				
Spare-Parts Inventory Reports				
Inventory Usage	Inventory Requirements	Inventory Metrics	Inventory Monitoring	Inventory Accountability
DODIG-2015-050: ACC and Corpus Christi Army Depot officials did not meet goals to reduce and reuse existing Government-owned inventory for the T700 contract because they did not require the contractor to use existing Corpus Christi Army Depot T700 spare-parts inventory located at DLA.	DODIG-2015-053: NAVSUP WSS contracting officers did not adequately manage the performance-based logistics contracts for the Phalanx Close-In Weapon System because they did not complete timely reviews to reconcile the contract's forecasted and actual demand and did not provide clear contract requirements related to DCMA's roles and responsibilities and NAVSUP WSS's quantity review process.	(FOUO)	(FOUO)	(FOUO)
(FOUO)	(FOUO)	(FOUO)	DODIG-2015-050: ACC and Corpus Christi Army Depot officials did not meet goals to reduce and reuse existing Government owned inventory for the T700 contract because they did not effectively monitor the reduction of inventory.	(FOUO)

**(FOUO) Reported Spare-Parts Inventory Management Problems (cont'd)**

<b>(FOUO)</b>				
<b>Spare-Parts Inventory Reports</b>				
<b>Inventory Usage</b>	<b>Inventory Requirements</b>	<b>Inventory Metrics</b>	<b>Inventory Monitoring</b>	<b>Inventory Accountability</b>
DODIG-2013-073: DLA Land and Maritime did not use its inventory of HMMWV repair parts before it purchased more from the contractor because DLA Land and Maritime officials did not review their inventory at key contract decision points to maximize use of their stock.	DODIG-2014-106: Military Sealift Command did not ensure that the contractor followed contract requirements when it purchased spares because it did not properly review purchase orders and included contradictory guidance in the contract.	DODIG-2012-102: PMO Stryker and ACC-Warren officials used a cost-reimbursable services contract to provide logistics support for Stryker vehicles that included a minimal set of metrics and did not effectively use other metrics because officials did not adequately define PBL contract requirements, establish the cost-reimbursable contract as one of the basic contract forms, and establish an effective means to measure operational costs.	DODIG-2014-106: Military Sealift Command did not effectively manage excess inventory worth \$3.4 million because it did not provide sufficient oversight to confirm that the contractor complied with contract provisions on excess Government property and inventory management.	DODIG-2013-103: Army and the contractor could not accurately value CH-47F Government-furnished property because the Army did not have a process to value these parts.
DODIG-2012-004: AMCOM officials did not effectively use DoD inventory before they procured the same items from a contractor because they did not have adequate procedures to use inventory that already existed.	DODIG-2013-103: AMCOM awarded the CH-47F contract without reviewing the proposed requirements for quantities of new and used parts because safety stock was not clearly identified as a contingency, was not reviewed in the technical analysis, and was not included as a separate line item in the contract.	D-2011-061: AMCOM officials overstated repair turnaround time improvements on a contract because AMCOM officials used inconsistent methods to calculate the repair turnaround time contract baseline.	DODIG-2013-040: G222 PMO officials did not determine the cost or availability of G222 spare parts to allow for the continued sustainability of the aircraft because the NTM-A/CSTC-A and the G222 PMO did not effectively manage the G222 program.	DODIG-2013-025: PMO Stryker officials did not properly account for \$892.3 million of Government property because they improperly treated the inventory as CAP while the contractor considered it Government property.

**(FOUO) Reported Spare-Parts Inventory Management Problems (cont'd)**

(FOUO)				
Spare-Parts Inventory Reports				
Inventory Usage	Inventory Requirements	Inventory Metrics	Inventory Monitoring	Inventory Accountability
D-2011-061: AMCOM officials did not effectively use \$339.7 million of DoD inventory before procuring the same parts from the contractor because they did not stop procurement from two sources, kept a second source of supply as a risk mitigation strategy, and DoD had inadequate policies and procedures for inventory use.	DODIG-2012-004: AMCOM officials transferred inventory to DLA Aviation as part of a 2005 BRAC supply and storage recommendation, but did not transfer requirements for the items that were being purchased from the contractor. Additionally, the contractor and either the Army or DLA procured and managed the same items because AMCOM did not develop an effective procurement and material management strategy to address the most cost-effective source of supply for consumable items and address an appropriate mark up on items procured from DLA.	D-2010-063: Government availability for the C-130 and F-15 depot-level reparables were not satisfactory because the contractor achieved availability rates of 60.3 and 75.9 percent in the first 2 contract years with the Air Force establishing a 90-percent goal for the C-130 and did not negotiate the F-15 contract. Additionally, the contract required only a 60-percent reliability improvement for 23.3 percent of the items, or significantly less than the Air Force business case goal of a 100-percent reliability improvement.	D-2006-103: NAVICP inconsistently applied procedures for contract management and inadequately documented oversight of PBL contracts related the H-60 Seahawk because of a lack of adequate contract management and oversight.	D-2003-064: Warner-Robbins ALC did not effectively manage or control materiel stored in local maintenance shops because its inventory records had an error rate of 22.4 percent, and materiel on the shop floor and floating spares storage area was not recorded on accountable records.

**(FOUO) Reported Spare-Parts Inventory Management Problems (cont'd)**

<b>(FOUO)</b>				
<b>Spare-Parts Inventory Reports</b>				
<b>Inventory Usage</b>	<b>Inventory Requirements</b>	<b>Inventory Metrics</b>	<b>Inventory Monitoring</b>	<b>Inventory Accountability</b>
D-2010-063: Air Force did not adequately address DLA inventory drawdown for some consumable items but agreed to drawdown \$51.1 million of inventory, enforce drawdown requirements, and assess whether the same method could be used for excess DLA assets related to the C-130 aircraft.	D-2011-061: AMCOM officials transferred consumable item inventory to DLA Aviation as part of a 2005 BRAC supply and storage recommendation but did not transfer requirements for the part that was purchased by a contractor. Additionally, the contractor, and either the Army or DLA, procured and managed the same items because DoD had inadequate policies and procedures for consolidating procurement and management responsibilities for consumable items and AMCOM and DLA did not develop an effective procurement and material management strategy that addressed the most cost-effective source of supply for consumable items.	D-2003-120: Navy did not require the contractor to establish a metric to reduce repair cycle times and achieve a minimum 10-percent reliability improvement.	D-2003-064: Warner-Robbins ALC did not effectively manage or control materiel stored in local maintenance shops because it had materiel stored in maintenance storerooms that exceeded requirements.	D-2003-033: The Naval Air Depot, North Island in San Diego, CA had significant levels of materiel stored in work center storerooms that were not recorded on accountable records because it did not comply with guidance regarding management of materiel and did not perform quarterly reviews.

**(FOUO) Reported Spare-Parts Inventory Management Problems (cont'd)**

(FOUO)				
Spare-Parts Inventory Reports				
Inventory Usage	Inventory Requirements	Inventory Metrics	Inventory Monitoring	Inventory Accountability
D-2002-112: DSCP established a contract with a supplier to improve availability of bench-stock material at the Air Force ALCs but required additional personnel to manage bench-stock material and would not use almost \$9 million of available inventory in Defense depots over the next 3 years.	D-2010-063: The contract was not consistent with the BRAC recommendations that transferred depot-level reparable procurement management and related support functions to DLA because the contract maintained those functions under Air Force control.		D-2003-057: NADEP-JAX maintained materiel that exceeded requirements because NAVAIR oversight contributed to the problem of accumulating excess materiel. Additionally, NADEP-JAX did not have adequate guidance or a defined management control program in place.	D-2002-091: The Corpus Christi Army Depot stored a large amount of materiel in work centers on the maintenance shop floor that was not recorded on any accountable records because it did not comply with Army guidance, did not perform physical inventories, and did not perform quarterly evaluations of materiel. Additionally, shop personnel were reluctant to turn in unused materiel when jobs were completed.
D-2001-171: DSCP did not place sufficient bench stock material on the IPV contract with a supplier to demonstrate a shift to commercial resources because the contractor could not economically obtain material and meet established cost goals, which resulted in the contractor primarily using the DLA supply system to obtain bench stock material to support the IPV program at Cherry Point.			D-2003-033: The Naval Air Depot, North Island in San Diego, CA stored materiel in its maintenance storerooms that exceeded requirements because it did not comply with guidance regarding management of materiel, did not perform quarterly reviews, and personnel were reluctant to turn in unused materiel.	D-2002-003: The Tobyhanna Army Depot did not effectively manage or control materiel stored in the ASRS because Tobyhanna did not perform annual physical inventories and reconciliation for quantities and values of materiel stored in the ASRS.

**(FOUO) Reported Spare-Parts Inventory Management Problems (cont'd)**

<b>(FOUO)</b>				
<b>Spare-Parts Inventory Reports</b>				
<b>Inventory Usage</b>	<b>Inventory Requirements</b>	<b>Inventory Metrics</b>	<b>Inventory Monitoring</b>	<b>Inventory Accountability</b>
D-2001-072: DSCP IPV contract did not demonstrate an effective shift to commercial resources for bench-stock material because it placed insufficient bench-stock material within reasonable cost goals, did not differentiate between units of issue, and did not institute a solution that effectively reduced the DLA supply system infrastructure and depot operations costs.			D-2002-149: DLA and Air Force Defense Inactive Item Program procedures were not followed and NSNs were not appropriately deleted from the supply system because DLA and Air Force management controls to ensure that NSNs were appropriately deleted from the DLA supply system were ineffective.	
D-2000-098: The DLA virtual prime vendor contract with a supplier was not the most economical and effective strategy to obtain parts and logistics support because there was no virtual inventory or the parts and depot stock to either satisfy DLA logistics response time goals or effectively reduce Government inventory. Additionally, Warner Robins used the virtual prime vendor contract to buy Air Force-managed reparable parts from wholesale inventory and continued to pay redundant management fees for logistics support.			D-2002-131: DLA's supply files contained NSNs for obsolete parts because existing guidance excluded some NSNs, and there was no management control to identify these NSNs for review.	



**(FOUO) Reported Spare-Parts Inventory Management Problems (cont'd)**

<b>(FOUO)</b>				
<b>Spare-Parts Inventory Reports</b>				
<b>Inventory Usage</b>	<b>Inventory Requirements</b>	<b>Inventory Metrics</b>	<b>Inventory Monitoring</b>	<b>Inventory Accountability</b>
			D-2002-091: The Corpus Christi Army Depot stored excess materiel that exceeded requirements because it did not comply with Army guidance, did not perform physical inventories, and did not perform quarterly evaluations of materiel. Additionally, shop personnel were reluctant to turn in unused materiel when jobs were completed.	
			D-2002-060: DLA did not review terminal NSNs to determine whether they were obsolete because DLA guidance excluded terminal NSNs, and there was no management control to identify terminal NSNs for review.	

**(FOUO) Reported Spare-Parts Inventory Management Problems (cont'd)**

<b>(FOUO)</b>				
<b>Spare-Parts Inventory Reports</b>				
<b>Inventory Usage</b>	<b>Inventory Requirements</b>	<b>Inventory Metrics</b>	<b>Inventory Monitoring</b>	<b>Inventory Accountability</b>
			D-2002-003: The Tobyhanna Army Depot maintained materiel that exceeded requirements because it did not comply with Army guidance regarding stock levels of materiel, did not evaluate materiel to determine whether it was required, did not perform quarterly reviews of stock levels, timing of purchased and stored materiel, and oversight and policy by CECOM.	
<b>(FOUO)</b>				

**LEGEND**

ACC	Army Contracting Command	NAVAIR	Naval Air Systems Command
ALC	Air Logistics Center	NAVICP	Naval Inventory Control Point
ASRS	Automated Storage and Retrieval System	NAVSUP WSS	Naval Supply Systems Command Weapon Systems Support
CECOM	Communications-Electronics Command	NSN	National Stock Number
DSCP	Defense Supply Center Philadelphia	NTM-A/CSTC-A	NATO Training Mission–Afghanistan/Combined Security Transition Command–Afghanistan
HMMWV	High Mobility Multipurpose Wheeled Vehicle	OSD	Office of the Secretary of Defense
IPV	Industrial Prime Vendor		
NADEP-JAX	Naval Air Depot, Jacksonville		

## Appendix D

### Spare-Parts Inventory Reports

Since 1999, the DoD OIG has issued 36 reports related to spare-parts inventory. In three reports, DLA effectively managed its spare-parts inventories. However, in 33 of the 36 reports, DoD did not effectively manage its spare-parts inventories. Table D contains the 33 reports and the categories of spare-parts inventory problems identified in each report.

*Table D. Report Categories of Spare-Parts Inventory Problems*

Report Number	Inventory Usage	Inventory Requirements	Inventory Metrics	Inventory Monitoring	Inventory Accountability	Nonrecurring Problems
DODIG-2015-053		X				
DODIG-2015-052			X	X	X	X
DODIG-2015-050	X			X		
DODIG-2014-119		X	X			X
DODIG-2014-106		X		X		
DODIG-2014-064	X				X	
DODIG-2013-104						X
DODIG-2013-103		X			X	
DODIG-2013-073	X					
DODIG-2013-040				X		
DODIG-2013-025					X	
DODIG-2012-102			X			
DODIG-2012-004	X	X				X
D-2011-061	X	X	X			X
D-2010-063	X	X	X			X
D-2006-105						X

Table D. Report Categories of Spare-Parts Inventory Problems (cont'd)


Report Number	Inventory Usage	Inventory Requirements	Inventory Metrics	Inventory Monitoring	Inventory Accountability	Nonrecurring Problems
D-2006-103				X		
D-2004-110						X
D-2004-064						X
D-2003-120			X			X
D-2003-064				X	X	
D-2003-057				X		
D-2003-033				X	X	
D-2002-149				X		
D-2002-131				X		
D-2002-112	X					
D-2002-091				X	X	
D-2002-060				X		
D-2002-003				X	X	
D-2001-171	X					
D-2001-072	X					
D-2000-180						X
D-2000-098	X					
Total	10	7	6	13	8	11

## Appendix E

### ~~(FOUO)~~ Nonrecurring Problems With Spare-Parts Inventory Reports

~~(FOUO)~~ DoD OIG identified in 11 of the 33 reports nonrecurring problems with the management of spare-parts inventory. These nonrecurring problems were wide ranging from the acceptance of spare-parts to the success of PBL implementation strategies, and only singular instances of these problems were found. Table E includes the specific nonrecurring spare-parts inventory problems.

~~(FOUO)~~ Table E. Reports With Nonrecurring Spare-Parts Inventory Problems

<del>(FOUO)</del>		
Report Number	Report Date	Nonrecurring Inventory Problems
DODIG-2015-052	12/19/2014	Air Force LCMC did not formally accept the spare parts from the contractor because Air Force LCMC officials did not verify that DCMA accepted the spare parts on behalf of the Air Force.
<del>(FOUO)</del> DODIG-2014-119	9/22/2014	
DODIG-2013-104	7/16/2013	PMO Stryker and DCMA-Detroit did not verify that the accounting system was adequate because they did not establish an adequate system of internal controls to review the accounting system and verify that the billing system for vouchers reconciled to the appropriate cost accounts.
DODIG-2012-004	11/3/2011	AMCOM officials added a material cost reduction clause into the contract, which was not effective in reducing repair costs because AMCOM officials used unreliable data, failed to consider depot labor costs, and omitted repair programs that experienced material cost increases.
D-2011-061	5/3/2011	AMCOM officials did not effectively use DoD inventory because the Army, DLA, and the contractor all used different systems to manage inventory and requirements.
D-2010-063	5/21/2010	Bundling guidance in the acquisition regulations was not consistent with the legislation regarding the definition of substantial bundling.
D-2006-105	8/9/2006	Air Force did not fully implement PBL initiatives for the Joint STARS weapon system because it did not reassess the support strategy and incorporate the OUSD(AT&L) guidance for implementation PBL.

~~(FOUO)~~ Table E. Reports With Nonrecurring Spare-Parts Inventory Problems (cont'd)

<del>(FOUO)</del>		
Report Number	Report Date	Nonrecurring Inventory Problems
<b>D-2004-110</b>	8/23/2004	The PBL strategy implementation by the Services (with the exception of the Navy) was inconsistent, processes were inadequate and uncoordinated, and results were undeterminable because DoD had not issued adequate PBL implementation guidance or sufficient oversight.
<b>D-2004-064</b>	3/29/2004	Air Force did not adequately consider best business practices, prudent acquisition procedures, compliance with statutory provisions, and system engineering requirements when purchasing the KC-767A Tanker Program.
<b>D-2003-120</b>	8/8/2003	The Navy business case used to justify the F/A-18E/F Integrated Readiness Support Teaming contract overstated the cost to DoD because it used unreliable and outdated data to calculate costs, cost recovery rates for obsolescence and net loss were not justified, cost avoidances were not fully supported or justified, and used a nontraditional method to calculate costs. Additionally, the Navy did not require the contractor to reduce and effectively monitor infrastructure support costs and accurately charge fleet customers.
<b>D-2000-180</b>	8/31/2000	Naval Inventory Control Point Philadelphia based its decision to award a contract for total logistics support on a business case analysis that used questionable data and judgments because the business case analysis method used to support the contract award was inadequate.
<del>(FOUO)</del>		



## Appendix F

### ~~(FOUO)~~ Excess Spare-Parts Inventories and Undervalued Financial Statements

~~(FOUO)~~ DoD maintained excess inventory valued at \$1 billion and undervalued the spare-parts inventory in its annual financial statements by more than \$1.65 billion. Table F includes the report values with excess spare-parts inventories and undervalued financial statements.

~~(FOUO)~~ Table F. Reports Values With Excess Spare-Parts Inventories and Undervalued Financial Statements

<del>(FOUO)</del>		
Report Number	Excess Inventory (in millions)	Inventory Not Reported on Financial Statements (in millions)
<del>(FOUO)</del> DODIG-2015-052	\$██████	\$██████
DODIG-2014-119	\$39.20	0
DODIG-2014-106	\$3.40	0
<del>(FOUO)</del> DODIG-2014-064	█	\$██████
<del>(FOUO)</del> DODIG-2013-103	█	\$██████
DODIG-2013-073	\$9.70	0
DODIG-2013-025	0	\$892.30
DODIG-2012-102	\$335.90	0
DODIG-2012-004	\$47.50	0
D-2011-061	\$242.80	0
D-2010-063	\$70.10	0
D-2003-057	\$20.00	0
D-2002-112	\$9.00	0
Total	\$1,000.00	\$1,652.50
<del>(FOUO)</del>		

## Appendix G

### Recommendations Table

Since 1999, DoD did not effectively manage its spare-parts inventories. DoD OIG made 237 recommendations in the 36 reports related to spare-parts inventory. See Table G for a summary and status of recommendations made by DoD OIG.

*Table G. Summary and Status of Spare-Part Inventory Recommendations*

Report Number	Number of Recommendations	Closed Recommendations	Open Recommendations	Category(s) of Recommendations
<b>DODIG-2015-053</b>	2	0	2	Inventory Requirements
<b>DODIG-2015-052</b>	7	0	7	Inventory Metrics, Inventory Monitoring, Inventory Accountability, Nonrecurring Problems
<b>DODIG-2015-050</b>	3	0	3	Inventory Usage, Inventory Monitoring
<b>DODIG-2014-119</b>	10	0	10	Inventory Requirements, Inventory Metrics, Nonrecurring Problems
<b>DODIG-2014-106</b>	7	0	7	Inventory Requirements, Inventory Monitoring
<b>DODIG-2014-064</b>	2	0	2	Inventory Usage, Inventory Accountability
<b>DODIG-2013-104</b>	5	5	0	Nonrecurring Problems
<b>DODIG-2013-103</b>	4	3	1	Inventory Requirements, Inventory Accountability
<b>DODIG-2013-073</b>	4	4	0	Inventory Usage
<b>DODIG-2013-040</b>	3	3	0	Inventory Monitoring
<b>DODIG-2013-025</b>	13	13	0	Inventory Accountability
<b>DODIG-2012-102</b>	11	9	2	Inventory Metrics

## Recommendations Table (cont'd)

Report Number	Number of Recommendations	Closed Recommendations	Open Recommendations	Category(s) of Recommendations
<b>DODIG-2012-004</b>	8	3	5	Inventory Usage, Inventory Requirements, Nonrecurring Problems
<b>D-2011-061</b>	13	13	0	Inventory Usage, Inventory Requirements, Inventory Metrics, Nonrecurring Problems
<b>D-2010-063</b>	14	14	0	Inventory Usage, Inventory Requirements, Inventory Metrics, Nonrecurring Problems
<b>D-2006-105</b>	7	7	0	Nonrecurring Problems
<b>D-2006-103</b>	5	5	0	Inventory Monitoring
<b>D-2004-110</b>	10	10	0	Nonrecurring Problems
<b>D-2004-064</b>	8	8	0	Nonrecurring Problems
<b>D-2003-120</b>	6	6	0	Inventory Metrics, Nonrecurring Problems
<b>D-2003-064</b>	7	7	0	Inventory Monitoring, Inventory Accountability
<b>D-2003-057</b>	6	6	0	Inventory Monitoring
<b>D-2003-033</b>	6	6	0	Inventory Monitoring, Inventory Accountability

## Recommendations Table (cont'd)

Report Number	Number of Recommendations	Closed Recommendations	Open Recommendations	Category(s) of Recommendations
D-2002-149	6	6	0	Inventory Monitoring
D-2002-131	3	3	0	Inventory Monitoring
D-2002-112	4	4	0	Inventory Usage
D-2002-091	12	12	0	Inventory Monitoring, Inventory Accountability
D-2002-060	2	2	0	Inventory Monitoring
D-2002-059	0	0	0	Good News Finding
D-2002-003	17	17	0	Inventory Monitoring, Inventory Accountability
D-2001-171	4	4	0	Inventory Usage
D-2001-072	10	10	0	Inventory Usage
D-2000-192	0	0	0	Good News Finding
D-2000-180	14	14	0	Nonrecurring Problems
D-2000-098	3	3	0	Inventory Usage
99-217	1	1	0	Good News Finding
<b>Totals</b>	<b>237</b>	<b>198</b>	<b>39</b>	

## Management Comments

### Assistant Secretary of Defense for Logistics and Materiel Readiness



LOGISTICS AND  
MATERIEL READINESS

ASSISTANT SECRETARY OF DEFENSE  
3500 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3500

MAR 27 2015

MEMORANDUM FOR PROGRAM DIRECTOR FOR ACQUISITION, PARTS, AND  
INVENTORY, OFFICE OF THE INSPECTOR GENERAL

THROUGH: DIRECTOR, ACQUISITION RESOURCES AND ANALYSIS *7/8 3/27/15*

SUBJECT: Response to DoDIG Draft Report on Summary of DoD Office of Inspector General  
Spare-Parts Inventory Audits: Additional Guidance is Needed (Project No. D2014-  
D000AT-0215.000)

As requested, I am providing a response to the recommendation contained in the subject report.

**Recommendation:** We recommend that the Assistant Secretary of Defense for Logistics and Materiel Readiness finalize and issue policy to effectively manage and account for Government-owned spare-parts inventories controlled by contractors.

**Response: Concur** – In response to the recommendation, the Assistant Secretary of Defense for Logistics and Materiel Readiness will publish Change 1 to DoD Manual 4140.01, Volume 6 by 3rd Quarter FY2015 to require contractors managing Government inventory under Commercial Sustainment type contracts to report, on a biannual basis, the following to the buying DoD Component: inventory requirements that the contractor establishes to achieve the performance required by the contract; existing Government inventory that the contractor manages against those requirements; and existing Government inventory that the contractor holds in excess of those requirements. In addition, Change 1 to DoD Manual 4140.01, Volume 6 will require contractors managing Government inventory under Commercial Sustainment type contracts to submit a written plan for the buying DoD Component's approval that proposes actions for reuse or disposal of Government inventory that the contractor identifies as excess to government requirements.

Please contact [REDACTED]  
[REDACTED] if additional information is required.

David J. Berteau

## Acronyms and Abbreviations

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<b>AMCOM</b>	Army Aviation and Missile Life Cycle Management Command
<b>ASD(L&amp;MR)</b>	Assistant Secretary of Defense for Logistics and Material Readiness
<b>BRAC</b>	Base Realignment and Closure
<b>CAP</b>	Contractor Acquired Property
<b>CIMIP</b>	Comprehensive Inventory Management Improvement Plan
<b>DCMA</b>	Defense Contract Management Agency
<b>DLA</b>	Defense Logistics Agency
<b>LCMC</b>	Life Cycle Management Center
<b>OUSD(AT&amp;L)</b>	Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics
<b>PBL</b>	Performance-Based Logistics
<b>PMO</b>	Project Management Office



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