

# INSPECTOR GENERAL

U.S. Department of Defense

#### JUNE 11, 2015



**Opportunities Exist to Improve the Inventory Management for Defense Logistics Agency Aviation C-130 Spare Parts** 

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# **Results in Brief**

*Opportunities Exist to Improve the Inventory Management for Defense Logistics Agency Aviation C-130 Spare Parts* 

#### June 11, 2015

# **Objective**

Our objective was to determine whether the Defense Logistics Agency (DLA) made cost effective materiel purchases to support the C-130 Hercules aircraft through multiple contracts.

## Finding

DLA Aviation did not make cost effective materiel purchases to support the C-130 aircraft. Specifically, DLA Aviation purchased inventory that Air Force customers forecasted but the Air Force did not order as expected. This occurred because DLA Aviation did not adequately assess whether supply chain disruptions, such as delivery time delays or insufficient part quality, would affect its ability to receive all the parts that the Air Force needed to perform its repairs. Air Force customers did not order parts until all the necessary parts were available for the repairs.

DLA Aviation also missed opportunities to cancel or reduce purchases more than the target quantity for replenishing a part's stock level through new purchases. The DLA Aviation procurement review processes for orders still awaiting delivery allowed it to purchase quantities of parts that exceeded the inventory target quantities and relied on monthly inventory data that understated on-order quantities when conducting these reviews. In December 2014, DLA initiated a computer system change so the monthly inventory data included the previously missing on-order quantities.

#### Finding (cont'd)

As a result, DLA Aviation accumulated inventory unique to the C-130 aircraft that exceeded actual customer orders. Our 68-part nonstatistical sample had inventory valued at \$16 million, yet DLA customers only ordered \$1.36 million annually from July 2012 through June 2014. DLA Aviation accumulated \$6.6 million of C-130 inventory that exceeded average annual customer orders and purchased \$2 million in inventory not needed to meet current inventory target quantities.

If inventory management is not improved, DLA Aviation will continue to acquire future inventory that exceeds customers' actual orders. Additionally, DLA Aviation will use funds to manage and store this inventory, resulting in increased materiel prices to its customers.

#### Recommendations

We recommend the Director, DLA, implement controls within the customer collaboration process that assess the supply chain risks before incorporating its customers' demand forecasts and making new materiel purchases; and

We recommend the Commander, DLA Aviation, evaluate and improve DLA Aviation procedures for reviewing purchase requests and orders of parts that are more than inventory target quantities.

### Management Comments and Our Response

Comments from DLA addressed all specifics of the recommendations, and no further comments are required. Please see the Recommendations Table on the back of this page.

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### **Recommendations Table**

Management	Recommendations Requiring Comment	No Additional Comments Required
Director, Defense Logistics Agency		1
Commander, Defense Logistics Agency Aviation		2



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

June 11, 2015

#### MEMORANDUM FOR DIRECTOR, DEFENSE LOGISTICS AGENCY

#### SUBJECT: Opportunities Exist to Improve the Inventory Management for Defense Logistics Agency Aviation C-130 Spare Parts (Report No. DODIG-2015-132)

We are providing this report for your information and use. The Defense Logistics Agency Aviation purchased inventory that Air Force customers forecasted but the Air Force did not order as expected and missed opportunities to cancel or reduce purchases that exceeded the target quantity for replenishing stock levels through new purchases. Specifically, the Defense Logistics Agency Aviation accumulated \$6.6 million of C-130 inventory that exceeded average annual customer orders. Additionally, the Defense Logistics Agency Aviation purchased \$2 million in inventory not needed to meet current inventory target quantities. We conducted this audit in accordance with generally accepted government auditing standards.

We considered management comments on a draft of this report when preparing the final report. Comments from the Director, Defense Logistics Agency Logistics Operations, responding for the Director, Defense Logistics Agency, conformed to the requirements of DoD Instruction 7650.03; 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. Wicecanved

<sup>/</sup> Jacqueline L. Wicecarver Assistant Inspector General Acquisition, Parts, and Inventory

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# Introduction

## **Objective**

The audit objective was to determine whether the Defense Logistics Agency (DLA) made cost effective materiel purchases to support the C-130 Hercules aircraft through multiple contracts. See Appendix A for a discussion of the scope and methodology and Appendix B for prior audit coverage related to the objective.

This is the first report in a series on the C-130 Hercules aircraft and addresses whether DLA Aviation cost effectively managed the C-130-unique inventory.<sup>1</sup> The second report will address whether DLA Aviation purchased C-130 spare parts at fair and reasonable prices through multiple contracts.

## Background

According to the Air Force and DoD Comptroller, the C-130 Hercules aircraft is a medium-sized, tactical transport aircraft that is primarily designed to transport a variety of oversized cargo in and out of rough terrain and hostile environments through air landing, extraction, and logistical support airdrops. The wide variety of cargo transported includes utility helicopters, six-wheeled armored vehicles, equipment on pallets, container delivery systems, and personnel.

The C-130J, first delivered to the Air Force in 1999, is the latest of six C-130 aircraft models in the fleet of medium-sized tactical airlift. The U.S. Air Force, Navy, and Marines all operate the C-130 Hercules aircraft.



<sup>&</sup>lt;sup>1</sup> As of June 2014, DLA had over 72,000 parts that were associated with the C-130 aircraft, which included parts unique to only the C-130 aircraft and parts used on both the C-130 and other type of aircraft. We focused our audit on parts that were unique to the C-130 aircraft.

#### **Defense Logistics Agency**

According to DLA's website, DLA<sup>2</sup> is the largest DoD combat support agency that provides worldwide logistics support to the Military Services in both peacetime and wartime. DLA provides nearly all of the consumable items the Services need, including weapon system parts. DLA Aviation, headquartered in Richmond, Virginia, is the U.S. military's integrated materiel manager for more than 1.1 million repair parts and operating supply items in support of all fixed- and rotor-wing aircraft, including spares for engines on fighters, bombers, transports, and helicopters, all airframe and landing gear parts, flight safety equipment, and propeller systems. As of June 2014, DLA managed 25,774 C-130 parts, valued at \$263.5 million.<sup>3</sup>

#### **Determining Amounts of Inventory Needed**

DoD inventory management guidance<sup>4</sup> requires DoD Components to control the amount of secondary item<sup>5</sup> inventories in order to minimize the total DoD supply chain costs while meeting peacetime, war, and other operational requirements. DLA determines its inventory requirements by considering the amount of inventory it needs to have in stock (on hand) or to purchase (on order).

To meet current inventory requirements, DLA purchases inventory up to the requirements objective.<sup>6</sup> The requirement objective establishes the target quantity for replenishing a part's stock level through new purchases. Generally, if DLA had enough quantities to meet the requirements objective, then it would not need to purchase more parts.

DoD inventory management guidance<sup>7</sup> requires DoD components to consider historical data when developing inventory requirements for a part. In accordance with that guidance, DLA considers historical data and future customer needs along with other variables to create a plan of action for obtaining the inventory. DLA uses different methods to determine future customer needs depending on the frequency and variability of prior customer demands. For parts that have adequate historical customer demand to estimate future requirements, DLA uses statistical

<sup>&</sup>lt;sup>2</sup> DLA refers to the agency as a whole.

<sup>&</sup>lt;sup>3</sup> Inventory data was obtained from the DLA Office of Resource and Research Analysis (DORRA).

<sup>&</sup>lt;sup>4</sup> DoDM 4140.01, "DoD Supply Chain Materiel Management," Volume 1, "DoD Supply Chain Materiel Management Procedures: Operational Requirements," February 10, 2014.

<sup>&</sup>lt;sup>5</sup> A principal item is an important supply item that is needed to support operational readiness and requires individual item management throughout the supply system. These items do not include completed aircraft, ships, or other combat vehicles. A secondary item is a supply item that is not defined as a principal item and includes reparable components, subsystems, and assemblies, consumable repair parts, bulk items and materiel subsistence, and expendable end items, including clothing and other personal gear.

<sup>&</sup>lt;sup>6</sup> The requirements objective is the maximum authorized quantity of stock for an item for wholesale stock replenishment.

<sup>&</sup>lt;sup>7</sup> DoDM 4140.01, Volume 2, "DoD Supply Chain Materiel Management Procedures: Demand and Supply Planning," February 10, 2014.

models and also considers input on future forecasted demands provided by its customers. For parts with infrequent or highly variable demand, DLA uses models that set minimum reordering levels and maximum purchase levels.

DLA categorizes its spare-parts inventories into several specific groups to determine whether the inventory is being held to meet requirements or if the inventory is potentially excess. According to DoD inventory management guidance,<sup>8</sup> the quantity of an item an Agency is authorized to have on-hand for peacetime and wartime requirements to sustain U.S. forces is referred to as the approved acquisition objective.

The approved acquisition objective includes the materiel needed to meet the requirements objective and materiel needed to meet an additional 2 years of estimated future demand.<sup>9</sup> Materiel that exceeds the approved acquisition objective is categorized as either long supply or potential excess inventory.

Long supply inventory includes materiel that is more economical to keep than dispose of because it is likely needed in the future. This inventory also includes materiel retained to support specific contingencies. Potential excess inventory, also referred to as potential reutilization stock, is inventory that is under review for disposal.

#### *Customer Collaboration Process Between Defense Logistics Agency and Air Force Customers*

DoD inventory management guidance<sup>10</sup> states that to improve the accuracy of demand forecasts, materiel managers and supply providers will collaborate with their customers to establish a future demand. The DLA Logistics Operations (J3) oversees DLA's supply chains to include DLA Aviation's supply chain and ensures that DLA Aviation gathers and interprets its customers' requirements. The DLA Logistics Operations is the principal planner for DLA business operations and provides materiel process management policy and guidance.

DLA uses the customer collaboration process when customers request to formally collaborate with DLA on a part's demand forecast. In February 2007, DLA signed a customer collaboration agreement with the Air Force,<sup>11</sup> which outlined the responsibilities for each party involved in the process. The customer collaboration

<sup>&</sup>lt;sup>8</sup> DoDM 4140.01, Volume 6, "DoD Supply Chain Materiel Management Procedures: Materiel Returns, Retention, and Disposition," February 10, 2014.

<sup>&</sup>lt;sup>9</sup> The approved acquisition objective also includes inventory held as war-reserve materiel and inventory held to minimize the impacts of materiel shortages such as loss of manufacturers.

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

<sup>&</sup>lt;sup>11</sup> "Air Force and DLA Performance Based Agreement Annex 3 Joint Business Systems Modernization Customer Collaboration," February 13, 2007.

agreement with the Air Force was developed to improve DLA support to the warfighter. According to the agreement, the Air Force has the flexibility to adjust estimated quantities and need by dates each month so DLA can accurately forecast demand for a part instead of relying on a forecast based solely on historical demand.

Under the customer collaboration process, DLA receives future quantity requirements from the Air Force for specific parts through a demand data exchange (DDE) planning process. DLA then enters the demand data into a web-based DLA tool that the Air Force and DLA use to review, update, and validate monthly demand forecasts submitted through the DDE. The DLA tool applies business rules that compare the new demand forecast to the previous demand forecast for each part.

During the demand forecasts' comparison, the DLA tool identifies if a part had a demand forecast that was substantially higher or lower than the previous demand forecast. DLA Aviation and the Air Force then review the parts with variances to determine if the new demand forecast was based on a valid requirement. After the demand forecast has been validated, DLA Aviation incorporates the new customer demand forecast for each part. Figure 2 shows a diagram of the DLA customer collaboration process.





Source: DoD OIG

#### Defense Logistics Agency Management Process Seeks Minimizing Excess On-Order Inventory

DoD inventory management guidance<sup>12</sup> requires DoD Components to establish a management process for minimizing excess on-order inventory when it is cost effective. Excess on-order inventory occurs when the requirement for a part decreases after the contract was awarded, but prior to the part being received.

DLA has a process to identify and limit the purchase of parts that are not needed to meet the requirements. Through this process, DLA personnel identify purchase requests and purchase orders<sup>13</sup> that may no longer be needed to meet the estimated requirements. Subsequently, DLA personnel evaluate each purchase request or order in more detail to determine whether the quantities still need to be purchased or whether the purchase order or request needs to be modified or cancelled. DLA officials noted that it is more challenging to modify or cancel purchase orders because of contractual obligations, which include contract termination costs.

To track progress in reducing on-order excess inventory, DoD tracks the percentage of on-order dollars that are above the approved acquisition objective. DLA also tracks and reports to the Deputy Assistant Secretary of Defense for Supply Chain Integration the value of its on-order inventory that exceeds the approved acquisition objective. In FY 2010, DoD established goals to reduce its percentage of on-order dollars above the approved acquisition objective from 8.5 percent in FY 2009 to 6 percent in FY 2014 and 4 percent in FY 2016.<sup>14</sup>

#### **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 internal control weaknesses for DLA and DLA Aviation. Specifically, DLA did not have adequate controls within its customer collaboration process prior to accepting customer demand forecasts for groups of parts. Additionally, DLA Aviation relied on incomplete monthly inventory data when it conducted reviews to identify purchases for excessive quantities. We will provide a copy of the report to the senior official responsible for internal controls in DLA.

<sup>&</sup>lt;sup>12</sup> DoDM 4140.01, Volume 3, "DoD Supply Chain Materiel Management Procedures: Materiel Sourcing," February 10, 2014.

<sup>&</sup>lt;sup>13</sup> A purchase request is a requisition for an item not yet placed on a contract. A purchase order is a contractual obligation for DLA to buy a part; however, that part has not been delivered to DLA.

<sup>&</sup>lt;sup>14</sup> The DoD goals to reduce its percentage of on-order dollars were established in the "Comprehensive Inventory Management Plan," October 2010.

# **Finding**

## **Defense Logistics Agency Aviation Made Inefficient** C-130 Materiel Purchases

DLA Aviation did not make cost effective materiel purchases to support the C-130 aircraft. Specifically, DLA Aviation purchased inventory that Air Force customers forecasted but the Air Force did not order as expected. This occurred because DLA Aviation did not adequately assess whether supply chain disruptions, such as delivery time delays or insufficient part quality, would affect its ability to receive all the parts that the Air Force needed to perform its repairs. Air Force customers did not order parts until all the necessary parts were available for the repairs.

DLA Aviation also missed opportunities to cancel or reduce purchases more than the target quantity for replenishing a part's stock level through new purchases. The DLA Aviation procurement review processes for orders still awaiting delivery allowed it to purchase quantities of parts that exceeded the inventory target quantities and relied on monthly inventory data that understated on-order quantities when conducting these reviews.

As a result, DLA Aviation accumulated C-130 inventory that exceeded actual customer orders. Our 68-part nonstatistical sample had inventory valued at \$16 million, yet DLA customers only ordered \$1.36 million annually from July 2012 through June 2014. DLA Aviation accumulated \$6.6 million of C-130 inventory that exceeded average annual customer orders and purchased \$2 million in inventory not needed to meet current inventory target quantities.

If inventory management is not improved, DLA Aviation will continue to acquire future inventory that exceeds customers' actual orders. Additionally, DLA will use funds to manage and store the potentially excessive inventory, resulting in increased materiel prices to DLA's customers.

## Parts Purchased to Support Requirements Disproportionate to Historical Orders

DLA Aviation established inventory requirement objectives for spare parts that exceeded historical customer orders. According to DoD Manual (DoDM) 4140.01, inventory requirement objectives are the target quantity for replenishing a part's stock level through new purchases. We reviewed a nonstatistical sample of 68 parts, valued at \$16 million. From that sample, we identified 26 of the

Finding

68 sample parts had inventory requirement objectives greater than 10 times the average annual customer orders made from July 2012 through June 2014. Table 1 shows that DLA Aviation requirement objectives for the 26 parts exceeded the average annual customer orders by 8,104.5 units, valued at \$5.8 million.

National Stock Number (NSN)	Inventory Requirement Objectives	Average Annual Customer Orders	Quantity Difference	Dollar Value Difference <sup>*</sup>
1560-01-250-9771	166.4	0.5	165.9	\$ 805,968
1560-01-201-6766	68.3	0.5	67.8	33,862
3040-00-724-0273	301.4	2.5	298.9	47,115
5306-01-016-1091	264.2	3.0	261.2	16,636
1620-00-306-3461	249.5	3.5	246.0	36,964
1560-01-453-9380	180.0	5.5	174.5	30,954
1560-01-453-6959	1,778.3	65.0	1,713.3	93,976
1560-01-453-9395	329.9	13.0	316.9	307,064
1560-00-573-4181	18.0	1.0	17.0	14,453
1560-01-036-8336	9.0	0.5	8.5	25,485
4720-01-476-5188	36.0	2.0	34.0	57,398
1560-01-034-4360	244.6	14.5	230.1	60,900
1560-01-137-2649	504.2	30.0	474.2	212,152
1560-01-453-9165	347.0	22.5	324.5	158,060
1560-01-453-9424	1,523.7	99.0	1,424.7	512,535
1560-00-587-1840	14.0	1.0	13.0	26,866
1560-01-453-9422	133.4	10.0	123.4	46,207
4010-01-396-2210	72.0	5.5	66.5	143,165
1650-00-022-8606	45.2	3.5	41.7	154,639
1560-01-201-6777	346.5	28.0	318.5	1,166,500
1560-01-455-0910	422.2	34.5	387.7	763,875
1560-00-587-1839	18.0	1.5	16.5	72,449
5365-01-573-4703	350.8	29.5	321.3	70,847
1560-01-453-9420	645.2	55.0	590.2	714,967
1560-01-572-9651	362.4	34.5	327.9	76,100
1560-01-453-9429	155.1	15.0	140.1	151,426
Total	8,585.5	481.0	8,104.5	\$5,800,562

Table 1. DLA Aviation C-130 Inventory Requirement Objectives Compared to Average Annual Customer Orders (as of June 2014)

Note: Totals do not equal the actual sum because of rounding.

\* Calculated by multiplying the quantity difference by DLA moving average price as of June 30, 2014.

DLA used several methods to establish the inventory requirement objectives and to determine the best quantity of parts to replenish back to those levels. For 6 of the 26 parts, DLA used two new methods to establish the inventory requirements. See the Other Matters of Interest section of the finding in this report for a discussion on these methods.

For the remaining 20 parts, DLA Aviation used a customer collaboration process to establish its inventory requirement objectives. Several factors contribute to calculating a part's requirement objective. The demand forecast<sup>15</sup> is the primary factor considered for parts that are collaborated between DLA and its customer. Increased demand forecasts from the customer could surge DLA inventory requirement objectives, which will result in additional quantity of parts to be purchased.

#### Unavailable Parts Negatively Impacted the Accuracy of the Demand Forecasts Under the Customer Collaboration Process

DLA Aviation purchased inventory that Air Force customers forecasted but the Air Force did not order as expected. DLA Aviation relied on the Air Force demand forecasts to establish inventory requirement objectives, but was unable to mitigate the impact when all the parts that the Air Force needed to perform its repairs were not available. DLA Aviation demand forecasts for 16 of the 20 customer-collaborated parts in our sample were based on a C-130 wing-flap repair schedule. For the Air Force to conduct the wing-flap repair, a few hundred parts needed to be available at the same time. Required parts that were not available for the C-130 wing-flap repair schedule negatively impacted the Air Force orders for other parts from DLA.

The remaining four customer-collaborated parts were related to other repair programs, and we found similar concerns with required parts that were not available. Table 2 shows that the Air Force demand forecasts for the 16 parts related to the C-130 wing-flap repair schedule exceeded DLA actual orders by 2,996 units, valued at \$2.5 million from August 2013 through August 2014.

<sup>&</sup>lt;sup>15</sup> Demand forecasting is the prediction of future customer demands performed through the use of quantitative models and customer collaboration. For customer collaboration, the demand forecast is based on future anticipated needs that are provided by the customer.

NSN	Air Force Demand Forecast	Actual DLA Customer Orders	Quantity Difference	Dollar Value Difference <sup>*</sup>
1560-01-453-9424	655	0	655	\$235,643
1560-01-453-6959	581	0	581	31,868
1560-01-453-9420	325	0	325	393,679
1560-01-453-9395	156	0	156	151,161
1560-01-250-9771	74	0	74	359,430
1560-01-453-9422	74	0	74	27,714
1560-01-201-6766	39	0	39	19,466
1560-01-453-9165	169	2	167	81,341
1560-01-453-9380	74	3	71	12,591
1560-01-455-0910	325	25	300	591,027
1560-01-453-9429	78	13	65	70,238
1560-01-572-9651	150	32	118	27,387
1560-01-034-4360	128	40	88	23,291
1560-01-201-6777	150	49	101	369,871
1560-01-137-2649	174	63	111	49,663
5365-01-573-4703	113	42	71	15,654
Total	3,265	269	2,996	\$2,460,024

Table 2. Air Force Demand Forecast Accuracy (August 2013 through August 2014)

Note: Totals do not equal the actual sum because of rounding.

\* Value calculated by multiplying the quantity difference by DLA's moving average price as of June 30, 2014.

According to an Air Force item manager, DLA Aviation could not obtain parts required to repair the C-130 wing flap because vendors did not produce parts that met the necessary design specifications. Unavailable parts caused the Air Force to delay the C-130 wing-flap repair and reassign maintenance personnel. When DLA Aviation obtained all the required parts, the Air Force did not immediately order the parts because they had reassigned the maintenance personnel who would perform the repairs. As a result, there were substantial discrepancies between the Air Force's forecasted demand and the actual DLA customer's parts order.

#### Potential Supply Chain Disruptions Not Identified in the Customer Collaboration Process

DLA did not have adequate controls within the customer collaboration process to assess the supply chain risks to ensure all parts would be available prior to accepting its customer demand forecasts. According to DoD inventory management guidance,<sup>16</sup> DoD materiel management will operate as a high-performing and agile supply chain responsive to customer requirements during peacetime and war while balancing risk and total cost. Supply chain risk management strategies will be employed to identify, monitor, assess, and mitigate (reduce or eliminate) potential disruptions within the DoD supply chain (for example, insufficient quality and unreliable suppliers) and outside the supply chain.

DLA Aviation had various procedures designed to monitor, assess, and mitigate

DLA Aviation accepted Air Force demand forecasts under the customer collaboration process without assessing supply chain risks.

potential disruptions that may affect DLA Aviation's ability to support its customer requirements. However, DLA Aviation accepted Air Force demand forecasts under the customer collaboration process without assessing supply chain risks. For the 20 customer collaborated parts we reviewed, DLA Aviation confirmed that the demand forecasts were based on valid Air Force requirements. However, DLA Aviation did not confirm whether all the other parts required to fully support the Air Force's repair schedules would be available within the necessary timeframes.

Supply chain disruptions, such as unavailable parts, negatively impact customer requisition of other parts required to complete a repair. If DLA Aviation does not consider the impact of potential supply chain disruptions, DLA Aviation may purchase inventory that exceeds actual customer orders and that would remain on the shelf until all the necessary parts are available for requisition.

According to the customer collaboration agreement between DLA and the Air Force, DLA will "establish internal controls to ensure support of DDE while ensuring that investment in inventory to support DDE does not lead to excessive growth." The Director, DLA, should implement controls within the customer collaboration process that assess the supply chain risks, such as the unavailability of parts, prior to incorporating its customers' demand forecasts and making materiel purchases.

<sup>&</sup>lt;sup>16</sup> DoD Instruction 4140.01 "DoD Supply Chain Materiel Management Policy," December 14, 2011.

## Part Purchases That Exceeded Requirements Could Have Been Reduced

DLA Aviation missed opportunities to cancel or reduce purchases that exceeded the requirement objectives. Inventory purchases may not have exceeded a part's requirement objective when orders were initially created, but subsequent changes in the requirements resulted in the planned purchases no longer being needed to meet the current requirement objective.

From September 2012 through June 2014, 54 of 68 parts we reviewed had reductions in requirements. As of June 2014, 29 of the 68 parts in our sample had inventory that was still on order that exceeded the inventory requirement objectives by \$3.6 million. Of those 29 parts, we identified 11 parts that had quantities on order that would result in the total inventory for those parts exceeding the approved acquisition objective by \$0.9 million. At the end of June 2014, DLA Aviation had only identified less than \$250,000 of the on-order inventory to review for potential modification or cancellation.

DLA Headquarters established a minimum threshold of 125 percent of the requirement objective as a guideline to identify potential excessive procurement of parts each month. Specifically, DLA Headquarters suggested that DLA supply chains should review any purchase request or purchase order with quantities exceeding 125 percent of the requirement objective for a part. In 2012, DLA Aviation revised its process to review excessive procurements of parts. DLA Aviation officials stated that DLA Headquarters' review process was inefficient and created an administrative burden.<sup>17</sup> DLA Aviation stated the DLA Headquarters' process did not produce the desired results quickly enough and made it difficult to determine the priority of the purchase orders or requests that should be reviewed. DLA Aviation's revised procedures used the approved acquisition objective as its threshold instead of the 125 percent of the requirement objective guideline.

DLA Aviation's ability to identify and, thereby, modify or cancel excessive purchases was limited because it did not know all the on-order inventory quantities needed to perform its excessive procurement reviews. In addition, DLA Aviation's increased minimum thresholds criteria did not identify purchases that were over the requirement objective, but still under the approved acquisition objective.

<sup>&</sup>lt;sup>17</sup> Administrative burden refers to the increased workload to DLA Aviation personnel to issue or terminate contracts for purchases of parts; and generate, cancel, and regenerate purchase requests for parts each month when the requirement changed.

#### Incomplete Monthly Inventory Data Used to Conduct the Analysis of Excessive Purchases

DLA Aviation relied on incomplete monthly inventory data when conducting reviews to identify purchases for excessive quantities.

DLA Aviation relied on incomplete monthly inventory data when conducting reviews to identify purchases for excessive quantities. To conduct its analysis, DLA Aviation used end-of-month inventory data that identified the requirement objectives and approved acquisition objectives, on-hand quantities, and on-order quantities for all its parts. DLA Aviation used the end-of-month data to calculate the amount of on-order inventory that were not received, which exceeded the approved acquisition objective.

We determined that the end-of-month inventory data used by DLA Aviation did not account for all quantities on order because the data did not include the quantities of parts on purchase orders that were past due. In our review of the June 2014 monthly inventory data for DLA Aviation, we identified 16 of 68 parts in the sample, with open purchase orders that had missing or understated quantities. Table 3 shows the purchase order quantities that DLA Aviation lost visibility of while conducting its end of June 2014 procurement review.

NSN	Actual Quantity On Order	DLA Aviation End-of-Month Quantity	Understated Amount
4730-00-334-9701	821	751	70
1560-00-587-1839	14	0	14
1660-00-884-4334	28	12	16
3110-01-167-6690	2886	2860	26
1560-01-201-6766	70	0	70
1560-01-201-6777	51	0	51
1560-01-268-2094	168	118	50
5340-01-297-2445	269	0	269
1560-01-420-2434	22	0	22
1560-01-453-6959	669	0	669
1560-01-453-9165	1	0	1
1560-01-453-9380	10	0	10
1560-01-453-9382	68	55	13
1560-01-453-9416	687	686	1
1560-01-453-9422	5	0	5
5365-01-573-4703	217	0	217

*Table 3. Quantities That DLA Aviation Did Not Account for During its June 2014 Procurement Reviews* 

Therefore, DLA Aviation could not adequately identify and assess purchases that potentially created excessive procurements because it did not know all the quantities that were ordered, but not received. During the audit, we informed

During the audit, we informed DLA Aviation officials about the missing quantities of parts... According to DLA officials, they initiated a change to their computer system to address the deficiency in December 2014.

DLA Aviation officials about the missing quantities of parts, and they confirmed that the monthly inventory data did not include end-of-month quantities on order but not received. DLA Aviation further reviewed the monthly inventory data and confirmed that purchase orders with delivery dates past due were not included in the end-of-month calculation. As a result, the end-of-month data was understated for parts that were past the delivery dates. According to DLA officials, they initiated a change to their computer system to address the deficiency in December 2014.

# Revised Procedures Achieved Minimal Results to Reduce Excessive Parts Purchases

DLA Aviation's procurement review process for orders still awaiting delivery allowed it to purchase quantities that exceeded the inventory requirement objectives but were still below the approved acquisition objective. As a result of DLA Aviation's increased procurement review thresholds, DLA Aviation assumed more risk that it would purchase inventory no longer needed to meet current inventory requirements. As a result of DLA Aviation's increased procurement review thresholds, DLA Aviation assumed more risk that it would purchase inventory no longer needed to meet current inventory requirements.

DLA Aviation provided its end-of-month inventory data used for its procurement reviews from September 2012 through June 2014. For our sample, we identified planned purchases that exceeded the requirement objectives, but DLA Aviation did not review those purchases because they were below the approved acquisition objectives. If DLA Aviation had followed DLA Headquarters' review procedures, then DLA Aviation supply planners would have been required to review these purchases for modification or cancelation. The following examples illustrate potential opportunities that DLA Aviation missed to modify purchases due to increased threshold criteria.

- DLA Aviation initiated a purchase request in August 2013 for 473 structural components.<sup>18</sup> However, after the purchase request was issued, the requirement objective for the components was reduced primarily as a result of reductions in the safety stock levels.<sup>19</sup> DLA Aviation did not reduce or cancel this purchase request, and it awarded two contracts in January and February 2014 for the 473 structural components. As of June 2014, DLA Aviation had an estimated 22 years of inventory<sup>20</sup> for this component with \$754,510 exceeding the requirement objective.
- DLA Aviation initiated a purchase request in October 2013 for 230 airfoil ribs, which are components of the wing (Figure 3).<sup>21</sup> However, after the purchase request was issued, the requirement objective for the ribs was reduced as a result of reductions in the production lead times and economic order quantities.<sup>22</sup> DLA Aviation did not reduce or cancel this purchase request, and it awarded a contract in April 2014 for the 230 airfoil ribs. As of June 2014, DLA Aviation had an estimated 18 years of inventory for this rib with \$115,667 exceeding the requirement objective.



<sup>&</sup>lt;sup>18</sup> Structural Components (NSN 1560-01-455-0910).

<sup>&</sup>lt;sup>19</sup> Safety stock is the amount of stock kept on hand for minor interruptions in the resupply process or fluctuations in demand.

<sup>&</sup>lt;sup>20</sup> We calculated the estimated years of inventory using historical customer orders for the part. We divided the total inventory quantity, as of June 2014, by the average annual customer order quantity for the two years prior to June 2014.

<sup>&</sup>lt;sup>21</sup> Airfoil Rib (NSN 1560-01-453-9429).

<sup>&</sup>lt;sup>22</sup> The quantity of a part that should be ordered to minimize the total costs of inventory. Costs of inventory include storage costs, ordering costs, and costs if there is not enough stock on hand for a part when a customer ordered that part.

Although we identified that DLA Aviation's revised review process canceled orders that exceeded the approved acquisition objective, DLA Aviation still had greater potential to minimize the purchases of unnecessary inventory. DLA Aviation provided historical requirement objectives for our sample that showed varying fluctuations in parts' requirements from September 2012 through June 2014. Such fluctuations in requirement objectives combined with a lower procurement review threshold could cause increased workload to place and terminate contracts and generate, cancel, and regenerate purchase requests. However, for its revised process, DLA Aviation officials could not quantify the cost benefit of the reduction in administrative burden compared to the overall increased investments in inventory. Further, DLA Aviation officials stated that they selected the approved acquisition objective as its threshold because it aligned with DoD inventory reporting requirements and did not select the threshold based on detailed analysis.

During FY 2013 and FY 2014, DLA Aviation averaged more than 8 percent on-order dollars that exceeded the approved acquisition objective. DLA Aviation's excessive on-order inventory amounts did not show a positive trend toward reaching DoD on-order inventory reduction goals. The DLA Aviation process only achieved minimal results to reduce excess on-order inventory. DLA Aviation could benefit from more aggressive review procedures, with lower threshold criteria to identify and cancel excessive purchase requests before awarding contracts. The Commander, DLA Aviation, should evaluate and improve DLA Aviation procedures that review purchase requests and orders of parts that may be excessive by ensuring correct and complete data is used and by considering costs to generate, cancel, and regenerate purchase requests compared to the costs for purchasing excessive inventory.

#### **Untimely Purchases of C-130 Inventory**

DLA Aviation accumulated C-130 inventory that exceeded actual customer orders. Our 68-part sample had inventory valued at \$16 million, yet DLA customers only ordered an average of \$1.36 million a year from July 2012 through June 2014. For the 20 customer collaborated parts reviewed, DLA Aviation invested \$7 million in inventory while its customers only ordered an average of less than \$0.4 million a year from July 2012 through June 2014. Table 4 shows that DLA Aviation accumulated \$6.6 million of C-130 inventory that exceeded average annual customer orders.

NSN	Inventory Value	Average Annual Customer Orders	Difference in Value
1560-01-455-0910	\$1,497,268	\$67,968	\$1,429,300
1560-01-201-6777	1,252,435	102,539	1,149,896
1560-01-453-9420	1,001,762	66,623	935,139
1560-01-250-9771	743,145	2,429	740,717
1560-01-453-9424	457,255	35,616	421,639
1560-01-453-9395	346,895	12,597	334,298
1650-00-022-8606	326,289	12,977	313,312
1560-01-453-9429	291,759	16,209	275,550
1560-01-137-2649	223,705	13,422	210,283
1560-01-453-9165	155,862	10,959	144,903
1560-01-201-6766	92,840	250	92,590
1620-00-306-3461	82,192	526	81,666
5365-01-573-4703	86,428	6,504	79,924
1560-01-453-6959	78,436	3,565	74,870
1560-01-034-4360	75,960	3,838	72,123
1560-01-572-9651	78,679	8,007	70,671
3040-00-724-0273	64,479	394	64,085
1560-01-453-9422	60,298	3,745	56,553
1560-01-453-9380	40,966	975	39,990
5306-01-016-1091	35,533	191	35,342
Total	\$6,992,186	\$369,334	\$6,622,852

Table 4. C-130 Inventory Accumulated That Exceeded Average Annual Customer Orders

Note: Totals do not equal the actual sum because of rounding.

We reviewed DLA Aviation end-of-month inventory data used to conduct its procurement reviews from September 2012 through June 2014, and we reviewed pending purchase requests and orders using both DLA Aviation and DLA Headquarters' procurement review procedures. As a result of our review, we

If DLA Aviation had used more aggressive review procedures with lower threshold criteria, it would have potentially cancelled or reduced a portion of the inventory.

identified that DLA Aviation purchased up to \$2 million in inventory that exceeded June 2014 inventory requirement objectives.

> If DLA Aviation had used more aggressive review procedures with lower threshold criteria, it would have potentially cancelled or reduced a portion of the inventory. Additionally, of the \$2 million invested in inventory, \$300,920 exceeded

the approved acquisition objective. DLA Aviation also risks missing further opportunities to reduce or cancel amounts of excessive inventory across the universe of DLA Aviation managed parts if it continues to rely on incomplete and understated data.

If inventory management is not improved, DLA Aviation will continue to make future materiel purchases that are more than actual customer orders and spend additional resources to handle and store these items. Also, if DLA Aviation continues to purchase inventory before it is needed or purchases too much inventory, it will incur unnecessary storage costs. These increased costs will raise the prices charged to DLA Aviation customers.

#### Conclusion

DLA Aviation did not make cost effective materiel purchases to support the C-130 aircraft. DLA Aviation should improve procedures to evaluate whether customer requirements are supportable before inventory is purchased and to identify and modify planned purchases no longer needed to meet current estimated requirements. Without additional action, DLA Aviation will continue to purchase spare parts that exceed customer demand and incur additional costs to store excessive inventory.

#### Other Matters of Interest on New Defense Logistics Agency Methods to Establish Inventory Levels

In 2013, DLA Headquarters instituted two new methods<sup>23</sup> that set inventory levels for parts with low or highly variable demand. During our audit, we identified concerns that these new methods set inflated inventory levels for specific C-130 parts when compared to historical customer orders. For example, over the last 5 years, customers ordered an average of less than one (0.6) pyrotechnic seals<sup>24</sup> per year; however, one of the new methods set the requirement level for the seal at a quantity of 18 units, which created 30 years of inventory when compared to the average historical orders.

The inventory levels set by these new methods did not improve forecasting for each individual part. The goal was to improve key inventory metrics across all the parts that used the methods within a supply chain. DLA reviewed the performance metrics of these parts on a regular basis including materiel

<sup>&</sup>lt;sup>23</sup> According to DLA officials, these two new methods, referred to as Peak and Next-Gen, did not attempt to generate a forecast for the part based on past demand; rather, those methods were based on a statistical model that used 5 years of historical data and other factors to assess risk of shortages. The new methods established minimum and maximum inventory stock levels. When inventory stock drops to the minimum level, DLA bought enough inventory to restore the part to the maximum level.

<sup>&</sup>lt;sup>24</sup> Pyrotechnic seal (NSN 1560-00-573-4181).

availability, purchase request workload, and on-hand inventory levels. Data provided by DLA Headquarters officials showed that the new methods had improved key metrics for a group of DLA Aviation managed parts from January 2012 through September 2014.

DLA Headquarters officials stated that they did not plan to fully evaluate the effect of the new methods until they had at least 2 years of data available. According to DLA Headquarters officials, DLA was in the early stages of analyzing the new methods as of December 2014. Starting in FY 2015, DLA would conduct an annual review of the performance of these methods against key inventory metrics. DLA officials further stated that starting in FY 2015, these new methods would be subject to monthly reviews by senior DLA officials in order to address any critical deviations compared to intended results and make necessary adjustments.

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

#### **Recommendation 1**

We recommend the Director, Defense Logistics Agency, implement controls within the customer collaboration process that assess the supply chain risks, such as the unavailability of parts, prior to incorporating its customers' demand forecasts and making materiel purchases.

#### Director, Defense Logistics Agency Logistics Operations Comments

The Director, DLA Logistics Operations, responding for the Director, DLA, agreed, stating that improving customer collaboration is a key element of DLA's financial stewardship goals. DLA is conducting meetings with its customers to look for ways to drive down costs. Additionally, DLA established a Planning Review Team in March 2015 to review existing demand and supply planning processes. The team will provide recommendations to improve DLA processes including customer collaboration. According to the Director, DLA will assess the initial recommendations in June 2015 and identify potential controls to implement tentatively by October 2015.

#### Our Response

The Director, DLA Logistics Operations addressed all specifics of the recommendation, and no additional comments are required.

#### **Recommendation 2**

We recommend the Commander, Defense Logistics Agency Aviation, evaluate and improve DLA Aviation procedures that review purchase requests and orders of parts that may be excessive by ensuring correct and complete data is used and by considering costs to generate, cancel, and regenerate purchase requests compared to the costs of purchasing excessive inventory.

#### Director, Defense Logistics Agency Logistics Operations Comments

The Director, DLA Logistics Operations, responding for the Commander, DLA Aviation, agreed, stating that DLA has set more aggressive goals for FY 2015 and FY 2016 to improve the performance of its "Due in Long Supply (DILS)" [on-order inventory exceeding inventory requirements]. The Director stated that DLA will require all DLA activities, including DLA Aviation, to continually evaluate and improve their DILS processes to meet the DLA established goals. Additionally, the Planning Review Team will review the DILS process. According to the Director, DLA will assess the team's initial findings in June 2015 and identify potential controls to implement tentatively by October 2015.

#### Our Response

The Director, DLA Logistics Operations addressed all specifics of the recommendation, and no additional comments are required.

# **Appendix A**

## **Scope and Methodology**

We conducted this performance audit from June 2014 through April 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

This is the first report in a series of reports on DLA materiel purchases supporting the C-130 Hercules. The scope of this report focused on the cost effectiveness of inventory management. The second report will focus on contract pricing.

We reviewed DoD inventory guidance within DoD Instruction 4140.01 and DoDM 4140.01. We met with DLA officials from:

- Headquarters to obtain information about DLA's inventory management procedures, methods for determining inventory requirements, and inventory improvement initiatives;
- Aviation, Richmond, Virginia, to obtain information on requirement objectives, forecasting methods to include customer collaboration, and procedures for reviewing excessive inventory purchases; and
- Aviation at Robins Air Force Base, Georgia and Hill Air Force Base, Utah to obtain information specific to supporting parts' requirements and collaborative forecasting for select parts.

We interviewed:

- Air Force personnel from the Planning for DLA Managed Consumables and Air Force Materiel Command to obtain information on collaborative forecasting; and
- Air Force personnel who managed C-130 parts to understand procedures for developing demand forecasts.

As of June 2014, DLA managed 25,774 unique parts for the C-130 aircraft. From the universe of 25,774 parts, we selected a nonstatistical sample of 68 parts with excessive inventory quantities based on DLA historical customer orders between July 2012 and June 2014.

#### Excessive Inventory Value Analysis

We reviewed the total inventory value for each sample part to determine how much of the total inventory value exceeds what would be ordered by DLA customers on an annual basis. To determine how much of the total inventory value would be used by DLA customers; we reviewed the external customer orders made from July 2012 through June 2014. We calculated the:

- total inventory value for each part by multiplying the June 2014 DLA moving average price by the total inventory quantity;
- annual customer orders based on the average of customer orders made over a 2-year period (July 2012 through June 2014);
- annual customer order value for each part by multiplying DLA moving average price as of June 2014 by the DLA average annual customer order quantity; and
- total inventory value that exceeded the average annual DLA customer orders by subtracting the average annual customer order value from the total inventory value for each sample part. For example, for NSN 1560-01-250-9771, "Airfoil RIB," the total inventory value was \$743,145. DLA annual customer order value for this part was \$2,428.58. Therefore, DLA accumulated \$740,717 of potential excessive inventory for this part based on its average annual customers' orders.

#### Inventory Requirement Objective Analysis

We reviewed the DLA Aviation inventory requirement objective, provided by DLA, for each part to identify whether the inventory requirement objective was reasonable in comparison to the average annual customer orders. To determine the reasonableness of the inventory requirement objectives, we reviewed the DLA Aviation inventory requirement objectives as of August 2014 and the actual customer orders from July 2012 through June 2014.

We calculated the annual customer orders based on the average of customer orders made over the 2-year period. Then we calculated the years of inventory by dividing the inventory requirement levels by the average annual customer orders. For example, for NSN 1560-01-201-6766, "Aircraft Former," the requirement level was 68.3 units and the average annual customer order quantity was 0.5 units. Therefore, it would take DLA 137 years to sell this part inventory based on its historical average annual customer orders. Additionally, we calculated the quantity difference between the requirements objectives and the average annual customer orders by subtracting the average annual customer orders from the inventory requirement objective. For example, for NSN 1560-01-201-6766, "Aircraft Former," the requirement objective was 68.3 units and the average annual customer order quantity was 0.5 units. Therefore, the requirement objective exceeded the average annual customer order quantity by 67.8 units.

#### Demand Forecast Accuracy Analysis

We reviewed the Air Force demand forecast, provided by DLA Aviation, for each part that the inventory requirement objective was 10 times greater than the historical average annual customer orders to determine whether the demand forecast accurately reflected the actual customer orders. To determine the accuracy of the demand forecast, we reviewed the Air Force demand forecast and actual orders from August 2013 through August 2014. We calculated the total demand forecast and total actual customer orders for each part by adding the sum of the quantities forecasted and quantities ordered from August 2013 through August 2014. For example, for NSN 1560-01-453-9424, "Airfoil RIB," the Air Force demand forecast was 655 units and the DLA actual orders was zero units. Therefore, the Air Force demand forecast exceeded DLA actual orders by 655 units from August 2013 through August 2014.

#### **On-Order Inventory Exceeding Requirements**

For our 68 part sample, we obtained end-of-month inventory data from DLA Aviation officials that it used to review on-order inventory from September 2012 through June 2014. This data identified the requirement objective, approved acquisition objectives, on-hand inventory, and on-order quantities in purchase requests and purchase orders. We used inventory data provided by DLA Headquarters to calculate the value of on-order inventory, as of June 2014, that exceeded both the requirement objectives and approved acquisition objectives identified by DLA Aviation.

We reviewed the DLA Aviation end-of-month inventory data to determine the potential on-order inventory that could have been reviewed using procurement review procedures based on DLA Headquarters' threshold criteria. We compared these results to the inventory that DLA Aviation procurement review procedures would have flagged for review. We also compared DLA Aviation end-of-month data to inventory data received from DLA Headquarters and identified that on-order inventory amounts were understated.

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

We relied on inventory data obtained from the DLA Office of Resource and Research Analysis (DORRA). Specifically, we relied on on-hand stock, historical requisition, and on-order data. The on-hand inventory data, identified in the DORRA report, were obtained from the Distribution Standard System.<sup>25</sup> During the audit, we evaluated the reliability of the Distribution Standard System by conducting a physical inspection of a sample of parts that the system identified had on-hand inventory located at a maintenance facility at Robins Air Force Base, Georgia. We determined that the Distribution Standard System was sufficiently reliable for the purposes of this report.

The historical requisition and on-order data identified in the DORRA report was obtained from the Electronic Business System.<sup>26</sup> We determined that the historical requisition and on-order data were reliable based on a comparison with actual source documents. Therefore, we concluded that the on-hand stock, historical requisition, and on-order data obtained from DORRA were sufficiently reliable for the purposes of this report.

### **Use of Technical Assistance**

We consulted with the DoD Office of Inspector General Quantitative Methods Division in determining the nonstatistical audit sample.

<sup>&</sup>lt;sup>25</sup> Distribution Standard System is a warehouse management system that accounts for materiel stored in DLA Distribution Centers.

<sup>&</sup>lt;sup>26</sup> The Electronic Business System is a DLA Enterprise Resource Planning system that manages DLA's finances, processing and filling customer orders, procuring materiel and other core business functions.

# **Appendix B**

#### **Prior Coverage**

During the last 5 years, the Government Accountability Office (GAO) and the Department of Defense Inspector General (DoD IG) issued 16 reports discussing DoD inventory management practices and parts supporting the C-130 aircraft. Unrestricted GAO reports can be accessed at <u>http://www.gao.gov</u>. Unrestricted DoD IG reports can be accessed at <u>http://www.dodig.mil/pubs/index.cfm</u>.

#### GAO

GAO-14-495, "Defense Inventory, Actions Needed To Improve the Defense Logistics Agency's Inventory Management," June 19, 2014

GAO-12-493, "Defense Inventory, Actions Underway to Implement Improvement Plan, but Steps Needed to Enhance Efforts," May 3, 2012

GAO-11-569, "Defense Logistics, DoD Needs to Take Additional Actions to Address Challenges in Supply Chain Management," July 28, 2011

GAO-11-240R, "DoD's 2010 Comprehensive Inventory Management Improvement Plan Addressed Statutory Requirements, But Faces Implementation Challenges," January 7, 2011

GAO-10-469, "Defense Logistics Agency Needs to Expand on Efforts to More Effectively Manage Spare Parts," May 11, 2010

#### DoD IG

DODIG-2015-052, "Air Force Life Cycle Management Center's 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 the F/A-18 Engine Performance-Based Logistics Contracts," April 25, 2014 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-2013-025, "Accountability Was Missing for Government Property Procured on the Army's Services Contract for Logistics Support of Stryker Vehicles," November 30, 2012

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

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

# **Management Comments**

# **Defense Logistics Agency Comments**

DEFENSE LOGISTICS AGENCY HEADQUARTERS 8725 JOHN J. KINGMAN ROAD FORT BELVOIR, VIRGINIA 22060-6221 MAY 2 7 2015 MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL SUBJECT: Response to DoD IG Draft Report "Opportunities Exist to Improve the Cost Effectiveness of the Defense Logistics Agency Aviation Spare-Parts Purchases," (Project No. D2014-D000AH-0184.000) Attached is the Defense Logistics Agency's (DLA) response to the subject Draft Report. We appreciate the opportunity to review and comment on the findings and recommendations. The point of contact for this audit is DLA Office of the Inspector General, VINCE GRIFFITH Rear Admiral, SC, USN Director, DLA Logistics Operations Attachment: As stated

### **Defense Logistics Agency Comments (cont'd)**

Response to DoDIG Report on "Opportunities Exist to Improve the Cost Effectiveness of the Defense Logistics Agency Aviation Spare-Parts Purchases", (Project No. D2014-D000AH-0184.000)

As requested, Defense Logistics Agency (DLA) is providing the following responses to the recommendations. Additional comments will be provided for your consideration under separate cover.

**Recommendation 1.** We recommend that the Director, DLA, implement controls within the customer collaboration process that assess the supply chain risks before incorporating its customers' demand forecasts and making new materiel purchases;

**Response:** Concur. Improving customer collaboration is a key element of DLA's 2015-2022 Strategic Plans' financial stewardship goals. DLA continues to hold cost summits with our customers that include discussion on improving customer demand collaboration as a means of driving down costs. Additionally, in March 2015, DLA established a Planning Review Team (PRT) to review existing demand and supply planning processes. This will be used to provide recommendations on improving these functions to include DLA's customer collaboration efforts. Initial recommendations will be assessed in June 2015 and more discreet recommendations on potential controls will tentatively be available in October 2015.

**Recommendation 2**. We recommend the Commander, DLA Aviation, evaluate and improve DLA Aviation procedures for reviewing purchase requests and ordering of parts that are more than the inventory target requires.

**Response:** Concur. DLA has established agency wide metrics for improving Due in Long Supply (DILS). In recent years, DLA has showed continual improvements in this area and we have set more aggressive goals for improving DILS performance. DILS is a key metric that is reported on in our internal Agency Performance Reviews and also used for reporting to the Department of Defense (DoD) as a metric in the DoD Comprehensive Inventory Management Plan (CIMIP). DLA's goal in DILS is 5% in FY15 and 4% in FY16. To achieve these aggressive goals, all DLA activities, including DLA Aviation, will be required to continually evaluate and improve DILS processes. The DILS process is also being addressed by the PRT and the initial findings will be assessed in June 2015 and a more discreet recommendation on potential controls will tentatively be available in October 2015.

DODIG PROJECT NO. D2014-D000AH-0184.000

# **Acronyms and Abbreviations**

- **DDE** Demand Data Exchange
- **DLA** Defense Logistics Agency
- DoDM DoD Manual
- DORRA DLA Office of Operations Research and Resource Analysis
  - NSN National Stock Number

# **Whistleblower Protection** U.S. Department of Defense

The Whistleblower Protection Enhancement Act of 2012 requires the Inspector General to designate a Whistleblower Protection Ombudsman to educate agency employees about prohibitions on retaliation, and rights and remedies against retaliation for protected disclosures. The designated ombudsman is the DoD Hotline Director. For more information on your rights and remedies against retaliation, visit www.dodig.mil/programs/whistleblower.

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