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Better Controls Essential to Improve the Reliability of DOD's Depot Inventory Records

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The Under Secretary of Defense (Comptroller)

The Honorable Jacques S. Gansler
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Adequate accountability and visibility over available supplies and equipment are significant components of mission readiness and are important to ensuring that funds are effectively spent. Department of Defense (DOD) reports, including financial statement reports, must provide decisionmakers with accurate information on the amount and composition of its inventory. For example, the Congressional Committees use DOD's reported inventory amounts as an important measure to verify inventory reductions and to determine budget requirements. At the end of fiscal year 1998, the Air Force, Army, Navy, and the Defense Logistics Agency (DLA) combined reported over $57 billion of inventory—an amount that is material to both DOD's departmentwide financial statements and to the consolidated financial statements for the U.S. government.

Over the years, auditors have repeatedly found problems with the accuracy of DOD's perpetual inventory records. DLA distribution depots' inventory records, which account for approximately 75 percent of DOD's reported inventory, supply much of the information in DOD's financial and supply reports. As part of our audit of the fiscal year 1998 governmentwide financial statements, we evaluated DOD procedures for verifying the accuracy of its perpetual inventory records. We assessed the internal controls over DLA's physical inventory process to determine whether they provide a reliable accuracy measure of the perpetual inventory records. We performed work at 14 of DLA's 22 distribution depots,[1] which accounted for about 80 percent of the dollar value of DLA distribution

[1]DOD considers the San Joaquin and Susquehanna depots as single depots, though each has two sites; however, both maintain and report inventory accuracy rates separately. Therefore, we are counting each site as a separate depot for purposes of this report. See appendix I for a complete list of the depots we visited.

depots' reported inventory. The DOD Inspector General (IG), the Air Force Audit Agency, and the Army Audit Agency assisted us in performing this work. We conducted our review from March 1998 through March 1999 in accordance with generally accepted government auditing standards. Appendix I provides further details on our objectives, scope, and methodology.

Results in Brief

Inventory record accuracy based on statistical sample inventory results is a key measure used by DOD managers and auditors to monitor the reliability of DOD's perpetual inventory records. DLA established record accuracy goals for fiscal years 1997 and 1998 of 92 and 95 percent, respectively. However, at the 14 distribution depots we visited, reported accuracy rates for fiscal year 1998 counts were below this goal with only 2 depots reporting inventory rates above 90 percent.

Several significant control weaknesses in the inventory count process affected the integrity of the counts. As a result, the reported accuracy rates do not provide a reliable measure of record accuracy.

- At all of the depots we visited, counters could access the inventory system to determine the expected number of inventory items on hand before undertaking the process of verifying inventory quantities at various locations. DLA instructions stated that it was unacceptable for the counters to use the inventory system quantity in advance of completing this task. However, we observed counters accessing the system to determine the quantity on hand before and during the sample counts. For example, one item variance totaling $1.3 million would have gone undetected if we had not requested that the items be physically counted rather than just recording the quantity in the system.
- DOD policies and procedures regarding physical inventories did not specify the need for adequate segregation of duties when performing counts. Most of the depots we reviewed used the same warehouse personnel that were primarily responsible for storing, rewarehousing, and issuing the items being counted instead of using independent parties. Without that independence, physical counts may be adjusted inappropriately and discrepancies not reported.
- The distribution depots lacked written detailed procedures for performing inventory counts. Thus, DLA managers lacked assurance that the depots applied consistent inventory procedures so that sample results were comparable.

In addition, research of inventory discrepancies was not adequate to permit managers to design and implement effective corrective actions. First, researchers did not always completely or properly research causes for the variances and document their results. Second, the codes most often cited to describe the errors did not identify underlying causes, thus hampering managers' ability to discern major reasons for inventory errors. Third, some locations did not compile the research results to identify trends on major reasons for errors. These weaknesses undermined DOD's goal of improving inventory accuracy and accountability and were exacerbated by (1) changes to the perpetual inventory records, such as reversing prior physical inventory adjustments without researchers investigating underlying receipt, issue, and shipping documents, and (2) the lack of depotwide detailed instructions to guide researchers through the appropriate steps to follow.

In addition to properly determining causative factors, the complete and prompt investigation of high-dollar variances and variances involving pilferable items is essential to identifying possible fraud and theft. However, the depots did not always complete research in a timely manner to permit the prompt investigation of unexplained losses. For example, one depot had a research backlog of over 400 cases, while another had a research backlog of about 10,000 cases with some over 2 years old. In addition, depots were not always notifying security offices of unresolved losses promptly, thus delaying the identification of possible fraud or theft. For example, at two depots, inventory staff did not notify security of some known inventory losses for almost 3 years.

Finally, DLA's recently revised inventory sampling process was a step forward in its efforts to measure inventory accuracy, but further improvements can be made. The sampling methodology considered all types of items equally in determining those to be tested, resulting in the selection of more items representing insignificant dollar amounts. For example, at one location, an estimated $49.5 million of items were counted out of a total of the reported $4.5 billion of items on hand, accounting for about 1 percent of the total inventory value stored there. This type of methodology does not give management the opportunity to respond appropriately to errors that reflect more serious problems in accountability over high-dollar or more controlled, sensitive items. Inventory accuracy rates that reflect the relative importance of items and their value would improve the efficiency of the physical inventory process and would provide added information to managers and the Congress.

DOD concurred with our recommendations.

Background

The Chief Financial Officers (CFO) Act of 1990 gives the DOD Under Secretary of Defense (Comptroller)[2] responsibility to directly manage and/or monitor, evaluate, and approve the design, budget, development, implementation, operation, and enhancement of agency component asset management systems. The Deputy Assistant Secretary of Defense (Logistics), who reports to the Under Secretary of Defense (Acquisition and Technology), prescribes general policy on physical inventory control execution. In addition, DOD has a Joint Physical Inventory Working Group that is chartered to develop, maintain, and improve DOD's physical inventory control program. This group is chaired by the DOD Physical Inventory Control Program Administrator from DLA and its membership includes representatives from each of the military services' logistics organizations, DLA, and the DOD CFO/Comptroller.

DLA, with 46,000 personnel in 1998, provides supply support, contract management services, and technical and logistical services to the military services, DOD agencies, and other federal agencies. As part of this mission, DLA is DOD's major warehousing organization, managing 22 distribution depots that warehouse over 75 percent of DOD's 4.3 million types of consumable items (such as clothing, food, and hardware) and 540,000 types of reparable items (such as hydraulic pumps, landing gear, and navigational computers). Each item type represents quantities that range from one to the tens of thousands. Within DLA's Defense Logistics Support Command, the Defense Distribution Center (DDC), New Cumberland, Pennsylvania, exercises central control over the distribution depots. DLA uses the Distribution Standard System (DSS), an automated perpetual inventory system, to maintain inventory records; track all materiel movement actions that occur at the distribution depots, such as receipts, issues, and rewarehousing; support research of record discrepancies; and provide the underlying inventory quantities for purchase decisions and financial statements. At the time of our review, 11 of the 14 depots we visited were using DSS. The San Antonio Distribution Depot was operating with an Air Force legacy system because the depot is scheduled for closure in 2001 and therefore is not being converted to DSS. The Norfolk and San Diego

[2]The DOD Under Secretary of Defense (Comptroller) is the CFO.

Distribution Depots were operating with Navy inventory systems during most of our work, but converted to DSS later in fiscal year 1998.

During fiscal year 1997, DLA established a statistically based physical inventory sampling process to measure the reliability of the distribution depots' inventory records. This action partially responded to prior GAO and DOD IG recommendations. The sample results are used as a measure of inventory record accuracy at each depot across the spectrum of items stored there. The DLA sampling methodology considers all items equally in selecting them for counts. Similarly, in measuring accuracy, DLA's procedures, which follow DOD policy, count each final adjustment to the inventory records that represents a gain or loss as an error, regardless of the significance of the gain or loss. Currently, DLA controls the sample selection and intends to execute a sample twice a year. The depots have Inventory Integrity units that are responsible for conducting or coordinating the physical inventories and any related research of variances between counts and the inventory records. A general description of the depots' sample inventory count and reconciliation process is in appendix II.

DOD's long-standing inability to reliably report inventory balances is one major impediment to obtaining an unqualified opinion on its financial statements. Perpetual inventory records' accuracy is key to assuring managers and auditors of the overall reliability of the inventory quantities underlying the reported inventory amounts.

Reported Accuracy Rates Do Not Meet Performance Goals

DLA uses physical counts that compare inventory records to location quantities to assess the reliability of its perpetual inventory records and measure inventory record accuracy. The twice yearly statistical sample is intended to provide a comprehensive measure of overall inventory record accuracy at each depot. The inventory record accuracy rate is the percentage of items counted without a variance.

DLA established sample inventory record accuracy goals for fiscal years 1997 and 1998 of 92 and 95 percent, respectively. The distribution depots' fiscal years 1997 and 1998 statistical sample inventory results, as shown in table 1, indicate that inventory quantity record accuracy has fallen short of the established goals. Of the 14 depots we visited, only the Norfolk and San Diego Distribution Depots reported over a 90 percent accuracy rate in fiscal year 1998. The remaining 12 depots reported accuracy rates less than 90 percent, with 7 reporting accuracy rates below 85 percent. While the

reported accuracy rates fell short of the goals, DLA's control weaknesses related to count and reconciliation processes raise questions about the integrity of the counts and therefore the value of the rates for measuring the reliability of the perpetual inventory records.

Table 1: DLA Depots' Statistical Inventory Sample Record Accuracy Results for Fiscal Years 1997 and 1998

DLA Distribution Depot	1st half FY 97 results (percentage)	2nd half FY 97 results (percentage)	1st half FY 98 results (percentage)
Anniston	80.6	85.7	83.3
Corpus Christi	75.0	86.4	82.6
Hill	90.2	83.1	89.9
Norfolk	83.7	91.0	93.3
Oklahoma City	77.4	75.6	86.7
Red River	73.4	83.9	89.2
San Antonio	70.2	66.2	72.0
San Diego	97.9	96.4	94.5
San Joaquin-Sharpe	79.6	82.3	87.9
San Joaquin-Tracy	73.7	84.2	81.5
Susquehanna-Mechanicsburg	73.9	74.2	81.0
Susquehanna-New Cumberland	71.8	Not available	73.4
Tobyhanna	80.3	81.8	82.3
Warner Robins	70.1	84.1	87.4

Source: DLA.

Reported accuracy rates indicate that managers cannot rely on the perpetual inventory records for accurate information needed to make purchase and other inventory management decisions. Inaccurate inventory records can result in DOD purchasing items that it does not need and, at the same time, in being short of needed items. In 1990, we designated DOD inventory management as a high-risk area due to its vulnerability to fraud, waste, and mismanagement. This high-risk designation has continued in our recent 1999 update.[3] We recently testified that although DOD reduced

[3] Major Management Challenges and Program Risks: Department of Defense (GAO/OCG-99-4, January 1999).

its inventory levels from 1989 through 1996, virtually all of the problems that previously contributed to billions of dollars of inventory that exceeded current needs still remain a concern.[4] These problems included inadequate oversight of its inventory, weak financial accountability, and overstated requirements.

No Assurance That Reported Accuracy Rates Are Correct

DOD managers could not be assured of the integrity of the count process because (1) counters could access the depot inventory system to obtain expected count quantities before and during the physical counts and (2) some counters did not have adequate segregation of duties. These conditions existed in part because the inventory systems did not sufficiently restrict access to items' on-hand quantities and DOD's policies and procedures did not specify that segregation of duties was an integral part of the physical inventory process. In addition, the distribution depots lacked written, detailed count procedures to help ensure more valid sample results among the depots. As a result, there is no assurance that accuracy rates provide a reliable measure of record accuracy.

System Access Provides Limited Assurance That Counts Are Actually Performed

Maintaining count integrity is key when performing physical inventories to help ensure that counts are accurate. An important way to maintain count integrity is to ensure that counters cannot obtain an item's current record quantity before or during the physical count. In a March 1998 memorandum to distribution depot commanders, the Chief of DLA's Distribution Operations and Administration Division stated that the sample physical inventories would be conducted by actually counting the selected items, specifically pointing out that it was unacceptable for those performing the counts to use system quantity amounts. However, the Distribution Standard System and the Navy inventory systems provided counters the capability to access record quantities before and during the counts. As a result, distribution depot managers could not be sure that items selected for physical inventory were actually counted. This is especially troubling when only one person does a count, which was usually the case at the depots. Although our observations indicated that most items were counted, at 6 of the 14 depots we visited, we observed counters checking the inventory system during the count process to see the on-hand

[4] Defense Inventory: Continuing Challenges in Managing Inventories and Avoiding Adverse Operational Effects (GAO/T-NSIAD-99-83, February 25, 1999).

balances and, at one location, using these balances instead of counting some items. For example:

- At the Susquehanna-New Cumberland Distribution Depot, we observed counters obtaining system quantities for four sample items and recording these amounts as the "physical count" for the items. We requested that the depot physically count these items and found variances between the physical counts and the record quantity for all four. One of the items—night image intensifiers, commonly referred to as "night vision goggles" with a unit price of about $1,300—had a variance of 1,018 items, which resulted in a $1.3 million loss adjustment to the inventory records. If we had not requested a recount, this discrepancy would have gone undetected. At our request, depot officials extensively researched this variance by reviewing up to 4 years of transactions. Although the records showed that the item had supposedly been counted on three previous occasions during that time and no significant receipt and issue transactions had occurred, this discrepancy had not been identified and therefore had never been researched and corrected or investigated as possible theft. Depot officials believe that the inventory records were inaccurate due to an error in posting an adjustment to the records 4 years earlier. However, because research documents are not retained for more than 2 years, they could not substantiate this conclusion. If physical inventories had been properly performed for any of the three prior counts of this item, depot officials would have identified the discrepancy sooner and could have determined whether the variance was due to theft, a data entry error, or other cause.
- At the Anniston Distribution Depot, we observed that counters routinely queried DSS for an inventory item's system quantity and would write this amount on their count sheet before performing a physical count. Counters explained that if their initial count does not agree with the system recorded balance, they can search adjacent bins for additional items, thus sometimes avoiding recounts. These counters were circumventing the previously mentioned March 1998 memorandum from the Chief of DLA's Distribution Operations and Administration Division, and their actions precluded obtaining an unbiased count result.

DLA and DDC officials agreed that counters should have restricted access to DSS inventory record balances during physical inventories. However, DLA officials did not provide us with their planned approach for addressing the problem or a timetable for implementation.

Inadequate Segregation of Duties Also Jeopardizes Count Integrity

Another important element to ensure count integrity is to have a person who does not ordinarily have access to the materiel being inventoried be involved in the count. The private sector companies we spoke with generally have independent parties perform physical inventories. While a count team could consist of a person familiar with the materiel and an independent person, depot officials stated that due to resource constraints counts are usually performed by one individual. In this circumstance, it is imperative that the person performing the count be independent from the day-to-day management and contact with that inventory. Without that independence, physical counts may be adjusted to hide known discrepancies between the number of items and inventory records. DOD has recognized that segregation of assigned duties is important, and its physical inventory control policy, DOD Materiel Management Regulation 4140.1-R, states that "duties such as receiving, posting transactions to records, and issuing items are (to the maximum extent possible) divided among the workforce so that no single individual can adversely affect the accuracy and integrity of the inventory." However, additional DOD policies and implementing procedures, such as the DOD 4000.25-2-M, "Military Standard Transaction Reporting and Accounting Procedures" (MILSTRAP), do not mention segregation of duties as an essential element of the inventory count process.

The Corpus Christi, Norfolk, Oklahoma City, San Antonio, San Diego, San Joaquin-Sharpe, San Joaquin-Tracy, and Warner Robins Distribution Depots used warehouse personnel—whose duties include storing, rewarehousing, and picking items for shipment—to perform counts. Since these counts were generally performed by only one person, this arrangement did not ensure adequate segregation of duties and jeopardized physical inventory integrity and the inventory count results. In comparison, the Anniston, Hill, Red River, Susquehanna-Mechanicsburg, Susquehanna-New Cumberland, and Tobyhanna Distribution Depots generally used dedicated Inventory Integrity unit staff to perform sample counts. This arrangement provided an acceptable segregation of duties because these units' staffs typically were independent of the warehousing process but still familiar with the materiel, thus reducing the risk of inappropriate counts.

Depots Lack Detailed Written Count Procedures

Although the DDC provided certain ad hoc instructions to the depots for the sample count, the distribution depots did not have written standard operating procedures on how to organize and perform counts. In 1997, the DOD IG also reported that the distribution depots did not have documented

procedures for performing physical inventories.[5] Without such procedures, DLA managers lacked assurance that the depots applied consistent inventory procedures so that sample results were comparable. Our review showed that the depots did not perform counts in the same manner. During our review, DLA was drafting a physical inventory users manual. However, the procedures being documented described processing interactions with DSS and did not specify how counts should be organized, performed, and reconciled to the inventory records. The Joint Financial Management Improvement Program's Federal Financial Management System Requirements: Inventory System Requirements, which references Office of Management and Budget Circular A-127, specifies that physical inventory controls should include "guidelines for the development, documentation, and conduct of physical inventories," and that these guidelines should detail the physical inventory-taking procedures and should stress adherence to the instructions. In addition, the Federal Financial Management Improvement Act of 1996 (Public Law104-208) requires each agency to implement and maintain financial management systems that comply substantially with the federal financial management systems requirements.

Further, DLA and DDC, which prepare procedures and have oversight responsibilities, did not ensure the depots adhered to the ad hoc instructions provided to the distribution depots on the sample count. Once instructions are provided, DLA, DDC, and distribution depot managers have a responsibility to provide training and oversee their implementation to ensure that the procedures are properly and consistently followed. Standard operating procedures would establish and assign such responsibility as well as describe how oversight will be carried out.

Research of Discrepancies Not Yielding Reliable Basis for Corrective Actions

Reliable research is essential to identify common reasons for variances between the inventory records and item counts so that managers can design and implement effective corrective actions. We found that the distribution depots were not complying with DOD policies and procedures in three key respects. First, researchers did not always completely or properly research causes for the variances and document their results. Second, the codes most often cited to describe the errors did not identify underlying causes, thus hampering managers' ability to discern major

[5] Inventory Record Accuracy and Management Controls at the Defense Logistics Agency Distribution Depots (DOD IG Report 98-019, November 10, 1997).

reasons for inventory errors. Third, some locations did not compile the research results to identify trends on major reasons for errors. These weaknesses undermined DOD's goal of improving inventory accuracy and accountability and were exacerbated by (1) changes to the perpetual inventory records, such as reversing prior physical inventory adjustments without researchers investigating underlying receipt, issue, and shipping documents, and (2) the lack of depotwide detailed instructions to guide researchers through the appropriate steps to follow.

Research Is Not Adequate and Well-Documented

MILSTRAP requires that the distribution depots research all inventory adjustments of classified and sensitive items regardless of dollar value, pilferable item adjustments of $2,500 or greater, and adjustments of $16,000 or greater for any other items to identify the type of error causing the count variance.[6] It defines research as "an investigation of discrepancies (i.e., gains and losses) consisting of (as a minimum) a complete review of all transactions to include supporting documentation, catalog change actions, shipment discrepancies, and unposted or rejected documentation occurring since the last completed inventory." MILSTRAP provides broad guidelines on conducting research and specifies that research documentation is to be retained for at least 2 years.

Researching count discrepancies has been a continuing problem. The DOD IG and the Army Audit Agency have previously reported that distribution depots have been unsuccessful in diagnosing the underlying causes of inventory record errors for several years because researchers used nonspecific error codes too frequently or because research results were too often inconclusive.[7] To determine if this lack of specificity and inconclusive research was still a problem, we examined the supporting documentation for 210 count variances that the distribution depots we visited had researched during fiscal year 1998 to determine whether the documentation supported the conclusions reached.[8] For this analysis, we reviewed research files for 66 count variances from the physical inventory

[6]The procedures also specify additional research criteria based on certain dollar value and unit variance thresholds. For example, variances that are greater than $5,000 but less than $16,000 and have greater than a 25 percent unit variance are to be researched.

[7]DOD IG Report 98-019 and Fiscal Year 1996 Army Defense Business Operations Fund Financial Statements – Supply Management Inventories (Army Audit Report AA 97-86, December 31, 1996).

[8]We did not evaluate research files at the San Antonio Distribution Depot, which is scheduled to close in 2001.

sample we observed and for 144 judgmentally selected count variances from other physical inventories the depots had performed.

The investigative work documented in the research files often was not always adequate to reliably conclude why the physical count differed from the inventory record. We noted that researchers often limited their investigation to reviewing transaction histories from the inventory systems and therefore did not accomplish the minimum research required by DOD procedures. Transaction histories provide a list of materiel movements at the distribution depot, such as receipts, issues, rewarehousing, and physical inventories. Transaction histories routinely are available for up to 2 years. However, we found little documentation showing that researchers attempted to examine the underlying receipt, issue, and shipping documents that would verify the accuracy of entries in the transaction history file. Thus, the researchers' scope of investigation was not always sufficient and could have led to inappropriate conclusions and inadequate identification of causes.

For example, unless researchers review and compare receipt documents to the quantity recorded in the system for that receipt, they cannot know whether a count variance was caused by an input error when an item was received or by an acceptance of a quantity different than was actually received. We identified the following research deficiencies in our sample.

- Susquehanna-New Cumberland researched three losses totaling about $39,000 and concluded that they were caused by errors in receiving, such as recording too many or too few items received. However, the research documentation did not include evidence that receipt documents had been reviewed to reach this conclusion. Accordingly, we could not validate the cause cited by the researchers.
- Susquehanna-Mechanicsburg Distribution Depot personnel concluded the reason for a gain of 1,703 units of pipe (value of $71,151) was unknown after limited research. However, staff members indicated the counter found a previously unrecorded quantity of pipe in a second location and included both locations in the counts.
- The San Joaquin-Tracy Distribution Depot concluded that the reason for a $2.2 million loss was due to an "erroneous gain." However, the research file did not contain any supporting documentation to show that the discrepancy had been researched or to explain how such a gain had occurred.
- The San Joaquin-Sharpe Distribution Depot had a $7.2 million gain for two trucks that it claimed was resolved. However, the variance was

only partially resolved. A unit price of $36,000 had been erroneously input as $3,600,000. This error explained the large-dollar discrepancy but the reason for the gain of two trucks, now valued at $72,000, was not determined.

We found that DLA had not provided the distribution depots standard detailed instructions, supplementing DOD's broad guidelines, to help ensure that all locations consistently and appropriately researched major count discrepancies. DLA officials agreed that the lack of such detailed instructions contributed to research deficiencies and stated that they are including in the DSS users manual a section on research procedures. Only the Red River, San Diego, and San Joaquin (both sites) Distribution Depots had developed local supplemental procedures that were useful in guiding researchers through research steps, including the review of receipt and issue transactions. However, as evidenced by two of the above examples from San Joaquin, even when local procedures existed, managers did not ensure that procedures were followed so that research was adequate and properly documented.

Error Codes Predominately Cited Are Not Useful for Corrective Actions

Once research has been performed and conclusions have been reached, MILSTRAP requires researchers to record the reason for the count discrepancy. Accordingly, it lists 23 error classification codes that researchers are to use to identify, code, and report the reasons for count variances. Guidance specifies that errors will be linked to the responsible activity, such as receiving, issuing, warehousing, and physical inventory, to better target areas needing improvement. An additional eight codes are provided to identify and record these activities. To implement this guidance, DLA provides 66 combinations of activity and error codes that can provide managers useable information on specific causes for count discrepancies. Appendix III lists and defines the error classification codes and provides a few examples of how the error and activity codes are combined.

Some of the provided codes are less definitive—and therefore less useful—than others. For example, reasons such as "erroneous count" and "erroneous adjustment posted" describe what happened instead of identifying the root causes for errors. These codes are not specific enough to determine how to avoid similar future errors. In contrast, most of the other reasons that could be cited, such as "materiel not stored/stored incorrectly," "data entry error," "document not posted," or "system program error," are more definitive and could be used to develop corrective action.

According to MILSTRAP, the reason referred to as "materiel not stored/stored incorrectly" indicates that materiel was not stored in a finite location or placed in a finite location when processing the storage transaction. In contrast, the guidance defines "erroneous count" as materiel incorrectly counted and "erroneous adjustment posted" as a prior action to adjust the property accountability record that was taken in error. In addition to being much less specific in describing what caused the count discrepancy, an incorrect physical inventory count is highly unlikely because, based on the depots' procedures, it would mean that different individuals performed inaccurate counts on first, second, and even third counts. Also, citing the cause as an erroneous adjustment does not explain why a wrong adjustment was made so that managers can take appropriate corrective action.

To determine the types of errors most frequently cited, we obtained data from the nine distribution depots that had summarized the causes for the 8,214 count variances they researched during the first 6 months of fiscal year 1998. As discussed later in this report, the remaining five depots did not have similar summarized data available. To focus on the types of errors being identified, we considered the 23 basic error classification codes. In consolidating the data in this manner, we noted that the depots sometimes cited reason codes, such as "issue-materiel not stored/stored incorrectly" and "physical inventory-erroneous denial," that were invalid because they did not correspond to any of the 66 combinations of the 23 error and 8 activity codes. We classified these in an "other" category.

We found extensive use of the less definitive of the 23 error codes. As shown in table 2, our analysis showed that the depots cited the reasons "erroneous count," "erroneous adjustment posted," "inconclusive," and "other" for 5,435, or about 66 percent, of the 8,214 count variances researched. These nine depots together attributed 36 percent of the 8,214 physical inventory discrepancies to the "erroneous adjustment posted" and "erroneous count" reasons alone.

Table 2: GAO Analysis of Nine DLA Depots' Reasons Cited for Reported Count Variances From October 1997 Through March 1998

DLA Distribution Depot	1 Total variances examined	2 Number citing erroneous count and erroneous adjustment posted	3 Number citing inconclusive and other	4 Total citing reasons in columns 2 and 3	5 Number citing remaining codes	Percentage citing erroneous counts and adjustments (column 2 divided by column 1)	Percentage citing four major reasons (column 4 divided by column 1)
Anniston	352	31	189	220	132	9	63
Hill	4,095	1,798	1,176	2,974	1,121	44	73
Norfolk	888	381	250	631	257	43	71
Red River	521	205	231	436	85	39	84
San Diego	1,151	135	509	644	507	12	56
San Joaquin – Sharpe	298	93	79	172	126	31	58
San Joaquin – Tracy	73	27	4	31	42	37	42
Susquehanna – Mechanicsburg	289	51	69	120	169	18	42
Susquehanna – New Cumberland	547	207	0	207	340	38	38
Total	**8,214**	**2,928**	**2,507**	**5,435**	**2,779**	**36 %**	**66 %**

Source: DLA Distribution Depots.

When researchers cited the “erroneous adjustment posted,” “erroneous count,” and “inconclusive” reasons, they often reversed prior physical inventory adjustments even though the underlying cause was unknown. Finding a prior adjustment to offset the variance is an expeditious way to resolve a count variance; however, MILSTRAP specifies that such a reversal will not be processed solely on the basis of a previous offsetting physical inventory adjustment. Our limited examination of 210 research cases showed that researchers reversed prior offsetting physical inventory adjustments to resolve the count variance for 91 out of 210 cases, or about 43 percent. The adjustment quantities reversed either exactly matched the current count variance quantity, thus eliminating the count variance, or reduced the variance to get closer to the quantity counted. For example, a Susquehanna-New Cumberland depot researcher resolved a $32,788 count gain for one item by reversing a prior loss adjustment based on a review of the transaction history without further analysis. This manner of resolving count variances without the requisite research is an unsupported, arbitrary

adjustment and further undermines any confidence that might exist in the accuracy of these records.

Such reversals of prior adjustments to the inventory records contributed to substantial changes in inventory records from October 1997 through March 1998 at the Norfolk, San Diego, Hill, San Joaquin (both sites), Susquehanna-New Cumberland, Anniston, and Tobyhanna Distribution Depots. For example, during this period the Norfolk and San Diego Distribution Depots reversed about $270 million and $37 million, respectively, of prior loss adjustments. At the same time, these two depots reversed about $95 million and $16 million, respectively, of prior gain adjustments. Such unsupported adjustments contribute to unreliable perpetual inventory records and increase the risk that inappropriate purchase decisions are made when managers rely on inaccurate inventory records and consequently order unneeded items or do not buy the items needed. This problem is compounded when the inventory records are incorrect for a long time. The inventory record adjustments that the depots reversed had often been originally recorded an average of 6 months before they reversed them. In 11 cases, however, the inventory records had been incorrect for approximately 1 year or more. In one instance, the Norfolk Distribution Depot reversed an adjustment that had occurred almost 3 years before to resolve a $114,100 count gain.

Some Depots Not Benefiting From Research Results

Even if research is reliable and meaningful error codes are assigned, distribution depots' managers do not have sufficient information for taking effective corrective actions to improve inventory record accuracy unless the reasons are summarized for analysis. MILSTRAP requires depots to periodically summarize and report on the type of errors identified during research to help managers identify and correct recurring problems in their operations. Although all 14 of the distribution depots we visited were researching variances, 5 of the depots—Corpus Christi, Oklahoma City, San Antonio, Tobyhanna, and Warner Robins—were not summarizing and reporting as required. As a result, managers could not fully benefit from the research and could not act upon trends in problem areas identified.

Possible Theft May Not Be Investigated

Research resulting in unresolved gain discrepancies are a "red flag" for receiving and warehousing problems, and unresolved loss discrepancies are a "red flag" for potential fraud or theft. For example, at the nine depots discussed previously, 18 percent of the discrepancies researched resulted in a finding of "inconclusive." Further, citing "erroneous count" and

"erroneous adjustment posted" reasons for count variances, as discussed in the previous section, may be masking underlying problems. Only "inconclusive" research results are considered for referral to security for further investigation. In addition to properly identifying causative factors, the complete and prompt investigation of high-dollar variances and variances involving pilferable items is essential to identify possible fraud and theft.

MILSTRAP specifies that storage activities must complete research within 45 calendar days from when the inventory adjustment was recorded. DOD financial management and supply policies and procedures require the DLA distribution depots to investigate and assess financial liability for loss, damage, and destruction of government property in their possession and to document these investigations.[9] At the time of our review, these policies and procedures required that a DD Form 200, "Financial Liability Investigation of Property Loss," be prepared when causative research results in a finding of "inconclusive" for all inventory variances of sensitive and classified items regardless of dollar value; pilferable items when an adjustment of $2,500 or more is required; any loss when the value is greater than $50,000; and any loss with an indication or suspicion of fraud, theft, or negligence. The policies also required the DD Form 200s be sent to security offices for review and investigation. The distribution depots' Inventory Integrity units are responsible for preparing the forms, sending them to the security offices, and maintaining a control register to track the status and disposition of actions taken.

At the time of our visits, six depots had backlogs of unresearched count discrepancies—some of which were from physical inventories several months or even years before. For example, the Norfolk Distribution Depot had a backlog of over 10,000 cases with some discrepancies over 2 years old; according to a depot inventory official, this backlog was caused by staff reductions. At the same time, the Corpus Christi Distribution Depot had a backlog of about 580 discrepancies, largely because the depot had

[9]Currently, the DOD Financial Management Regulation, volume 12, chapter 7, "Financial Liability for Government Property Lost, Damaged or Destroyed," which was previously Accounting and Reporting for Government Property Lost, Damaged or Destroyed, DOD 7200.10-M, provides policy and procedures for identifying and reporting possible inventory thefts. DLA implements this policy in DLA Directive 4140.69, Inventory Adjustment Research, dated January 13, 1999, which recently superseded DLA Supply Operations Policy and Procedures Memorandum No. 92-15, Causative Research and Request for Investigation of Inventory Adjustments at the DLA Defense Distribution Depots. The directive no longer considers one of the criteria for a DD Form 200 to be any loss when the value is greater than $50,000.

decided to stop performing research for over a year. Additionally, the San Joaquin-Sharpe Distribution Depot had a backlog of about 418 discrepancies because resources had not been devoted solely to performing research until 1997. Although the San Antonio Distribution Depot also had a significant backlog, an inventory official there did not provide the number.

Even for those distribution depots that did not have significant backlogs, the time to complete research sometimes exceeded the 45-day requirement, further hampering the possibility of meaningful investigations because more effort is involved as a case gets older. For example, at the Anniston Distribution Depot, we reviewed research documentation for 26 count variances and 14 of them took from 62 to 122 days to complete research. Out of 24 count variances we reviewed at the Red River Distribution Depot, the completion time for 13 exceeded 45 days, ranging from 47 to 190 days. Depot officials indicated that causative research cases sometimes involve special and extenuating circumstances that make the research more difficult and time-consuming. Nevertheless, after too much time has passed, research is unlikely to determine a cause or identify possible theft for investigation.

When research was performed, at least four depots were not promptly referring DD Form 200s to depot security or had not been completing the forms. Specifically, the control registers from the San Joaquin-Sharpe, Anniston, Red River, and San Diego Distribution Depots revealed that the time expired from when the loss was identified from a physical count and research was completed to when the security office received the required form ranged from less than a month to over 2 years. The San Joaquin-Sharpe Distribution Depot had at least 124 DD Form 200s—covering over $7.2 million worth of items—that were not completed and referred to the depot security office for up to 3 years. About 60 percent, or 75, of these items were sensitive, pilferable, or confidential items, which are supposed to be highly controlled.

For example, an October 1996 $307,000 loss of a thermal imaging sensor—a sensitive item primarily used to designate targets for the Kiowa Warrior Helicopter during combat missions—had not been referred to security until April 1997. In addition, an October 1995 $29,000 loss of image intensifier housings—sensitive items used to hold night vision equipment for pilots—had not been referred to security until September 1996. Of 83 DD Form 200s that we reviewed at the San Diego Distribution Depot, 35 had not been filled out from 3 months to almost 3 years after the date the loss was

discovered. At the same time, the Warner Robins and Oklahoma City Distribution Depots had not prepared any DD Form 200s during most of fiscal year 1998. According to depot officials, they had a waiver from this requirement; however, they were unable to provide documentation supporting this waiver and DDC officials stated that they would not waive such an important requirement. Such delays in completing research and notifying security offices can adversely affect the security offices' ability to conduct prompt and meaningful investigations. As a result, the distribution depots are not effectively identifying and investigating possible fraud, theft, or mismanagement of inventory.

Inventory Sampling Methodology Could Be Improved

The inventory sampling process that DLA established in fiscal year 1997 was a step forward in its efforts to measure the reliability of the distribution depots' inventory records. As established by AMCL 8A policy, physically counting each of the over 4 million types of items for which DLA is responsible is not practical or efficient. The goal of the sampling process is to select and count a statistically valid number of sample items to measure inventory record accuracy across the spectrum of items stored at each of the depots. However, DLA's sampling methodology used in fiscal year 1998 did not consider the dollar value or the sensitivity of the types of items in selecting those to be physically counted—each type of item was considered equally. DLA's existing sampling methodology could be improved to provide an inventory record accuracy measure that incorporates these factors.

For example, in the methodology used, an error for a $1 item is counted the same as an error for a $50,000 item, and a distribution depot with 10 errors in low-dollar items would report the same inventory accuracy rate as one with 10 errors in high-dollar items. Similarly, an error in sensitive, controlled items, such as firearms or night vision goggles, is counted the same as an error in common hardware items or tools, such as screws or hammers. This type of accuracy rate does not give management the opportunity to respond appropriately to errors that reflect more serious problems in accountability over high-dollar or more sensitive, controlled items. For example, inaccuracies in lower valued items could be more easily tolerated and the impact alleviated because maintaining more items than needed is more affordable. Because of the expense, this is not the case for high-dollar items. Thus, enhancing DOD's existing methodology to consider the relative importance of the dollar value and sensitivity of items could result in inventory record accuracy rates that are more meaningful to managers in making cost-effective corrections to problem areas. A

sampling methodology that reflects the significant dollar value of the inventory stored at each distribution depot would also better satisfy financial reporting requirements.

DLA's current sampling process results in the selection of more items representing insignificant dollar amounts, which often are small items that are difficult to count and for which exact record accuracy may not be as great a concern. At 12 of 13 distribution depots, the inventory accuracy rates reflected primarily variances under $1,000. For example, at six depots using DSS, approximately 70 percent to 80 percent of the reported errors were due to variances of less than $1,000 even though these depots principally store high-value items, many of which are reparables, and the inventory dollar value at these locations totaled a reported $36.4 billion. One reason this occurred is because approximately 90 percent of the items counted at these locations had an extended value (quantity times unit price) of less than $100,000 and approximately 70 percent had a unit price of less than $10,000. At Red River Distribution Depot, for example, of the 798 items DLA selected, only 47 items were counted whose extended dollar values exceeded $100,000. Moreover, only an estimated $49.5 million of items were counted out of a total of a reported $4.5 billion of items on hand, accounting for about 1 percent of the total inventory value stored there. The selection of predominately lower valued items also can result in few item count variances being researched to identify causes, as the need for research is generally triggered by a dollar threshold. Thus, the depots are not benefiting as fully as possible from sampling results to help improve operations.

We discussed physical inventory procedures with several private sector firms in conjunction with this work and found that they employed a variety of practices to verify inventory accuracy rates. Regardless of the practice used, however, dollar significance was a common factor in determining what items were counted. For example, one airline company grouped items according to certain characteristics, such as type and usage, and then it selected items based on dollar value, ensuring that most high-dollar items were counted. The company separated reparables that are critical to keeping airplanes flying from consumables, forming two groups of items to be measured with separate acceptable error rates.

The DOD IG reported on DLA's sampling plan in November 1997 and expressed concern with the validity of the statistical sampling

methodology.[10] In April 1998, DOD approved a change to the DLA sampling methodology in how items would be selected. DLA did not perform a second physical inventory sample in fiscal year 1998 because it was changing its system to implement the new methodology. DOD also included the need to design and implement a better sampling methodology in its November 1998 proposed implementation strategy, which addressed key issues preventing DOD from obtaining an unqualified audit opinion.[11] Further, the DOD IG recently reported on the status of DLA's revised sampling methodology.[12] According to the IG, although the new sampling methodology should allow DLA to obtain a more statistically valid measure of record accuracy, it does not select items based on the significant dollars and therefore still will not measure inventory dollar value accuracy. The IG reports included recommendations to design and implement a sampling plan that provides a statistically valid measure of the dollar value of the material stored at the distribution depots.

Conclusions

Mission readiness requires that DOD have adequate accountability and visibility over its available inventory. Accurate inventory records help DOD managers achieve readiness goals within budget resources by ensuring that funds are spent on needed items and that unnecessary purchases are avoided. Further, accurate records are necessary for financial statement reporting to ensure reliable information to decisionmakers. Inventory record accuracy is key to managers assessing the reliability of the perpetual inventory records. However, DLA's inventory accuracy rates did not provide reliable information for assessing the accuracy of inventory records because the count and research results could not be relied upon. To provide a meaningful measure for managerial decisions and financial reporting purposes, DLA's procedures for counting and reconciling variances must be improved. Further, investigations of possible theft were not being done due to major delays in researching count variances and in notifying security offices of significant and unresolved discrepancies between counts and the inventory records.

[10]DOD IG Report 98-019, November 10, 1997.

[11]In response to the President's goal to achieve an unqualified opinion of the government's fiscal year 1999 consolidated financial statements, in June 1998, the Office of Management and Budget requested that DOD prepare an action plan for resolving material management deficiencies identified by the auditors.

[12]Status of the Defense Logistics Agency Plan to Measure Inventory Record Accuracy at the Distribution Depots Using Statistical Sampling (DOD IG Report 99-080, February 10, 1999).

Improved internal controls over the count process, including revised policies and written detailed procedures, would help ensure that the distribution depots properly perform counts and reconcile variances to produce valid count results. Additional procedures and emphasis on strict adherence to current policies and regulations would also help ensure meaningful inventory research results and the prompt identification and investigation of possible fraud and theft. Furthermore, a DLA inventory sampling methodology that better recognizes the importance of item dollar values and other differences between items would provide more meaningful inventory record accuracy measures and serve as a basis for appropriate management action.

Recommendations

We recommend that the Under Secretary of Defense (Acquisition and Technology), the Under Secretary of Defense (Comptroller), and the Director of DLA take the following actions.

- Ensure that the inventory counters do not have access to inventory records during the counts and are sufficiently independent so that the integrity of the counts are not jeopardized. To address this will require (1) changing the inventory system to better restrict access to on hand quantities before and during the counts, (2) revising MILSTRAP to emphasize that segregation of duties is an essential control element of the inventory count process, (3) developing written procedures and providing training on how counts are to be organized and performed, and (4) monitoring the physical inventories to ensure that procedures are properly and consistently followed.
- Improve the accuracy of research and enhance the reliability basis of corrective actions by (1) revising the appropriate policies and procedures to provide detailed instructions on conducting research (including review of transactions that affect the accountable balance, e.g. receipt, issues, and adjustments); appropriately using error codes; documenting research actions; and accumulating research results, (2) training personnel responsible for research, (3) reviewing and eliminating error codes that do not identify underlying causes of inventory record variances, and (4) specifying how oversight will be carried out.
- Ensure that possible theft is properly investigated by (1) monitoring compliance with existing policies and procedures so that research is properly and promptly completed, (2) notifying security offices of significant losses and gains promptly, and (3) establishing appropriate management actions for noncompliance with the policy.

- Enhance the sampling methodology to provide an inventory accuracy measure that better reflects the importance of the dollar value and sensitivity of items on hand at each distribution depot for accountability of assets and financial reporting.

Agency Comments and Our Evaluation

In commenting on a draft of this report, the Deputy Under Secretary of Defense (Logistics) stated that DOD concurred with all of our recommendations. DOD's response outlined specific actions that it has planned to address the recommendations, along with estimated dates of completion. In general, these actions, if properly implemented, will result in significant improvements in the reliability of DOD's inventory records. Our evaluation of DOD's planned actions identified some areas where we see the need for further actions to fully satisfy the intent of our recommendations.

First, in response to our recommendation that DOD ensure that its inventory counters are sufficiently independent, DOD stated that its new procedures will allow the physical count process to be conducted by multiskilled personnel but that count entry and other steps will be performed by the inventory integrity organization. This planned change may not fully address the control weakness regarding segregation of duties as discussed in the report if warehouse personnel are allowed to continue to perform solo physical counts of items for which they have day-to-day management and storage responsibility. If DOD intends to use multiskilled personnel to perform inventory counts, it is imperative that its procedures spell out how a proper segregation of duties will then be accomplished. For example, procedures need to clearly state that multiskilled personnel will not be solely responsible for counting inventory items for which they have storage responsibility.

Second, in response to our recommendation that DOD properly investigate possible inventory theft, DOD stated that DLA will revise its program managers' performance standards to include critical elements that will hold them responsible for timely completion of research and timely reporting to security. We support this action. However, DOD noted that additional management action in response to noncompliance with the timely research and reporting requirement would depend on the reason for the noncompliance. DOD stated that if, for example, program managers cited insufficient resources as the cause for noncompliance, management may need to address prioritization of workload and allocation of resources. DOD's response could be construed as accepting a claim of insufficient

resources as a valid justification for not performing research or not reporting possible theft. Management has the responsibility to ensure that such critical tasks are performed so that important accountability controls function properly.

Finally, in response to our recommendation that the sampling methodology be enhanced to reflect the importance of the dollar value and sensitivity of items on hand at each distribution depot, DOD indicated that two separate sampling plans have been developed to satisfy the different "accuracy" requirements of the logistics and financial communities. A new DLA financial sampling plan, which will focus on inventory value, will be conducted in the fourth-quarter of fiscal year 1999. Although DOD's response did not specify the extent of use for its new methodology, we understand that the fourth quarter financial sampling plan will be limited to DLA-owned items and will not include inventory owned by the military services. As a result, only 17 percent of DOD's inventory will be subject to the new methodology for fiscal year 1999. We urge DOD to expand its sampling plan to cover all inventory held by DLA regardless of owner.

We are sending copies of this report to the Honorable William S. Cohen, Secretary of Defense; the Honorable Jacob J. Lew, Director of the Office of Management and Budget; and interested congressional committees. Copies will be made available to others upon request.

Please contact me at (202) 512-9095 if you or your offices have any questions concerning this report. Other contacts and contributors to this report are listed in appendix V.

Lisa G. Jacobson
Director, Defense Audits

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Abbreviations

CFO	chief financial officer
DDC	Defense Distribution Center
DLA	Defense Logistics Agency
DOD	Department of Defense
DSS	Distribution Standard System
IG	inspector general
MILSTRAP	Military Standard Transaction Reporting and Accounting Procedures

Objectives, Scope, and Methodology

Our objective was to determine the extent to which DLA's physical inventory count and reconciliation procedures could be relied on to provide accurate perpetual inventory records. To determine this, we (1) observed physical inventory counts to assess the adequacy and reliability of the count process and (2) examined the inventory variance research process and the validity of conclusions reached.

To obtain background on and understand the details of the count process and the system documentation, we (1) reviewed DOD policies, procedures, regulations, and DSS user manuals, (2) discussed physical inventory count procedures with DLA, depot Inventory Integrity unit officials, and DDC officials, and (3) reviewed prior GAO, DOD IG, and military service audit agencies' reports. We also obtained DLA depots' inventory sample results for fiscal years 1997 and 1998, as well as monthly depot inventory gains and losses data for the first 6 months of fiscal year 1998.

To observe the DLA physical inventory count process and assess its adequacy and consistency, we visited 14 DLA distribution depots while they performed their fiscal year 1998 statistical inventory sample (see table I.1). Collectively, these 14 depots stored approximately $78 billion, or about 82 percent of the total inventory dollars and about 3.6 million items, or about 71 percent of the total inventory items that DLA's distribution depots maintained as of September 30, 1997.[1] We used checklists to document how inventory sample counts were performed at these depots for 4,258 count observations out of a total of 14,106 sample items. For each sample item with an initial count-to-record variance, we obtained information on the item characteristics, record quantities, and count history. From this information, we prepared detailed schedules documenting each count variance at the depots to track what happened during the counts. (Because of the different count procedures that the San Antonio Distribution Depot followed due to its impending closure in 2001, we were not able to prepare a tracking schedule for that depot.)

[1]This value is based on the standard price of items and differs from the value reported in the financial statements because items are revalued for financial reporting according to federal accounting standards.

Table I.1: Depot Information on DLA's FY 1998 Statistical Inventory Sample Counts

DLA distribution depot	Total inventory dollar value (in billions)	Total number of inventory line items	DLA sample size	DLA sample counts observed by GAO
Anniston	4.58	35,111	1,009	446
Corpus Christi	3.24	34,484	763	418
Hill	7.40	165,857	1,004	347
Norfolk	6.60	630,572	888	44
Oklahoma City	6.49	176,819	1,030	549
Red River	4.49	116,243	798	250
San Antonio	4.88	106,765	503	194
San Diego	5.01	284,942	1,317	590
San Joaquin-Sharpe	2.62	509,791	1,063	109
San Joaquin-Tracy	1.54	414,879	982	153
Susquehanna-Mechanicsburg	1.56	304,392	1,366	340
Susquehanna-New Cumberland	3.21	331,069	1,231	251
Tobyhanna	4.06	62,061	1,150	340
Warner Robins	10.18	232,988	1,002	227
Totals	**65.86**	**3,405,973**	**14,106**	**4,258**

Note: With the exception of the three depots who were not using DSS during our review—Norfolk, San Antonio, and San Diego—inventory dollar value and number of inventory line items data are as of January 1998. Inventory dollar value and number of inventory line items for Norfolk are as of March 1998, San Diego as of April 1998, and San Antonio as of July 1998.

Source: DLA.

As part of our count process evaluation, we also discussed DLA's sampling methodology with DLA DDC officials and DOD IG. We also contacted several private sector firms to discuss their physical inventory procedures.

To evaluate the count reconciliation process, we analyzed the data on the tracking schedule to identify (1) how many items were counted more than once, (2) the time frame to perform all recounts, (3) possible reasons for the count differences, (4) any transactions used in attempting to reconcile the differences, and (5) the final adjustment made to the inventory records. We also discussed count reconciliation procedures with DLA depot Inventory Integrity unit officials and compared how the depots performed this process.

To examine the research process and the validity of conclusions reached, we obtained, analyzed, and summarized data on each depot's research results for the first half of fiscal year 1998. Based on these data, we judgmentally selected 144 research cases, reviewed depots' supporting documentation to ascertain whether these data supported the conclusions reached, and identified any adjustments made to the inventory records based on the research results. In addition, we reviewed 66 research cases from the sample we observed. Additionally, we reviewed whether depots completed a required DD Form 200 "Financial Liability Investigation of Property Loss" for unresolved research cases and how promptly these forms were forwarded to depot security offices.

We conducted our review from March 1998 through March 1999 in accordance with generally accepted government auditing standards. The DOD IG, the Air Force Audit Agency, and the Army Audit Agency assisted us in performing this work. We requested written comments on a draft of this report from the Under Secretary of Defense (Comptroller) and the Under Secretary of Defense (Acquisition and Technology). These comments are discussed in the "Agency Comments and Our Evaluation" section and are reprinted in appendix IV.

General Description of the Depots' Inventory Sample Count and Reconciliation Process

DLA centrally controls the selection of sample items from databases provided by each distribution depot and selects a sample for each depot. In the sampling methodology used during our observations, every item and condition code combination in a depot's database could potentially be selected. The selection was not based on the dollar value of items.

After DLA selects the inventory sample, the list of sample items is sent to each depot. The depot then schedules the items for a physical count and has 30 days to complete the entire sample. Each item scheduled to be counted on a given day is assigned to an individual counter who is provided the item's stock number, description, unit of issue, condition, and location. The counter goes to the location where the item is stored, verifies this information, and then performs an initial count. After the count is completed, the counter immediately enters the quantity into DSS if the depot uses radio frequency units. Radio frequency units are hand-held devices that provide real-time access and update into DSS. If the depot is not using these units, the counter will manually record the count on count sheets that are accumulated for entry into DSS via a computer terminal at the end of the day. DSS then compares the count results with the inventory records and identifies any count variances.

If the item's initial count agrees with the DSS inventory record amount, then the inventory for this item is completed and the item count is not considered in error. If the two do not agree, then the item is scheduled for a second count the following day. However, because of workload considerations, the second count may not occur until a few days after the first count is completed. The second counter—who may or may not be the one who performed the first count—then recounts the item and either inputs the results into DSS via the radio frequency unit or a DSS terminal.

If the item's second physical count agrees with the DSS inventory record amount, then the inventory for this item is completed and the item count is not considered in error. However, if these two amounts do not agree, then the item is scheduled for a third count the next day. Again, these third counts may not occur for several days after the completion of the second count.

Before performing a third count, the counter receives a DSS generated Inventory Evaluation Research Listing that provides the results of the first and second counts and lists any recent transactions, such as receipts, issues, or rewarehousing activity, that occurred within the first and second count time frame. The third counter—who can be but usually is not the

same person who performed the first or second count—attempts to reconcile differences between the various counts. To do this, the counter will either accept the second count based on a review of transactions or actually perform a third count. The third counter will enter the physical count quantity into DSS that he or she believes is accurate, which then completes the inventory process for the item. If the physical count entered differs from the item's DSS inventory record amount, then the item count is considered in error. The inventory records are adjusted to match the physical count.

Under certain conditions, depots perform additional research on some count variances. The purpose of this research is to identify reasons why the variances occurred, to verify that the inventory adjustments were correct, and to track reasons in order to eliminate repetitive errors.

Research Codes

Table III.1: Error/Cause Codes Definitions

A	System/Program Error	Property accountability record was not correctly updated by a valid transaction because the system failed or program contained a logic error.
B	Document Not Posted	Physical processing was completed but transaction update of the property accountability record was not effected.
C	Source Document Error	Error in the source document NSN, quantity, unit of issue, condition, type of pack, lot number, ownership, purpose, and/or location (routing number) caused erroneous update of property accountability record.
D	Data Entry Error	Input transaction did not match source document NSN, quantity, unit of issue, condition, type of pack, lot number, ownership, purpose, and/or location (routing identifier) and caused erroneous update of the property accountability record.
E	Rejected Document Not Posted	Transaction was rejected during processing and was not reinput to update the property accountability record.
F	Duplicate Document Posted	Same transaction updated the property accountability record more than once.
G	Reversal Document Not Posted	Property accountability record was updated by a transaction processed to completion and required transaction reversal was not processed.
H	Erroneous Reversal Posted	Prior action to reverse a transaction which updated the property accountability record was taken in error.
I		Not assigned
J	Misidentified/Mixed Materiel	Assets in storage location were identified by incorrect/multiple stock number, unit of issue, supply condition, shelf-life, type of pack, lot number, or ownership/purpose.
K	Duplicate Physical Processing	Transaction updated the property accountability record once but materiel physically processed more than once.
L	Wrong Materiel Selected	Materiel selected did not match transaction which updated the property accountability record (i.e., wrong stock number, quantity, unit of issue, supply condition, type of pack, lot, ownership, purpose, and/or location was physically selected).
M	Materiel Selected From Wrong Location	Storage location from which materiel was selected did not match storage location cited in the transaction.
N	Physical Processing Not Complete	Transaction updated the property accountability record but physical processing of materiel was not completed.
O		Not assigned
P	Erroneous Denial	Denial processed in error and materiel found after denial was submitted.
Q	Materiel Not Stored/Stored Incorrectly	Materiel was not stored in finite location or placed in finite location when processing the storage transaction.
R	Infloat Document Control Error	Erroneous data posted to the property accountability record because infloat documents were not considered or were not available.
S	Erroneous Count	Materiel incorrectly counted.
T	Erroneous Adjustment Posted	Prior action to adjust the property accountability record was taken in error.
U	Catalog Change Not Posted	Transaction resulted in erroneous update of the accountability record because the property accountability record was not updated by catalog change transaction.
V	Erroneous Catalog Change Posted	Erroneous data posted to property accountability record due to error in catalog change record due to error in catalog change transaction (e.g., wrong unit of issue to or from, etc.).

(continued)

W	Bin Tag/Locator Label Error	Bin tag/locator label missing, incomplete, or reflected erroneous data for assets in storage location.
X	Theft	Inventory adjustment attributed to probable theft.
Y	No Conclusive Findings	Cause for the inventory discrepancy could not be determined.

Table III.2: Operations Codes

1	Receiving
2	Issue
3	Physical Inventory
4	Cataloging Changes
5	Logistics Reassignments
6	Warehousing/Rewarehousing
7	Location Survey
8	Other

Table III.3: Examples of Error Classification Codes

1B	Receiving – Document not posted
1C	Receiving – Source document error
1D	Receiving – Data entry error
1E	Receiving – Rejected document not posted
1F	Receiving – Duplicate document posted
1G	Receiving – Reversal document not posted
1H	Receiving – Erroneous reversal posted
1J	Receiving – Misidentified/mixed materiel
1Q	Receiving – Materiel not stored/stored incorrectly
1R	Receiving – Infloat document control error
1S	Receiving – Erroneous count
3B	Physical Inventory – Document not posted
3C	Physical Inventory – Source document error
3D	Physical Inventory – Data entry error
3E	Physical Inventory – Rejected document not posted
3F	Physical Inventory – Duplicate document posted
3G	Physical Inventory – Reversal document not posted
3H	Physical Inventory – Erroneous reversal posted

(continued)

3R	Physical Inventory – Infloat document control error
3S	Physical Inventory – Erroneous count
3T	Physical Inventory – Erroneous adjustment

6C	Warehousing/Rewarehousing – Source document error
6D	Warehousing/Rewarehousing – Data entry error
6E	Warehousing/Rewarehousing – Rejected document not posted
6J	Warehousing/Rewarehousing – Misidentified/mixed materiel
6M	Warehousing/Rewarehousing – Materiel from wrong location
6N	Warehousing/Rewarehousing – Physical process not completed
6Q	Warehousing/Rewarehousing – Materiel not stored/stored incorrectly
6R	Warehousing/Rewarehousing – Infloat document control error
6S	Warehousing/Rewarehousing – Erroneous count
6W	Warehousing/Rewarehousing – Bin tag/locator label error

Comments From the Department of Defense

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON DC 20301-3000

ACQUISITION AND TECHNOLOGY

MAY 20 1999

(L/MDM)

Mr. Gene L. Dodaro
Assistant Comptroller General
Accounting and Information Management Division
U.S. General Accounting Office
Washington DC 20548

Dear Mr. Dodaro:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "FINANCIAL MANAGEMENT: Better Controls Essential to Improve the reliability of DoD's Depot Inventory Records," dated April 13, 1999 (GAO Code 919336/OSD Case 1793). The Department concurs with the report recommendations.

The detailed DoD comments on the draft GAO report recommendations are provided in the enclosure. The DoD appreciates the opportunity to comment on the draft report.

Sincerely,

Roger W. Kallock
for Deputy Under Secretary
of Defense (Logistics)

Enclosure

GAO DRAFT REPORT DATED APRIL 13, 1999
(GAO CODE 919336) OSD CASE 1793

"FINANCIAL MANAGEMENT: BETTER CONTROLS ESSENTIAL TO IMPROVE THE RELIABILITY OF DOD'S DEPOT INVENTORY RECORDS"

DEPARTMENT OF DEFENSE COMMENTS TO
THE GAO RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended that the Under Secretary of Defense (Acquisition and Technology), the Under Secretary of Defense (Comptroller), and the Director, Defense Logistics Agency (DLA) ensure that the inventory counters do not have access to inventory records during the counts and are sufficiently independent so that the integrity of the counts are not jeopardized. The GAO stated that to address this will require (1) changing the inventory system to better restrict access to on hand quantities before and during the counts, (2) revising the Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP) to emphasize that segregation of duties is an essential control element of the inventory count process, (3) developing written procedures and providing training on how counts are to be organized and performed, and (4) monitoring the physical inventories to ensure that procedures are properly and consistently followed.

DOD RESPONSE: Concur. The Defense Logistics Agency will:

(1) Change the DSS Radio Frequency (RF) count application to ensure the on-hand location balance cannot be accessed while performing inventory counts. In a non-RF environment, the counter's responsibilities will be limited to determining the actual physical on-hand quantity, or count. The count information will then be provided to the Inventory Integrity organization for count entry, application of in-float control and appropriate research. This eliminates any need for the counter to access location balance.

(2) Submit to the Defense Logistics Management Standards Office (DLMSO) a proposed MILSTRAP change that states the physical count process may be conducted by multi-skilled personnel, however, count entry, application of in-float control and pre-adjustment research will be accomplished by the inventory integrity organization.

(3) Ensure that the already developed detailed draft procedures on how to perform counts are officially published and disseminated to all depots. (Training is addressed in our response to Recommendation 2 (1).) The training being provided not only addresses Causative Research but also "count" procedures).

(4) Hold the Depot Commanders responsible for the overall inventory accuracy of their respective depot and for providing adequate management priority and resources for the execution of physical inventory control program functions. The Heads of Inventory Integrity organizations and Accountable Officers will be held responsible for validating compliance with physical inventory policy and procedures, regardless of where in the organization the function is

performed. To ensure compliance, critical elements in their Performance Plans will be revised as necessary.

These actions are estimated to be completed by the end of this fiscal year.

RECOMMENDATION 2: "The GAO recommended that the Under Secretary of Defense (Acquisition and Technology), the Under Secretary of Defense (Comptroller), and the Director, DLA improve accuracy of research and enhance reliability of corrective actions by (1) revising the appropriate policies or procedures to provide detailed instructions on conducting research (including review of transactions which affect the accountable balance (e.g., receipt, issue, adjustment, etc.)); appropriately using error codes; documenting research actions; and accumulating research results, (2) training personnel responsible for research, (3) reviewing and, as appropriate, eliminating error codes that do not identify underlying causes of inventory record variances, and (4) specifying how oversight will be carried out. (p. 34/GAO Report)"

DoD Response: Concur.

(1) Detailed instructions (system-specific DSS research tools and examples) for causative research are in process and should be completed during 4th quarter FY 99.

(2) Initial training by subject matter experts (SME), using case studies, began in April 1999. The Defense Distribution Center (DDC) has tentatively scheduled 3 additional depots for on-site training and operational review beginning June 1999. Team members will prioritize remaining depots based upon a review of performance indicators, to include (but not limited to): sample inventory results, location accuracy, system access parameters, and actual physical inventory adjustments taken.

(3) Training sessions and feedback will assist the Department in identifying and eliminating ambiguous and/or inappropriately structured codes. It must be noted; however, that there may always be a need for "No conclusive findings."

(4) DLA will perform oversight through a combination of (1) periodic trend analysis of causative research results by the DDC and respective depots, and (2) random, unannounced site visits by DDC compliance review teams comprised of oversight personnel and SME. SMEs will examine selected causative research (CR) cases and determine whether: (1) research provided a reliable basis for adjustment decisions, (2) research was well documented, and (3) corrective actions resulted in process changes, where appropriate.

These actions are estimated to be completed by September 30, 2000.

RECOMMENDATION 3: The GAO recommended that the Under Secretary of Defense (Acquisition and Technology), the Under Secretary of Defense (Comptroller), and the Director, DLA ensure that possible theft is properly investigated by (1) monitoring compliance with existing policies and procedures so that research is properly completed in a timely manner, (2) notifying

security offices of significant losses and gains promptly, and (3) establishing appropriate management actions for non-compliance with the policy.

DoD RESPONSE: Concur. The Defense Logistics Agency's Defense Distribution Center will

(1) Monitor depots' causative research age and completion dates, using on-line DSS workload tools.

(2) Complete the drafting of supplemental guidance to accountable offices to ensure that all qualifying physical inventory adjustments which remain unresolved (i.e., will result in a DD Form 200 (FLIPL)) are immediately forwarded to security for appropriate action.

(3) Revise Program Managers' performance standards to include critical elements establishing responsibility for timely completion of causative research ***and*** timely reporting to security. It should be noted; however, that additional "appropriate" management action will depend upon the reason for non-compliance. For example, if the reason were insufficient resources, management may need to address prioritization of workload and allocation of resources

These actions are estimated to be completed by the end of this fiscal year.

RECOMMENDATION 4: The GAO recommended that the Under Secretary of Defense (Acquisition and Technology), the Under Secretary of Defense (Comptroller), and the Director, DLA enhance the sampling methodology to provide an inventory accuracy measure that better reflects the importance of the dollar value and sensitivity of items on hand at each distribution depot for accountability of assets and financial reporting.

DOD RESPONSE: Concur. The Department has not been successful in the development or linkage of one sampling plan to satisfy both the logistics and financial communities' requirements to measure 'accuracy'. Therefore, separate sampling plans have been developed to meet the needs of the two communities. Beginning with the 2nd Quarter FY99 sample, the DLA ***logistics*** sampling plan has been changed to incorporate the DoD stratification and tolerances that provide for a "Variable Line Item Accuracy" measure, giving recognition to dollar value as well as other item characteristics. While this sampling plan satisfies our logistical requirement to measure ***record*** accuracy, it does not satisfy the financial community's requirement to certify the Agency's financial statement. As a result, the DLA ***financial*** sampling plan, which focuses on inventory valuation, was developed in conjunction with the DoD IG statisticians and audit community and will be conducted 4th Quarter FY99.

GAO Contact and Staff Acknowledgements

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