DEPARTMENT OF DEFENSE

JOINT AUDIT REPORT

DEPOT SOURCE OF REPAIR CODE

Report No. 98-155

June 15, 1998

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Acronyms

DLA	Defense Logistics Agency
DLSC	Defense Logistics Services Command
DSOR	Depot Source or Repair
FLIS	Federal Logistics Information System
JLC	Joint Logistics Commanders
NIMSC	Nonconsumable Item Materiel Support Code
PICA	Primary Inventory Control Activity
SICA	Secondary Inventory Control Activity

INSPECTOR GENERAL
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June 15, 1998

MEMORANDUM FOR COMMANDANT, MARINE CORPS
DEPUTY UNDER SECRETARY OF DEFENSE (LOGISTICS)
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT AND COMPTROLLER)
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)
DIRECTOR, DEFENSE LOGISTICS AGENCY
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on the Depot Source of Repair Code (Report No. 98-155)

We are providing this report for your review and comments. The audit was requested by the Joint Logistics Commanders. This joint audit was coordinated by the DoD Joint Logistics Audit Planning Group and conducted by team members from the Inspector General, DoD, and the Army, the Navy, and the Air Force audit organizations. We considered management comments on a draft of this report in preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. Therefore, we request that the Deputy Under Secretary of Defense (Logistics), the Army, the Navy, and the Air Force provide comments on the final report by August 14, 1998.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. James L. Sommer, e-mail sommerj@afaams.wpafb.af.mil, or Mr. Steve C. Houlette, at (937) 257-5429, e-mail houlettes@afaams.wpafb.af.mil. See Appendix C for the report distribution. The audit team members are listed inside the back cover.

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Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. 98-155 **June 15, 1998**
(Project No. 7LD-5032)

Depot Source of Repair Code

Executive Summary

Introduction. Since the early 1960s, the Joint Logistics Commanders have expressed concern about the proliferation of duplicate wholesale functions and facilities. A 1986 study[1] of wholesale level support for friend or foe identification systems identified many multiple repair sources (due to a lack of visibility over other Services' activities) for individual nonconsumable items.[2] To prevent unnecessary duplication, the Joint Logistics Commanders directed DoD logisticians to implement in the Defense Logistics Agency Federal Logistics Information System (FLIS) a depot source of repair (DSOR) code to identify repair sources. The Services accomplish this by inputting DSOR codes into their cataloging systems for transfer to the FLIS. Of 410,308 nonconsumable items recorded in the FLIS as of March 31, 1996, 176,832 items contained DSOR codes and the remaining 233,476 items were not coded.

Objectives. The overall audit objective was to evaluate controls over the DSOR coding process. Specifically, we reviewed the procedures and controls DoD personnel used to ensure accurate code input and transfer to the FLIS.

Audit Results. Of 410,308 nonconsumable items, an estimated 268,104 items (65.3 percent) were inactive. For the remaining active items,[3] an estimated 108,973 items (26.6 percent of 410,308 total items) had erroneous DSOR codes. Consequently, DoD maintenance managers were not always aware of established depot repair capabilities, including duplicate maintenance facilities for 38 of 145 active items reviewed. Finally, approximately $0.5 million of inventory unused in one Service can be transferred to other using Services to reduce planned procurements. See Part I for a discussion of the audit results.

The management controls needed to be improved because we identified a material weakness in the process of inputting and transferring DSOR codes to the FLIS. See Appendix A for details on the management control program.

Summary of Recommendations. We recommend that the Deputy Under Secretary of Defense (Logistics) task the Services to identify requirements that incorporate selected edits into the standardized cataloging system. We also recommend that the Deputy Under Secretary of Defense (Logistics) task the Director, Defense Logistics Agency, in coordination with the Military

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[1] Conducted by the Joint Policy Coordinating Group on Defense Integrated Materiel Management and Depot Maintenance Interservicing, 1986.

[2] Nonconsumable items are items not consumed in use that are economically repairable.

[3] Items with demands, purchases, or repairs within the 2 years preceding the audit.

Departments, to expedite the system changes and other procedures necessary to periodically validate DSOR code accuracy by identifying blank and "99" default codes and update DoD Manual 4100.39-M. We recommend that the Services update the FLIS to reflect accurate inactive and active DSOR code data; establish a requirement to periodically validate DSOR code accuracy; and train all personnel involved in the DSOR coding process. We recommend that the Army and the Navy correct translation deficiencies for the repair codes in their cataloging systems and that the Air Force and the Marine Corps develop Service specific guidance for DSOR coding and cataloging. Finally, we recommend that the Joint Logistics Commanders task the Joint Policy Coordinating Group on Depot Maintenance to analyze maintenance facility duplication for individual items.

Management Comments. The Acting Deputy Under Secretary of Defense (Logistics) concurred with the recommendations stating that the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management) will task the Services and Defense Logistics Agency to implement the recommendations. The Defense Logistics Agency stated that a requirement exists to validate DSOR code accuracy, but to accomplish that the Services must provide updated data faster. The Army concurred with the intent of the recommendations, stating that changes in process to its automated system should correct the vast majority of problems identified in the audit. The Army stated that retraining would not be required because it is changing the automated system logic to correctly update the DSOR codes. The Navy concurred with the recommendations, stating that it will work with the Defense Logistics Services Command to develop methods to correct existing active items. The Navy also stated that specific training deficiencies would be addressed as they appeared. The Air Force did not comment on a draft of this report. The Marine Corps concurred with the recommendations, stating that it implemented service-specific guidance and procedures for manual DSOR coding and cataloging. The Army member of the Joint Logistic Commanders Joint Secretariat concurred with the recommendation to analyze maintenance facility duplication, stating that the Joint Policy Coordinating Group would be required to develop a plan of action and provide periodic reports to the Joint Secretariat.

Audit Response. Based on Defense Logistics Agency comments, we revised the recommendations to the Deputy Under Secretary by tasking the Defense Logistics Agency to coordinate with the Military Departments to expedite the update of the guidance and system changes necessary for validating DSOR code accuracy. Comments from the Acting Deputy Under Secretary were responsive; however, he did not provide completion dates for the recommendations. Comments from the Army were partially responsive. It did not address requirements to train personnel who update DSOR codes manually. Comments from the Navy were partially responsive. The Navy did not provide specific details and completion dates for correcting training deficiencies. Neither the Army nor the Navy adequately addressed deletion of inactive items. The Joint Logistics Commanders did not provide completion dates for the plan of action and overall milestones. Therefore, we request that the Deputy Under Secretary of Defense (Logistics), the Army, the Navy, the Air Force and the Joint Logistics Commanders provide comments on the final report by August 14, 1998.

Table of Contents

Executive Summary i

Part I - Audit Results

Audit Background 2
Audit Objectives 3
Depot Source of Repair Code Accuracy 4

Part II - Additional Information

Appendix A. Audit Process
Scope and Methodology 16
Management Control Program 17
Summary of Prior Coverage 17
Appendix B. Sample Selection 18
Appendix C. Report Distribution 20

Part III - Management Comments

Acting Deputy Under Secretary of Defense (Logistics) Comments 24
Joint Logistics Commanders Secretariat Comments 25
Department of the Army Comments 26
Department of the Navy Comments 31
Defense Logistics Agency Comments 36

Part I - Audit Results

Audit Background

This report discusses depot source of repair (DSOR) code processing controls over nonconsumable items. Nonconsumable items are items not consumed in use that are economically repairable. These include major end items (such as test equipment) and depot repairable components. The Joint Logistics Commanders (JLC) requested this audit because of their concerns that the Services' inability to accurately code DSOR data had contributed to the Services independently developing duplicate repair sources for nonconsumable items, which resulted in potentially uneconomical and inefficient depot maintenance infrastructure. Inefficiencies increase asset repair prices, use more operations and maintenance funds, and reduce the Services' purchasing power.

In 1973, the JLC established the Joint Policy Coordinating Group on Defense Integrated Materiel Management and Depot Maintenance Interservicing to eliminate duplicate wholesale management functions (budgeting, cataloging, disposal, maintenance, procurement, requirements computation, and wholesale stockage) for nonconsumable items used by more than one Service. In 1974, the Deputy Secretary of Defense directed the Services to start the consolidation process, and the JLC in turn directed the Services to develop a two-phased program.

Phase I was to identify all nonconsumable items used by two or more Services and to assign each item a single manager. Materiel management responsibility was to be weighed heavily in favor of the Service having the most significant technical and depot maintenance capability supporting the item.

Phase II was to consolidate under the single manager the wholesale logistics functions of asset accountability, depot maintenance, overhaul requirements computation, and replacement. Specifically, Phase II included assigning each item to a primary inventory control activity (PICA), with all other users becoming secondary inventory control activities (SICAs) for that item. SICAs would provide PICAs with DSOR codes and PICAs would input both PICA and SICA derived codes into the Federal Logistics Information System (FLIS), a database maintained by the Defense Logistics Agency (DLA).

The JLC established the Joint Depot Maintenance Program to maintain the minimum infrastructure necessary to meet depot repair requirements. To test the program, in 1986, the Joint Policy Coordinating Group on Defense Integrated Materiel Management and Depot Maintenance Interservicing evaluated wholesale level support for friend or foe identification systems.

Analysts found widespread disregard of repair source assignments resulting in numerous redundant maintenance facilities. The Services explained that establishing redundant facilities often resulted from a lack of visibility of other Services' maintenance activities. Therefore, the JLC directed a DLA activity, the Defense Logistics Services Command (DLSC), the Joint Depot Maintenance Analysis Group, and the Services to establish the DSOR coding requirement. The DSOR coding requirement was later included in the joint Army, Navy, Air Force, and Marine Corps regulation, "Wholesale Inventory Management and Logistics Support of Multiservice Used Nonconsumable Items,"[1] April 27, 1990, and DoD Manual 4100.39-M, "FLIS Procedures Manual," January 1995. The 1991 DSOR code implementation required the Services to develop processes and procedures to ensure code input for each newly acquired item and current inventory assets requiring depot repair. Subsequent to the initial DSOR code update, codes requiring manual input were often left blank.

The DSOR coding was to be transferred from the Service cataloging systems to the FLIS maintained by DLA. DoD plans to modify the Service cataloging systems by consolidating them into one standard, centralized system that the DLA Cataloging and Standardization Center at Battle Creek, Michigan, will operate. DoD is early in the conceptualization phase of the consolidation; therefore, a system implementation date has not been established.

This audit supports the National Performance Review goal of encouraging actions that minimize cost growth in major defense acquisition programs to no greater than 1 percent annually, by helping to preclude the establishment of redundant maintenance infrastructure. The audit also supports the DoD strategic logistics goal of streamlining logistics infrastructure by reducing weapon system ownership costs.

Audit Objectives

The overall audit objective was to evaluate controls over the DSOR coding process. Specifically, we reviewed the procedures and controls DoD personnel used to ensure accurate code input and transfer to the FLIS. Appendix A of this report provides details on our scope, methodology, and the management control program and summarizes prior audit coverage.

[1] Army Materiel Command Regulation 700-99, Naval Supply Systems Command Instruction 4790.7, Air Force Materiel Command Regulation 400-21, and U.S. Marine Corps Order P4410.22C.

Depot Source of Repair Code Accuracy

Of 410,308 nonconsumable items recorded in the FLIS, an estimated 268,104 items (65.3 percent) were inactive. For the remaining active items, an estimated 108,973 items (26.6 percent of 410,308 total items) had erroneous DSOR codes. The codes were inaccurate because procedures and controls that DoD personnel used to ensure accurate code input and transfer to the FLIS were not adequate. Specifically,

- edits for FLIS and Service cataloging systems did not prevent some erroneous DSOR codes from transferring to the FLIS,

- DoD Manual 4100.39-M did not contain all the necessary depot repair location codes,

- the Army and Navy cataloging systems contained coding translation deficiencies,

- the Services did not establish a requirement to periodically validate FLIS DSOR code accuracy,

- the Services did not properly train personnel in the DSOR coding process,

- the Air Force and Marine Corps did not develop Service-specific guidance for manual DSOR coding and cataloging, and

- the Services were classifying items inconsistently.

As a result, DoD maintenance managers did not have available the data necessary to identify potential duplicate repair facilities and resource inefficiencies. In addition, approximately $0.5 million of inventory unused in one Service could be transferred to other Services to reduce planned procurements.

Policies and Procedures

As new items are cataloged into the DoD supply system, a source of repair for nonconsumable items should be identified. The joint Service regulation requires the maintenance interservice support management officer within each Service to provide DSOR codes to the PICA manager for FLIS input through the Service cataloging system to reflect the authorized source of repair. PICA item managers also input SICA-derived DSOR codes. DoD Manual 4100.39-M, volume 10, table 117, lists the DSOR codes that the Services use to identify depot repair organizations.

DSOR Coding Process

The FLIS included inactive and active items with inaccurate DSOR codes. Of 410,308 nonconsumable items recorded in the FLIS, an estimated 268,104 items (65.3 percent) were inactive. For the remaining active items, an estimated 108,973 items (26.6 percent of 410,308 total items) had erroneous DSOR codes (see Appendix B for sampling plan and results).

Inactive and erroneous DSOR coded items occurred in all (frequently in some) Services (see Table 1). Erroneous codes were the responsibility of the managing Service (that is, PICAs were responsible for entering their codes and the SICA-derived codes). We evaluated the FLIS DSOR codes using 250 sampled items, both random and judgmental, to determine the causes for erroneous inputs of inactive and active items for each of the Services. The mathematical outcome of the samples for each of the Services shown in the following analyses are for discussion purposes only and cannot be statistically projected to the universe of items in each of the Services.

Table 1. Inactive and Active Items*

		Active DSOR Items		
Service	Inactive Items	Correct DSOR Codes	Erroneous DSOR Codes	Total Items Reviewed
Army	32	22	40	94
Navy	86	2	37	125
Air Force	79	39	31	149
Marine Corps	10	6	24	40
Totals*	**207**	**69**	**132**	**408**

* Includes random and judgmentally sampled items; many of the items were used by more than one Service.

Erroneous codes occurred because the procedures and controls that DoD personnel used to ensure accurate code input and transfer to the FLIS were not adequate. Specifically, neither FLIS nor Service cataloging systems prevented unassigned DSOR codes from transferring to the FLIS, DoD Manual 4100.39-M did not contain all the necessary depot repair location codes, the Army and Navy cataloging systems had coding translation deficiencies, none of the Services established a requirement to periodically validate FLIS DSOR code accuracy, the Services were not training personnel in the coding process, and the Air Force and Marine Corps had not developed Service-specific guidance for manual DSOR coding and cataloging.

Automated and Manual DSOR Coding

The Services used two approaches to input source of repair codes into their cataloging systems for FLIS updates. The two approaches were automated coding and manual coding.

Automated DSOR Coding Process. Coding translation deficiencies of the Army and the Navy cataloging systems contributed to coding problems. The Army and the Navy used an automated translation process under which item managers input Service unique PICA repair codes into the cataloging systems. The systems would automatically translate codes into the DSOR codes for FLIS transfer. That approach was effective only for PICA data. Item managers still needed to manually input SICA-derived DSOR codes directly into the FLIS.

Army DSOR Coding. We reviewed 94 Army sample items, 62 active and 32 inactive. In the sample of 94 items were 22 active items and 17 inactive items that had correct FLIS DSOR codes. The remaining sample items had erroneous FLIS DSOR codes, 40 active items and 15 inactive items. Of the 55 erroneous active and inactive items, 44 were erroneous Army PICA inputs and the remaining 11 were Army-used items (that is, the Army was the SICA) with erroneous inputs by other PICAs. Army item managers inputted a routing identifier code for repair into the cataloging system, the Commodity Command Standard System. The system translated the routing identifier code for repair into the two-character DSOR code identifying the depot repair site, then transfered the code to the FLIS.

Several factors can cause an erroneous FLIS DSOR code. First, the Army cataloging system did not contain edits to prevent an inaccurate code "99" from transferring to the FLIS. If system translation deficiencies prevent the Army cataloging system from creating a valid DSOR code, the system will, by default, assign an inaccurate code "99" (unassigned repair source) and transfer the unassigned code to the FLIS. Second, FLIS edits allowed item managers to enter nonconsumable item materiel support codes (NIMSC)[2] indicating that depot maintenance was being retained without requiring an associated DSOR code to be entered into the system.

Third, DSOR codes in DoD Manual 4100.39-M, volume 10, table 117, were not updated and did not contain all the necessary DSOR codes. For example, when base closures or realignments changed repair locations, the Manual was not updated. Such an instance happened at the U.S. Army Communications-Electronics Command Security Logistics Activity. The Activity had listed the Lexington Bluegrass Army Depot as the FLIS repair location. DoD downsizing

[2] The NIMSC identifies PICA and SICA managers and asset support relationships. NIMSC "1" indicates items used by the SICA, whereby both the SICA and PICA repair the item. NIMSC "2" indicates assets where the SICA cannot use the repaired item, yet both the PICA and SICA repair the item.

closed that depot and transferred the work load to the Tobyhanna Army Depot. The DLA organization responsible for the Manual, the DLSC, did not revise the Manual to reflect the new repair location.

When an item manager at the Activity manually corrected the code by later adding the routing identifier code for repair to the Army cataloging system, the system converted the code to a DSOR code and automatically transferred it to the FLIS. Although the code was corrected in this instance, the update process was not always accomplished. Personnel at the Army Logistics Systems Support Center said the conversion process often failed, but they could neither explain why the translator system did not update the repair code nor produce documentation explaining how the update should operate. Those problems were exacerbated by personnel not periodically validating DSOR codes because guidance[3] did not require such validation, and because personnel were not trained to perform the validation. For example, the Army was the PICA on a position and azimuth determination equipment item with FLIS DSOR code "99." The Marine Corps was a SICA for the item, and because it had not assigned a repair location, the FLIS DSOR code "99" entered into the system was correct for the Marine Corps. However, a contractor repaired the item for the Army. Because of system translator problems and because personnel were not periodically validating the codes, the Army PICA had not identified the error. DoD possibly could save funds by sending the Marine Corps assets to the Army contractor for repair.

Navy DSOR Coding. We reviewed 125 Navy sample items, 39 active and 86 inactive. In the sample of 125 items were 2 active items and 5 inactive items that had correct FLIS DSOR codes. The remaining sample items had erroneous FLIS DSOR codes, 37 active items and 81 inactive items. Of the 118 erroneous active and inactive items, 55 were erroneous Navy PICA inputs and the remaining 63 were Navy-used items (that is, the Navy was the SICA) with erroneous inputs by other PICAs. For Navy PICA items, cataloging or systems personnel inputted a six-character unit identification code into the cataloging system, the Repairables Management File. The system translated the identification code into the two-character DSOR code identifying the depot repair site, then transferred the code to the FLIS.

Several factors can cause an erroneous FLIS DSOR code. If system translation deficiencies prevent the Repairables Management File from creating a valid DSOR code, then the system will assign code "99" and transfer it to the FLIS. Erroneous coding occurred often because the Navy had not revised the logic table of the cataloging system that related unit identification and DSOR codes since the system's 1990 implementation. A correction or update to the cataloging system did not automatically update the FLIS; a cataloging transaction (which personnel did not always perform) was required. Finally, the Repairables Management File did not contain system edits to prevent an erroneous[4] code "99" from transferring to the FLIS and the FLIS did not

[3] Army Materiel Command Regulation 700-99.

[4] The only valid DSOR code "99" occurs for items lacking depot repair facility assignments.

contain an edit to prevent it from accepting erroneous codes. For example, the Navy was the PICA on an amplifier that had an incorrect FLIS DSOR code "99." The code was incorrect because we determined that a Navy depot repaired the item. The Air Force SICA DSOR code correctly identified the Navy depot, but the item was obsolete in the Air Force and had no recent activity. Although the Air Force had identified the correct DSOR code, the FLIS was inaccurate because a correction or update to the Navy cataloging system did not occur.

Manual DSOR Coding Process. The Air Force and Marine Corps did not develop Service-specific guidance for manual DSOR coding and cataloging. The Air Force and the Marine Corps used a manual coding process under which item managers input DSOR code data into the Service cataloging systems, rendering code conversion unnecessary. Item managers also entered the SICA-derived DSOR codes.

Air Force DSOR Coding. We reviewed 149 Air Force sample items, 70 active and 79 inactive. In the sample of 149 items were 39 active items and 30 inactive items that had correct FLIS DSOR codes. The remaining sample items had erroneous FLIS DSOR codes, 31 active items and 49 inactive items. Of the 80 erroneous active and inactive items, 50 were erroneous Air Force PICA inputs and the remaining 30 were Air Force-used items (that is, the Air Force was the SICA) with erroneous inputs by other PICAs. For Air Force PICA items, item managers; equipment specialists; or program managers inputted the two-character DSOR code into the cataloging system, the Master Item Identification Control System. The System transferred the DSOR code to the FLIS. In Air Force cataloging, system edits require managers to input a DSOR code to complete the process.

Most Air Force managers we dealt with were not familiar with DSOR coding and its ramifications because they had insufficient guidance and training. Consequently, the Air Force managers usually input code "99" for items to bypass the system edit. For example, the Air Force was the PICA on a J85-21 engine fuel control. Although a contractor repaired the item for the Air Force, the FLIS DSOR code had been incorrectly input as a code "99." The Navy SICA DSOR code for the engine fuel control was also incorrectly coded as "99." The code was incorrect because the Navy sent the asset to the same contractor as the Air Force and to an Air Force depot for repair.

Marine Corps DSOR Coding. We reviewed 40 Marine Corps sample items, 30 active and 10 inactive. In the sample of 40 items were 6 active items and 3 inactive items that had correct FLIS DSOR codes. The remaining sample items had erroneous FLIS DSOR codes, 24 active items and 7 inactive items. Of the 31 erroneous active and inactive items, 2 were erroneous Marine Corps PICA inputs and the remaining 29 were Marine Corps-used items (that is, the Marine Corps was the SICA) with erroneous inputs by other PICAs. The two erroneous codes were for items only the Marine Corps used. For Marine Corps PICA items, item managers, equipment specialists, or weapon system managers input the two-character DSOR code into the cataloging system, the Technical Data Management System. The System transfers the DSOR code to the FLIS.

The Marine Corps cataloging system contained no system edits to ensure that DSOR codes were input into the system correctly. Further, most Marine Corps managers we dealt with were not familiar with DSOR coding and its

ramifications because they had insufficient guidance and training. Consequently, both items, for which the Marine Corps was the PICA were input into its cataloging system incorrectly. For 29 of the remaining 38 items, as a SICA the Marine Corps was forwarding incorrect DSOR code data to the PICA. For example, the Army was the PICA on a Dragon Missile electronic component assembly and had correctly coded the FLIS with the Army depot repair location. The Marine Corps SICA DSOR code reflected an incorrect Army depot repair location. Nevertheless, the Marine Corps sent the asset to the correct Army depot for repair, which was different than the SICA DSOR code.

Duplicate Maintenance Facilities

DoD maintenance planners were not always aware of established depot repair capabilities; therefore, duplicate maintenance facilities existed for 38 (26 percent) of 145 active items[5] reviewed. For example, the Air Force was the PICA on a sleeve bearing with FLIS DSOR code "99"; and an Air Force depot repaired the item. The Navy SICA DSOR code field was blank for the same item and the Navy sent the item to a contractor for repair. Because of the incorrect code and the missing code for the same item, managers in either Service would not be aware of the duplicate maintenance facilities.

Item Classification

In all Services, asset managers did not consistently classify items as consumable or nonconsumable during the cataloging process. For example, for 22 (see Table 2) of our 250 random and judgmental sample items, items classified as consumable in some Services, but nonconsumable in other Services, were not visible to all users. That lack of visibility resulted in inefficient use of resources because Services planned to dispose of about $540,000 of assets[6] that other Services could repair and use. For example, the Air Force managed a nonconsumable item, TF33/999E engine compressor blade with FY 1997 purchase requirements of 748 assets, valued at $137,410. The Navy managed the same item as a consumable J57 engine component that was retired in 1991. Although the Navy still held sufficient quantities of the item to satisfy the Air Force requirement, it was planning to dispose of the asset. As a result of our audit, the Navy transferred the required assets, and additional assets, valued at $540,000 to the Air Force. The Navy had total assets valued at $6.5 million that it planned to dispose that other Services could use or repair. After

[5] During the audit, we provided a list of the 38 items to the Joint Policy Coordinating Group on Depot Maintenance.

[6] During the audit, we provided a list of the $540,000 of assets that could be repaired and used to the Services.

transferring the $540,000 worth of assets to the Air Force, the Navy still retains almost $6 million of serviceable J57 engine components that the Air Force could use on its active TF33 engine.

Table 2. Services Inconsistently Classified Items

Service Classified Items as Consumable	Service Classified Items as Nonconsumable			
	Army	Navy	Air Force	Marine Corps
Army	0	0	0	0
Navy	2	0	13	1
Air Force	1	2	0	1
Marine Corps	3	0	0	0
Total*	**6**	**2**	**13**	**2**

* The total exceeds 22 because one item was classified differently in more than one Service.

As shown above, the Navy classified two items as consumables that were considered nonconsumables in the Army.

Summary

Improvements are needed in controls over the DSOR coding process and maintenance of the data base. Of 410,308 nonconsumable items recorded in the FLIS, an estimated 268,104 items (65.3 percent) were inactive. Inactive items are candidates for review and deletion. For the remaining active items, an estimated 108,973 items (26.6 percent of 410,308 total items) had erroneous DSOR codes. Accurate DSOR coding can help DoD maintenance managers identify potential duplicate maintenance facilities and reduce or eliminate resource inefficiencies. By improving guidance, data system procedures, and training, DoD can enhance the DSOR coding process.

Management Actions

During the audit, DLSC systems personnel were working on a systems change to enhance FLIS edits to ensure the system accepts only DSOR code "99" for those situations in which depot repair has not been established. DLSC advised us that it implemented the change on October 1, 1997. DLSC personnel also expressed a willingness and desire to work with the Services to update the FLIS data similar to a 1994 DLSC data cleanup on asset demilitarization codes.

Additionally, during the audit, Air Force managers requisitioned serviceable assets from the Navy that the Navy was planning to dispose. The Air Force then canceled its pending purchase of those assets and realized $540,000 in monetary benefits.

Recommendations, Management Comments, and Audit Response

Revised Recommendations. Based on comments from DLA, we revised Recommendations 2.a. and 2.b.

1. We recommend that the Deputy Under Secretary of Defense (Logistics) task the Services to identify requirements that incorporate selected edits into the standard cataloging system being designed. The edits should:

a. Limit valid depot source of repair (DSOR) code "99" to those situations in which depot repair has not been established.

b. Require managers to input a DSOR code for all items with repair sources.

2. We recommend that the Deputy Under Secretary of Defense (Logistics) task the Director, Defense Logistics Agency, in coordination with the Military Departments, to expedite the:

a. Update of DoD Manual 4100.39-M, table 117, with correct depot repair location codes.

b. System changes or other procedures necessary to periodically validate DSOR code accuracy by identifying blank codes or code "99" and referring the items to Service maintenance interservice support management officers for correction.

Acting Deputy Under Secretary of Defense (Logistics) Comments. The Acting Deputy Under Secretary of Defense (Logistics) concurred, stating that the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management) will task the Services and DLA to implement the recommendations. His office will provide details concerning completion dates after completion of necessary planning.

Defense Logistics Agency Comments. Concerning Recommendation 2.a., DLA stated that the DSOR codes in Table 117 are not used to identify the repair source for national stock numbered items. The DSOR codes are used to identify authorized depot sources of repair that item managers use for cataloging in the FLIS. DoD Manual 4100.39-M requires the Military Services' Maintenance Interservice Support Offices to keep DSOR codes updated. The DLA Defense Logistics Information Service updates the DoD Manual and the FLIS from the

changes submitted by the Services and the Joint Depot Maintenance Analysis Group. Consequently, the Services need to accelerate their actions to update codes so DLA can correct erroneous codes in the FLIS and DoD Manual.

Concerning Recommendation 2.b., DLA stated that the requirement to periodically validate DSOR code accuracy by identifying blank codes or code "99" for referral to the Services for correction already exists. A system change request was initiated in 1988 to made necessary system changes to the FLIS and actions are ongoing to accomplish all the changes in the system change request. Completion dates for the remaining changes cannot be estimated and DLA recommended the recommendation be dropped.

Audit Response. We revised Recommendations 2.a. and 2.b., based on DLA comments. However, we believe Recommendation 2.b. is still valid because the system changes have not been completed and the problems from erroneous DSOR codes will not be corrected. Consequently, we request that the Deputy Under Secretary of Defense (Logistics) provide additional comments on Recommendations 2.a. and 2.b. and the estimated completion dates for Recommendations 1.a., 1.b., 2.a., and 2.b. in response to the final report.

3. We recommend that the Commanders, Army Materiel Command, Naval Supply Systems Command, and Air Force Materiel Command, and the Marine Corps Deputy Chief of Staff (Installations and Logistics):

a. Coordinate with the Defense Logistics Services Command to develop a systems capability to update the Federal Logistics Information System by deleting inactive items and correcting all erroneous data for remaining active items.

b. Establish a requirement to periodically validate DSOR code accuracy.

c. Train all personnel involved in the DSOR coding process to input DSOR codes accurately and timely and perform DSOR code validation.

Army Comments. The Army concurred with the intent of the recommendations. It stated that erroneous data in the DoD Manual was revised, the modification of the DSOR validation routine was completed, and system changes to complete the edit modifcation process are targeted for completion by the second quarter in FY 1999. The Army will delete the inactive items through the normal Defense Inactive Item Program because other means would be inefficient. The Army further stated that because its system logic is being changed to update the DSOR, retraining is unnecessary.

Audit Response. Comments from the Army are generally responsive. The normal Defense Inactive Item Program may be an efficient method for deleting inactive items. However, the Army ineffectively utilized the Program in the past as indicated in our audit sample, whereby, 32 of 94 of our sampled items were inactive and had not been deleted. Concerning the need to retrain personnel in the DSOR coding process, our audit indicated that SICA-derived DSOR codes were manually input into the FLIS. Consequently, the Army system changes may correct automated errors but would have no affect on manual DSOR coding. Therefore, we continue to believe that those personnel required for manual DSOR coding should receive appropriate training to

increase the potential for accurate DSOR codes entered into the FLIS. We request that the Army provide an estimated completion date for eliminating inactive items and provide additional comments on the need to train personnel in the DSOR coding process in response to the final report.

Navy Comments. The Navy concurred, stating that it will work with DLSC in developing a cost-effective method for correcting existing active items and Navy representatives to the Joint Depot Maintenance Analysis Group will provide the necessary data to eliminate the erroneous codes. Additionally, systems development for intra-Navy interfaces and programming changes needed to periodically validate DSOR codes will be completed in July 1999. Further, the Navy will address specific deficiencies in training personnel as they appear.

Audit Response. The Navy comments were generally responsive. The Navy did not address any action for deleting inactive items. Also, the Navy did not provide sufficient information on training personnel in the DSOR coding process and a completion date for that action. We request that the Navy provide additional comments on deleting inactive items and more specific details on training personnel and the estimated completion dates in response to the final report.

Air Force Comments. The Air Force did not provide comments on a draft of this report. Therefore, we request that the Air Force provide comments in response to the final report.

Marine Corps Comments. The Marine Corps concurred, stating that it will pursue the development and incorporation of a systems capability in Phase III of the Asset Tracking for Logistics and Supply System to update the FLIS that is expected to be completed December 31, 2000. Additionally, the Marine Corps was required in August 1997 to conduct file maintenance with periodic reviews to ensure assigned DSOR codes remain current. Finally, the Marine Corps has implemented semiannual DSOR training sessions for all equipment specialist/provisioners, weapon system managers, catalogers, and item managers.

4. We recommend that the Commanders, Army Materiel Command and Naval Supply Systems Command, correct deficiencies in their cataloging systems for translating repair codes.

Army Comments. The Army concurred. It stated that it has initiated a two-phased program that implemented tables in the revised DoD Manual 4140.39-M and modified the DSOR valid edit routine. It will also complete the edit modification process through system changes to its automated system. Phase I has been completed and the target completion date for Phase II is the second quarter of FY 1999.

Navy Comments. The Navy concurred. It stated that deficiencies in the cataloging system for translating repair codes were corrected with changes to the Data Interchange Program that were mandated by DLSC and were implemented October 1, 1997.

5. We recommend that the Commander, Air Force Materiel Command and the Marine Corps Deputy Chief of Staff (Installations and Logistics) develop Service-specific guidance for manual DSOR coding and cataloging.

Air Force Comments. The Air Force did not provide comments on a draft of this report. Therefore, we request that the Air Force provide comments in response to the final report.

Marine Corps Comments. The Marine Corps concurred, stating that the recommendation was implemented in Commander, Marine Corps Logistics Bases Policy Statement 11-97, "Assignment of Depot Source of Repair (DSOR) Codes," August 5, 1997. The policy provides service-specific guidance and procedures for manual DSOR coding and cataloging.

6. We recommend that the Joint Logistics Commanders task the Joint Policy Coordinating Group on Depot Maintenance to analyze maintenance facility duplication identified in this audit for potential workload consolidation.

Joint Logistics Commanders Comments. The Army member of the Joint Logistic Commanders Joint Secretariat concurred, stating that the Joint Policy Coordinating Group would be required to develop a plan of action with milestones and to provide the status of work on this task in periodic reports to the Joint Secretariat.

Audit Response. We request that the Joint Logistics Commanders provide the estimated completion dates for the plan of action and overall milestones in response to the final report.

Part II - Additional Information

Appendix A. Audit Process

Scope and Methodology

We reviewed DoD and Service policies and procedures for assigning and inputting DSOR codes into Service cataloging systems and the FLIS. To determine DSOR code accuracy, we visited 24 Army, Navy, Air Force, and Marine Corps inventory control points. At those locations, we interviewed inventory managers, maintenance interservice support management officers, equipment specialists, cataloging system managers, and training personnel. We sampled 250 of 410,308 nonconsumable DoD items as of March 31, 1996, and compared DSOR codes in Service cataloging systems with the FLIS DSOR codes. In addition, we interviewed Joint Depot Maintenance and Analysis Group personnel to understand the coding process within DoD maintenance organizations. Detailed sample information is in Appendix B.

DoD-wide Corporate Level Government Performance and Results Act (GPRA) Goals. In response to the GPRA, DoD established 6 DoD-wide corporate level performance objectives and 14 goals for meeting these objectives. This report pertains to achievement of the following objective and goal.

> **Objective:** Fundamentally reengineer DoD and achieve 21st century infrastructure. **Goal:** Reduce costs while maintaining required military capabilities across all DoD mission areas. **(DoD-6)**

DoD Functional Area Reform Goals. Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following functional area objectives and goals.

- **Logistics Functional Area. Objective:** Develop a seamless logistics system. **Goal:** Improve the communication of logistics information (developing and implementing an integrated data environment to expand Electronic Data Interface, and enhance information exchange with DoD, with industry, other government agencies, and with allies). **(LOG-2.2)**

- **Logistics Functional Area. Objective:** Streamline logistics infrastructure. **Goal:** Implement most successful business practices (resulting in reductions of minimally required inventory levels). **(LOG-3.1)**

General Accounting Office High Risk Area. The General Accounting Office has identified several high risk areas in the DoD. This report provides coverage of the Defense Infrastructure and Defense Inventory Management high risk areas.

Use of Computer-Processed Data. We selected sample data from the FLIS without reviewing the system's general and application controls. As discussed in this report, the FLIS contained significant inaccurate DSOR coding.

Audit Type, Dates, and Standards. This economy and efficiency audit was conducted from April through November 1997. The audit was conducted in accordance with auditing standards issued by the Comptroller General of the United States, and accordingly, included such tests of internal controls as were considered necessary.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available upon request.

Management Control Program

DoD Directive 5010.38, "Management Control Program," August 26, 1996, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of Review of Management Controls. The audit evaluated the adequacy of Service controls over the DSOR coding process. Specifically, we evaluated the controls that the Services used to input DSOR codes into the Service cataloging systems that transfer the codes to the FLIS.

Adequacy of Management Controls. The audit identified material internal control weaknesses as defined by DoD Directive 5010.38. Management controls were not adequate to ensure that the Service DSOR coding process was accurate. Specifically, all Services had erroneous FLIS DSOR codes. All recommendations, if implemented, should correct the identified weaknesses. We identified potential monetary benefits of $0.5 million in reduced procurements by transferring unused inventory between the Services. A copy of this report will be provided to the senior officials in charge of management controls in the Office of the Secretary of Defense and the Services.

Adequacy of Management's Self-Evaluation. Management at the Services' inventory control points did not identify the accuracy of FLIS DSOR codes as an assessable unit; therefore, they did not identify or report the material management control weaknesses identified by the audit.

Summary of Prior Coverage

No prior coverage has been done in the last 5 years.

Appendix B. Sample Selection

Sampling Plan

Sampling Purposes. In support of this audit, the purposes of the statistical sampling were to provide quantitative estimates of the percentage and number of items that were active and had erroneous DSOR codes, and also the percentage and number of items that were inactive.

Sampling Frame. The original frame for our statistical sampling included 410,308 nonconsumable items in the FLIS universe as of March 31, 1996. Subsequently, 50 items were removed from the statistical frame and audited judgmentally.

Sampling Design. Stratified sampling was used for this audit. Strata were defined operationally in terms of Service-use, Service-repair, and DSOR code categories with different anticipated percentages of erroneous DSOR coding (see Table B.1).

Table B.1. Sample Stratification

Strata	Risk	Definition	Universe Size	Percent	Random Sample Size	Judgmental Sample Size
1	High	Multiple Service use and repair; DSOR code 99 or blank	3,928	1.0	30	30
2	High	Multiple Service use and repair; other DSOR codes	1,021	0.2	30	10
3	High-Medium	Multiple Service use; single repair source; DSOR code 99 or blank	41,448	10.1	30	10
4	Medium	Multiple Service use; single repair source; other DSOR codes	0	0	0	0
5	Medium-Low	Single Service use; multiple or single repair source; all DSOR codes	327,860	79.9	80	0
6	Low	Single Service use and repair; other DSOR codes	36,051	8.8	30	0
Total			**410,308**		**200**	**50**

Sample Results

We calculated statistical estimates of percentages and the number of inactive and active items with DSOR errors from the sample data, as shown in Table B.2.

Table B.2. Sample Results

	95-Percent Confidence Intervals		
Inactive Items	Lower Bound	Point Estimate	Upper Bound
Percent	57.6	65.3	73.1
Number	236,353	268,104	299,854
Active Items with Incorrect DSOR Codes			
Percent	18.7	26.6	34.4
Number	76,920	108,973	141,025

With 95 percent confidence, the percentage of active items with incorrect DSOR codes in the universe (sampling frame) defined above is from 18.7 percent to 34.4 percent. With the same confidence level, the number of those active items with DSOR errors is from 76,920 to 141,025. The point estimates, 26.6 percent and 108,973 items, respectively, are the statistically best unbiased single value estimators of the universe values for active items with incorrect DSOR codes.

With 95 percent confidence, the percentage of inactive items in the universe (sampling frame) defined above is from 57.6 percent to 73.1 percent. With the same confidence level, the number of those active items with DSOR errors is from 236,353 to 299,854. The point estimates, 65.3 percent and 268,104 items, respectively, are the statistically best unbiased single value estimators of the universe values for inactive items.

Appendix C. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
- Deputy Under Secretary of Defense (Logistics)
  - Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management)
  - Assistant Deputy Under Secretary of Defense (Maintenance, Policy, Programs, and Resources)
- Director, Defense Logistics Studies Information Exchange

Under Secretary of Defense (Comptroller)
- Deputy Chief Financial Officer
- Deputy Comptroller (Program/Budget)

Assistant Secretary of Defense (Public Affairs)

Department of Army

Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Director, Dudley Knox Library, Naval Post Graduate School
Auditor General, Department of the Navy

Marine Corps

Commandant, Marine Corps

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, National Security Agency
  Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency

Non-Defense Federal Organizations and Individuals

Office of Management and Budget
General Accounting Office
  National Security and International Affairs Division
    Technical Information Center

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

  Senate Committee on Appropriations
  Senate Subcommittee on Defense, Committee on Appropriations
  Senate Committee on Armed Services
  Senate Committee on Governmental Affairs
  House Committee on Appropriations
  House Subcommittee on National Security, Committee on Appropriations
  House Committee on Government Reform and Oversight
  House Subcommittee on Government Management, Information, and Technology, Committee on Government Reform and Oversight
  House Subcommittee on National Security, International Affairs, and Criminal Justice, Committee on Government Reform and Oversight
  House Committee on National Security

Part III - Management Comments

Acting Deputy Under Secretary of Defense (Logistics) Comments

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

ACQUISITION AND TECHNOLOGY

01 APR 1998

MEMORANDUM FOR THE INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE
(ATTN: DIRECTOR, READINESS AND LOGISTICS SUPPORT)

THROUGH: CHIEF, CONGRESSIONAL ACTIONS AND INTERNAL REPORTS 4/10/98

SUBJECT: Audit Report on the Depot Source of Repair Code (Project No. 7LD-5032)

Your memorandum of February 27, 1998 requested that we review and comment on the draft audit report on the depot source of repair code.

We concur with the findings and recommendations of the audit.

Recommendations 1 and 2 were identified in the report for action by the Deputy Under Secretary of Defense (Logistics). Upon issuance of the final audit report, the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management) will initiate actions to task the Services and the Defense Logistics Agency to implement these two recommendations. Details concerning completion dates will be provided at a later date after completion of necessary planning.

Roy R. Willis
Acting Deputy Under Secretary
of Defense (Logistics)

cc:
CMC
ASN(FM&C)
ASAF(FM&C)
Auditor General, DA
Director, DLA

Joint Logistics Commanders Secretariat Comments

DEPARTMENT OF THE ARMY
HEADQUARTERS US ARMY MATERIEL COMMAND
5001 EISENHOWER AVE., ALEXANDRIA, VA 22333-0001

DEPARTMENT OF THE NAVY
DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)
WASHINGTON, DC 20350-2000

DEPARTMENT OF THE NAVY
HEADQUARTERS US MARINE CORPS
WASHINGTON, DC 20380-0001

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AFB, OHIO 45433-5001

DEFENSE LOGISTICS AGENCY
8725 JOHN J. KINGMAN ROAD
FT. BELVOIR, VA 22060-6221

JOINT LOGISTICS COMMANDERS

JOINT SECRETARIAT

21 Apr 98

MEMORANDUM FOR DIRECTOR, READINESS AND LOGISTICS SUPPORT DIRECTORATE, INSPECTOR GENERAL, DEPARTMENT OF DEFENSE, 400 ARMY NAVY DRIVE, ARLINGTON, VIRGINIA 22202-2884

SUBJECT: Audit Report on the Depot Source of Repair Code (Project No. 7LD-5032)

1. We concur with recommendation 6 in subject report (draft) "to direct the Joint Policy Coordinating Group on Depot Maintenance to analyze maintenance facility duplication identified in this audit for potential workload consolidation." We will require the group to develop a plan of action with milestones and to provide the status of work on this task in periodic reports to the Joint Secretariat.

2. Please contact me at 617-9695 if you have any questions regarding this matter.

Gregory P. McIntosh
AMC Member, Joint Secretariat

cc: Ms. Sherry Ott (AFMC/DRE)
CDR Trish Van Belle (N424E)
Capt Reid Merrill (USMC Code LPP-O)
CDR Steve Romano (DLA/MMCSD)
Mr. Dave Barton (AMCLG-MJ)

Department of the Army Comments

DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR LOGISTICS
500 ARMY PENTAGON
WASHINGTON DC 20310-0500

DALO-SMP

MEMORANDUM THRU

DEPUTY CHIEF OF STAFF FOR LOGISTICS

~~DIRECTOR OF THE ARMY STAFF~~

ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, LOGISTICS AND ENVIRONMENT)

FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE (AUDITING)

SUBJECT: Draft Audit Report on the Depot Source of Repair Code (Project No. 7LD-5032)--INFORMATION MEMORANDUM

1. This is in response to USAAA memorandum of 5 Mar 98 (Tab A), which asked ODCSLOG to respond to your memorandum of 27 Feb 98 (Encl to Tab A). Your memorandum requested ODCSLOG to review subject draft audit and provide comments.

2. The DCSLOG concurs with the intent of the recommendations. The Army, in conjunction with the Joint Depot Maintenance Analysis Group, has revised the erroneous data in the DOD manual. The modification of the Depot Source of Repair Code (DSOR) validation routine has also been completed. The systems' changes to complete the edit modification process are targeted for completion 2Q FY 99. This should eliminate the vast majority of problems identified in the audit while assignment of DSOR codes is in process.

3. The Army will delete the inactive items through the normal Defense Inactive Item Program. To delete the inactive items off-line in the interim would be merely cosmetic and inefficient.

4. Since the Army is changing its system logic to correctly update the DSOR, retraining will not be required. Update of the DSOR will be transparent to the catalogers.

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DASA(L) #

DALO-SMP
SUBJECT: Draft Audit Report on the Depot Source of Repair Code (Project No. 7LD-5032)--INFORMATION MEMORANDUM

5. The Army's detailed comments are at Tab B.

2 Encls

JULIAN A. SULLIVAN, JR.
Major General, GS
Director of Supply
and Maintenance

CF:
VCSA
CDR, USAMC
SAAG-PMF-E
DALO-ZXA
DALO-RMI

USAMC (AMCLG-S) - Concur, Mr. Malter/617-8809 (E-mail)
USAMC (AMCIR-A) - Concur, Mr. Kurzer (E-mail)
OASA(I,L&E) - Concur, Mr. Croom/697-5727 (E-mail)

Ms. Tutor/697-7061

2

DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY MATERIEL COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333-0001

REPLY TO ATTENTION OF

AMCIR-A (36-2a) 23 April 1998

MEMORANDUM FOR MS. LINDA TUTOR, OFFICE OF THE ARMY DEPUTY CHIEF OF STAFF FOR LOGISTICS, 109 ARMY PENTAGON, WASHINGTON, DC 20310-0109

SUBJECT: DODIG Draft Report, Depot Source of Repair Code, Project 7LD-5032 (AMC No. D9815)

1. We are enclosing our position on subject report IAW AR 36-2.

2. Point of contact for this action is Mr. Robert Kurzer, (703) 617-9025, e-mail - bkurzer@hqamc.army.mil.

3. AMC -- America's Arsenal for the Brave.

FOR THE COMMANDER:

Encl
as

JAMES M. LINK
Major General, USA
Chief of Staff

DODIG DRAFT REPORT
DEPOT SOURCE OF REPAIR CODE (DSOR)
PROJECT NO. 7LD-5032

FINDING.

DEPOT SOURCE OF REPAIR CODE ACCURACY. Of the 410,308 nonconsumable items in the Federal Logistics Information System (FLIS), an estimated 268,104 items (65.3 percent) were inactive. For the remaining active items, an estimate of 108,973 items (26.6 percent of 410,308 total items) had erroneous DSOR codes. The codes were inaccurate because procedures that DOD personnel used to ensure accurate code input and transfer to the FLIS were not adequate. Specifically:

a. Edits for FLIS and Service cataloging did not prevent some erroneous DSOR codes from transferring to the FLIS.

b. DOD Manual 4100.39-M did not contain all the necessary depot repair location codes.

c. The Army and Navy cataloging systems contained coding translation deficiencies.

d. The Services did not establish a requirement to periodically validate FLIS DSOR code accuracy.

e. The Services did not properly train personnel in the DSOR coding process.

f. The Air Force and Marine Corps did not develop Service-specific guidance for manual DSOR coding and cataloging.

g. The Services were classifying items inconsistently.

As a result, DOD maintenance managers did not have available the data necessary to identify potential duplicate repair facilities and resource inefficiencies. In addition, approximately $0.5 million of inventory unused in one Service could be transferred to other Services to reduce planned procedures.

RECOMMENDATION AND ACTIONS TAKEN

RECOMMENDATION 3. We recommend that the Commander, USAMC, Commander, Naval Supply Systems Command, Commander, Air Force Materiel Command, and Marine Corps Deputy Chief of Staff (Installations and Logistics):

a. Coordinate with the Defense Logistics Services Command to develop a systems capability to update the Federal Logistics Information system by deleting inactive items and correcting all erroneous data for remaining active items.

b. Establish a requirement to periodically validate DSOR code accuracy.

c. Train all personnel involved in the DSOR coding process to input DSOR codes accurately and timely and perform DSOR code validation.

ACTION TAKEN. Concur in Part. We do not concur in initiating large-scale retraining program or establishing periodic or cyclical DSOR validation programs. However, the changes we are making to systems, particularly the edits, should eliminate the vast majority of problems found in the audit while assignment of DSOR codes is in process. This is a very cost-efficient solution. The recommendations for training and cyclical quality control would drain scarce resources, increase customer surcharges, and would not guarantee responsive change to customers. We note, the DODIG did not provide a cost-benefit analysis.

RECOMMENDATION 4. We recommend that the Commanders, USAMC and Naval Supply Systems Command, correct deficiencies in their cataloging systems for translating repair codes.

ACTION TAKEN. Concur. We have initiated a two-phase program to correct the system deficiencies reported in the draft audit. Systems Change Request XLSCIP608205(145) has implemented the revised DOD 4140.39M, Tables 117 and 126. These tables were the product of the Joint Depot Maintenance Analysis Group, thus accommodating the coordination requirement recommended in the audit. In addition, Phase I modified the DSOR valid edit routine. Phase II will complete the edit modification process. Phase I is complete. Phase II is being accomplished under SCR XLSCIP608205. Target for completion of Phase II is 2Q FY 99.

Department of the Navy Comments

DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY
RESEARCH, DEVELOPMENT AND ACQUISITION
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

19 May 1998

MEMORANDUM FOR THE DEPARTMENT OF DEFENSE ASSISTANT INSPECTOR GENERAL FOR AUDITING

SUBJECT: DODIG Report: Depot Source of Repair Code Accuracy (Report No. 7LD-5032) - Information Memorandum

REFERENCE: (a) DODIG Report 7LD-5032 of 27 February 1998

ENCLOSURE: (1) Department Of The Navy Comments On DODIG Draft Audit Report On Depot Source of Repair Code Accuracy (Report No. 7LD-5032)
(2) Marine Corps Comments On DODIG Draft Audit Report On Depot Source of Repair Code (Project No. 7LD-5032)

We have reviewed the findings and recommendations provided by reference (a) and concur with Recommendations 3.a, 3.b, 3.c, 4 and 5 as directed to the Navy and Marine Corps. The Navy and Marine Corps responses are provided in enclosures (1) and (2), respectively.

WILLIAM J. SCHAEFER
Deputy Assistant Secretary
of the Navy
Planning, Programming, and
Resources

Copy to:

FMO-31
COMNAVSUP(91E)
CMC (RFR-20)

Department Of The Navy Comments
On
DODIG Draft Audit Report
On
Depot Source Of Repair Code Accuracy
(Project No. 7LD-5032)

Finding: Depot Source of Repair Code Accuracy

Of 410,308 nonconsumable items recorded in the FLIS, an estimated 268,104 items (65.3 percent) were inactive. For the remaining active items, an estimated 108,973 items (26.6 percent of 410,308 total items) had erroneous DSOR codes. The codes were inaccurate because procedures and controls that DOD personnel used to ensure accurate code input and transfer to the FLIS were not adequate.

Navy Comment:

Concur. A change in the UICP-DLSC Data Interchange Program, (A/O C13) was completed on 1 October 1997. This ensures compatibility for accurate code input and transfer to the FLIS.

Recommendations for Corrective Action

Recommendation 3. We recommend that the Commanders, Army Material Command, Naval Supply Systems Command, and Air Force Material Command, and the Marine Corps Deputy Chief of Staff (Installation and Logistics):

a. Coordinate with the Defense Logistics Services Command to develop a system capability to update the Federal Logistics Information System by deleting inactive items and correcting all erroneous data for remaining active items.

Navy Reply

Concur. We agree that a cost effective method for correcting existing active items is needed and will work with DLSC in developing that capability. New codes being developed by Navy representatives to the Joint Depot Maintenance Analysis Group (JDMAG), when made available for use, will provide the necessary data to eliminate erroneous codes.

Enclosure (1)

b. (U) Establish a requirement to periodically validate DSOR code accuracy.

Navy Reply

Concur. We agree that periodic validation is desirable. Additional intra-Navy interfaces and programming changes need to be developed to transmit accurate DSOR codes to the FLIS. Systems development required to implement the actions above will be completed in July 1999.

c. (U) Train all personnel involved in the DSOR coding process to input DSOR codes accurately and timely and perform DSOR code validation.

Navy Reply

Concur. We will address specific deficiencies as they appear.

Recommendation 4. (U) We recommend that the Commanders, Army Material Command and Naval Supply Systems Command, correct deficiencies in their cataloging systems for translating repair codes.

Navy Reply

Concur. Deficiencies in the cataloging system for translating repair codes were corrected with changes to the UICP programs mandated by DLSC. Implementation was 1 October 1997. To make correct assignments, new codes being developed by Navy representatives to the JDMAG need to be made available for use.

Enclosure (1)

Marine Corps Comments
On
DODIG Draft Audit Report
On
Depot Source of Repair Code
(Project No. 7LD-5032)

Recommendations For Corrective Action

Recommendation 3. We recommend that the Commanders, Army Material Command, Naval Systems Command, and Air Force Material Command, and the Marine Corps Deputy Chief of Staff (Installations and Logistics):

a. Coordinate with the Defense Logistics Services Command to develop a systems capability to update the Federal Logistics Information System by deleting inactive items and correcting all erroneous data for remaining active items.

Marine Corps Reply: The Marine Corps concurs in the recommendation. The Marine Corps is pursuing development and incorporation of the systems capability to update the FLIS via Phase III (Depot Maintenance), of the Marine Corps Asset Tracking for Logistics and Supply System (ATLASS). Estimated completion date is 31 December 2000.

b. Establish a requirement to periodically validate DSOR code accuracy.

Marine Corps Reply: The Marine Corps concurs in the recommendation. Action was implemented in August 1997 which requires the Commander, Marine Corps Logistics Bases (COMMARCORLOGBASES) to conduct file maintenance (with periodic reviews) to ensure that the assigned DSOR code reflected in the Technical Data Management System and the Federal Logistics Information System, once there, remain current.

c. Train all personnel involved in the DSOR coding process to input DSOR codes accurately and timely and perform DSOR code validation.

Marine Corps Reply: The Marine Corps concurs in the recommendation. The COMMARCORLOGBASES has implemented semi-annual required DSOR code training sessions for all equipment specialist/provisioners, weapon system managers,

Enclosure (2)

catalogers, and item managers. Once trained, these individuals are required to research the application files, provisioning files, and cataloging files to validate the accuracy of assigned DSOR codes.

Recommendation 5. "We recommend that the Commander, Air Force Material Command and the Marine Corps Deputy Chief of Staff (Installations and Logistics) develop Service-specific guidance for manual DSOR coding and cataloging.

Marine Corps Reply: The Marine Corps concurs in the recommendation. This recommendation was implemented by COMMARCORLOGBASES Policy Statement 11-97, "Assignment of Depot Source of Repair (DSOR) Codes" of 5 August 1997. This policy provides service-specific guidance and procedures for manual DSOR coding and cataloging.

Enclosure (2)

Defense Logistics Agency Comments

DEFENSE LOGISTICS AGENCY
HEADQUARTERS
8725 JOHN J. KINGMAN ROAD, SUITE 2533
FT. BELVOIR, VIRGINIA 22060-6221

IN REPLY REFER TO

1 MAY 1998

DDAI

MEMORANDUM FOR DIRECTOR, READINESS AND LOGISTICS SUPPORT, OIG, DEPARTMENT OF DEFENSE

SUBJECT: Draft Report on Depot Source of Repair Codes, 7LD-5032

In response to your request of 27 February 1998, the following comments and recommendations are provided:

a. Page 11, paragraph 2a. This paragraph recommends that DLA be tasked to update the Federal Logistics Information System Procedures Manual (DoD Manual 4100.39-M), Table 117 with correct depot repair codes. The DSOR codes contained in Table 117 are not used to identify the repair source for national stock numbered items. These DSOR codes are used to identify authorized depot sources of repair which item managers use for cataloging in the Federal Logistics Information System (FLIS). Part II of Table 117 and pages 4 and 5 of DoD Manual 4100.39-M assigns the Military Services' Maintenance Interservice Support Offices (MISMO) the responsibility of keeping the codes in Table 117 updated. Pages 4 and 5 of the manual also delineates the procedures the MISMOs, the Joint Depot Maintenance Analysis Group (JDMAG), and the Air Force Cataloging and Standardization Center (CASC) are to use to coordinate and submit changes to Table 117 and (FLIS). Once the changes are coordinated amongst the Military Services, JDMAG submits the changes to DLA's Defense Logistics Information Service (DLIS) who update the DoD Manual and FLIS. These procedures work well. What is needed is for the MISMOs to generate the DSOR code changes faster, if that's possible, so DLIS can make the changes required to correct the problems caused by erroneous DSOR codes. Recommend this recommendation be revised to highlight the need for the Military Services' MISMOs to accelerated their actions to update the codes contained in Table 117, DoD Manual 4100.39-M.

b. Page 11, paragraph 2b. This paragraph recommends that DLA be required to periodically validate DSOR codes accuracy by identifying blank codes or code "99" and referring the items to the Military Services' MISMO offices for correction. This requirement already exists. Procedures to validate DSOR code accuracy were not implemented by DLIS immediately following the implementation of the DSOR code in FLIS's Total Item Record due to ongoing systems modernization activities. In 1988, System Change Request (SCR) 8818101 was initiated

Page 2
Subject: Draft Report on Depot Source of Repair Codes, 7LD-5032

to make this and other changes to FLIS. In 1991, many of these changes were implemented. Actions are ongoing between DLIS and JDMAG to accomplish all the changes contained in the SCR. An estimated completion date for the remaining changes is not determinable at the present time. Recommend this recommendation be deleted from the report.

Should you have any questions, please contact Sharon Entsminger, 767-6267.

for E. R. CHAMBERLIN
RADM, SC, USN
Deputy Director

cc:
DLSC-BO
DLSC-LEC

Audit Team Members

The Air Force Audit Agency managed this joint audit and the following team members made significant contributions to the report.

Stan Borek	Air Force Audit Agency
Jeff Dye	Naval Audit Service
Chris Hake	Air Force Audit Agency
Steve Houlette	Air Force Audit Agency
Ann Kruszewski	Naval Audit Service
Jim Nowicki	Army Audit Agency
Bob Schonewolf	Inspector General, DoD
Michelle Shicora	Air Force Audit Agency
Frank Sonsini	Inspector General, DoD
Jan Thomas	Air Force Audit Agency
Raymond Van Horn, Jr.	Air Force Audit Agency
Chong Young	Inspector General, DoD
Shelton R. Young	Inspector General, DoD