

July 1995

# DEPOT MAINTENANCE

## Some Funds Intended for Maintenance Are Used for Other Purposes





**National Security and  
International Affairs Division**

B-259382

July 6, 1995

Congressional Committees

During the past several years, the Congress and officials from the Department of Defense (DOD) and military services have expressed concerns about the adequacy of the depot maintenance funding levels and the adverse effect on readiness as a result of growing maintenance backlogs.<sup>1</sup>

The objectives of our review were to (1) determine the services' processes for deciding which end items of equipment will be overhauled, (2) compare the depot maintenance funding received by the services from the Congress to the amounts requested by the services and to the use of these funds, and (3) assess the services' management of maintenance backlogs and the impact of depot maintenance backlogs on readiness.

---

**Background**

The Army, the Navy, and the Air Force operate 24 major depot maintenance facilities to repair equipment that cannot or should not be repaired by field units. The types of maintenance and repair work performed at the depots include

- repair and overhaul of major end items (tanks, personnel carriers, aircraft, trucks, etc.) that are paid for with operation and maintenance (O&M) funds;
- repair of components and major assemblies that are initially paid for with stock funds and that are returned to the supply system for issue to customers who reimburse the stock fund with O&M funds; and
- modernization and conversion programs that are paid for with procurement funds.

---

**Results in Brief**

The services use such measurements as hours of usage/operations, mileage, engineered standards, historical data, and inspection results to identify end items of equipment that qualify for depot maintenance (so-called depot maintenance candidates). They then assess the candidates in terms of the depots' ability to perform the maintenance and the anticipated availability of funds. This process results in the depot maintenance requirements that are reflected in the services' budget

---

<sup>1</sup>Maintenance backlog is defined as the difference between the total depot maintenance requirement and that part of the requirement for which funds are provided. Another name for maintenance backlog is unfunded requirements.

---

requests. After funding levels are determined, adjustments may be made to the number and type of end items to be overhauled.

From fiscal years 1993 through 1995, the Army and the Navy received about \$591 million more and the Air Force about \$75 million less than requested for depot maintenance. A comparison of the amount of depot maintenance work executed to the amount of funds requested and received shows that for fiscal years 1993 and 1994, the amount of depot maintenance work accomplished by the services was about \$485 million less than the amount requested and about \$832 million less than the amount received. The depot maintenance funds not used for depot maintenance were used for military contingencies and other O&M expenditures such as real property maintenance and base operations.

The depot maintenance backlogs at the time the services submit their budget requests to the Congress tend to decrease during the year of budget execution. These decreases are a result of the services' reducing the requirements for items requiring depot maintenance, not because more depot maintenance was performed.

According to service officials, the depot maintenance backlogs are manageable, represent an acceptable minimal level of risk, and have not yet adversely affected equipment operational readiness rates. They attribute the lack of adverse effect to the funding levels; the levels of depot maintenance execution; and the reductions to the force levels, which have made more equipment available to the remaining forces.

---

## Services Generally Use Same Process to Determine Maintenance Requirements

Each of the services use the same general process for identifying its depot maintenance requirements. The first step is to identify those end items of equipment that meet the criteria as depot maintenance candidates. Then, based on inputs such as force structure, fielding schedules, and operating tempo, initial depot maintenance requirements are determined. These requirements are reviewed and adjusted to reflect the capability and capacity of the depots to accomplish the repairs. The product of this process is referred to as executable requirements. The cost of the executable requirements is then determined and the services decide what portion of the total requirement can be funded. This amount then becomes the basis for the services' depot maintenance budget requests.

Once the budget process is completed and the funds are provided, adjustments may be made to the number and type of end items to be

---

overhauled. This amount then becomes the funded depot maintenance requirements. The difference between the funded requirements and the total executable requirements is the maintenance backlog.

Although the services use similar processes to develop their depot maintenance requirements, the Army and the Navy vary significantly from the Air Force in the way they determine whether an aircraft will be sent to the depot for overhaul.

The Army and the Navy identify notional requirements for budget purposes based on historical experiences. As the budget execution year proceeds, the notional requirements are replaced with firm, actual requirements that are the result of the Army and the Navy inspecting the candidates to determine whether overhauls are needed. If an aircraft does not need to be overhauled, a waiver is granted for a year. This process is repeated each year until the aircraft fails inspection and is scheduled for overhaul. The Air Force, on the other hand, does not have an inspection and waiver process. It adheres to maintenance cycles based on flying hours, engineered requirements, and historical usage data. When one of these criteria is met, the aircraft is overhauled.

According to Navy officials, the inspection and waiver process has enabled them to reduce the number of aircraft to be overhauled by 38 percent and resulted in cost avoidances of \$300 million a year. The Army has reported similar experiences by using this process. It reported a 60-percent reduction in the number of aircraft to be overhauled and cost avoidances of about \$4 billion over the past 5 years.

In commenting on a draft of this report, DOD pointed out that the Army's estimated savings were somewhat overstated because the estimate did not consider the cost of maintaining the aircraft that would otherwise have been overhauled.

---

## Increased Depot Maintenance Funds Are Not Necessarily Used for Depot Maintenance Work

Although the services received more funds than requested for depot maintenance, the services do not always use these funds for that purpose. As shown in table 1, between fiscal years 1993 and 1995, the services received about \$15.3 billion for depot maintenance. This represents about \$516 million more than the services requested.

**Table 1: Funds Requested and Received for Fiscal Years 1993 Through 1995**

Dollars in millions

Service	Fiscal year 1993		Fiscal year 1994		Fiscal year 1995		Fiscal years 1993-95		Difference
	Requested	Received	Requested	Received	Requested	Received	Requested	Received	
Army	\$773	\$995	\$721	\$796	\$1,037	\$1,169	\$2,531	\$2,960	\$429
Navy:									
Air	576	567	554	604	660	683	1,790	1,854	64
Ships	2,399	2,395	2,003	2,089	2,337	2,353	6,739	6,837	98
Air Force	1,234	1,149	1,062	1,074	1,387	1,385	3,683	3,608	(75)
<b>Total</b>	<b>\$4,982</b>	<b>\$5,106</b>	<b>\$4,340</b>	<b>\$4,563</b>	<b>\$5,421</b>	<b>\$5,590</b>	<b>\$14,743</b>	<b>\$15,259</b>	<b>\$516</b>

For fiscal years 1993 and 1994, the amount of depot maintenance work executed was about \$8.8 billion, as compared to \$9.3 billion requested and \$9.7 billion received. Table 2 shows the depot maintenance funding level and the depot maintenance work executed by service for fiscal years 1993 and 1994.

**Table 2: Funding and Execution Levels by Service for Fiscal Years 1993 and 1994**

Dollars in millions

Service	Fiscal year 1993			Fiscal year 1994		
	Received	Executed	Difference	Received	Executed	Difference
Army	\$995	\$917	\$78	\$796	\$694	\$102
Navy:						
Air	567	492	75	604	477	127
Ships	2,395	2,287	108	2,089	1,741	348
Air Force	1,149	1,152	(3)	1,074	1,077	(3) <sup>a</sup>
<b>Total</b>	<b>\$5,106</b>	<b>\$4,848</b>	<b>\$258</b>	<b>\$4,563</b>	<b>\$3,989</b>	<b>\$574</b>

<sup>a</sup>The amount of depot maintenance executed exceeded the amount of depot maintenance funds received because funds from other O&M accounts were transferred into the depot maintenance account.

Army and Navy officials acknowledge that all the funds received for depot maintenance are not necessarily used for that purpose. The funds may be used for military contingencies, other O&M programs, or to compensate for other congressional and service-level budget reductions as the following examples illustrate.

- In fiscal year 1994, the Navy's depot maintenance program for ships and aircraft was \$475 million less than the amount the Navy provided for these purposes. This amount was moved to the flying hour program, Haiti/Cuba operations, base operations, real property maintenance, and other O&M

---

accounts. In fiscal year 1995, about \$14.3 million of depot maintenance funds were moved to nondepot maintenance activities such as contractor and consulting services and information technology. The Navy determined that the \$14.3 million represented depot maintenance's share of the congressional reductions in these areas.

- In fiscal year 1994, the Army used \$75 million of its depot maintenance funds for base closure costs and for voluntary separation of personnel. Thus far, in fiscal year 1995, the Army has transferred \$12 million of its depot maintenance funds to pay for temporary duty and information management costs. Army officials said that this transfer represented depot maintenance's share of a congressional reduction to these areas.

Service officials said that if they had not received the depot maintenance funding levels that they did, they would have had to either find other sources to pay for the nondepot maintenance activities or reduce the amount of depot maintenance work to be performed.

---

## Maintenance Backlogs Tend to Decrease During the Year of Budget Execution

The maintenance backlogs at the time the services submit their budget requests to the Congress have often been reduced or eliminated during the year of budget execution. The reduction or elimination has occurred primarily because the funded depot maintenance requirements were reduced as end items of equipment were removed from the services' inventories. As a result, the services can reduce their backlogs by transferring end items from the unfunded (backlog category) to the funded category. The maintenance backlogs at the time of budget submission and at the end of the year of execution are shown in table 3.

**Table 3: Maintenance Backlogs at Time of Budget Submission and End of Fiscal Years 1993 to 1995**

Dollars in millions							
Service	Fiscal year 1993		Fiscal year 1994		Fiscal year 1995		
	Budget submission	End	Budget submission <sup>a</sup>	End	Budget submission <sup>a</sup>	End (estimated)	
Army	\$637	\$494 <sup>b</sup>	\$551	\$577 <sup>b</sup>	\$637	\$122 <sup>b</sup>	
Navy:							
Air	153	83	254	125	186	163	
Ships	0	0	129	0	0	0	
Air Force	185	110	275	231	338	146	
<b>Total</b>	<b>\$975</b>	<b>\$687</b>	<b>\$1,209</b>	<b>\$933</b>	<b>\$1,161</b>	<b>\$431</b>	

<sup>a</sup>The backlog at the end of a fiscal year does not become the beginning backlog for the next fiscal year. The reason for this is that depot maintenance candidates are determined anew each year and the new backlog is a function of the expected funding level.

<sup>b</sup>The Army does not compute an end-of-year backlog. The figures shown in the table represent the difference between the total requirement at budget submission and the amount of depot maintenance funds obligated during the year. The other services do compute an end-of-year backlog based on the difference between the total requirements adjusted for changes during the year and the depot maintenance funds obligated during the year.

One reason for backlog reductions after the budget requests are submitted to the Congress can be the implementation of new initiatives. For example, the fiscal year 1995 Army budget request included depot maintenance requirements for the Army Aviation and Troop Command of \$539 million and a maintenance backlog of \$253 million. After the budget was submitted, the requirements and backlog were reduced to \$307 million and \$16 million, respectively. According to Army officials, at the time the budget was submitted, the Aviation Restructuring Initiative had not been approved. After budget submission, the restructuring initiative was approved to eliminate older helicopters (AH-1, UH-1, and OH-58) from the Army inventory. The effect of eliminating these helicopters was to eliminate the associated depot maintenance requirements and, in turn, reduce the overall depot maintenance backlog.

Other reasons are including depot work in the current year's requirements that has been previously funded and included in the carryover and reducing requirements because of inadequate depot capability. For example, at the beginning of fiscal year 1994, the Air Force's Air Combat Command's backlog was \$130 million. Later, the depot maintenance requirements for engines were reduced when the San Antonio depot informed the command that the depot did not have the capability to execute the total engine repair requirements. The repair requirements were also reduced because they included depot work that had already

---

been funded in a prior fiscal year and was included as part of the depot maintenance carryover. As a result, the backlog was reduced to \$60 million. By the end of the fiscal year, the Air Force had reduced the number of B-52s and F-111s in the force. This reduction decreased the depot maintenance requirements for these aircraft, which, in turn, enabled the command to fund all previously unfunded requirements and eliminate the backlog.

Maintenance backlogs may also be eliminated if the funds provided exceed the amount requested. For example, when the Navy submitted its budget request for fiscal year 1994, it estimated a ship maintenance backlog of \$129 million. The Navy received \$86 million more than it requested for ship depot maintenance. The increased funds, coupled with an overall reduction of depot maintenance requirements, enabled the Navy to eliminate its backlog and transfer \$390 million to other O&M programs.

---

## Depot Maintenance Backlog Has Not Affected Readiness

Depot maintenance backlog consists of equipment items that meet the criteria for overhaul or repair but for which funds are not available to overhaul them. Generally, if an item that was categorized as part of the backlog becomes inoperable, it is sent to a depot for repair and displaces an item that has been scheduled for overhaul. The displaced equipment item will then be moved from the funded to the unfunded category.

In testimonies before the Congress and internal studies, service officials at the chief of staff level and officials responsible for the depot maintenance program have stated that depot maintenance backlogs have not yet affected equipment operational readiness rates. The officials attribute the lack of adverse effect on readiness to the funding levels, the levels of depot maintenance execution, and the reductions to the force levels which, have made more equipment available to the remaining forces. Their position is best illustrated by the following comments from service officials.

- The Air Force does not consider depot maintenance backlog as a readiness issue. Aircraft and engine maintenance backlogs have not caused any aircraft to be grounded, and the Air Force believes that it can continue to defer some depot maintenance over the Future Years Defense Plan (a 6-year plan) without any serious impact.
- The Army's depot maintenance backlog has not directly affected the operational readiness of Army units. It has been shown that funding streams and backlogs cannot be tied to readiness.

- The Navy's position is that no impact on readiness can be attributed to maintenance backlogs and that the existing backlogs are manageable. Furthermore, the readiness risks associated with maintenance backlogs are minimal.

Service officials, however, agree that there could be some long-term effect on sustainability and modernization. If depot maintenance funding levels are reduced to a point where the services cannot repair needed inoperable items, readiness could be affected. Sustainability could also be affected if, rather than making needed repairs, inventory levels of major components and assemblies are reduced.

## Matters for Congressional Consideration

To enhance its oversight of DOD's depot maintenance program, the Congress may wish to require the services to include the following types of information as part of their budget requests.

- The amount of funds received for depot maintenance that was not used for that purpose. If funds were used for other than depot maintenance, the other uses should be identified and the reasons for and the amounts of the funds transferred should be explained.

We recognize that section 361 of the National Defense Authorization Act for Fiscal Year 1995 addresses the essence of the above suggested reporting requirement. However, the reporting requirement should be revised to include identification of the other uses for which the funds were transferred in addition to the amount and the reasons for the transfers.

- The maintenance backlogs at the (1) beginning and end of the most recently completed fiscal year and (2) beginning of the current fiscal year and at the time of the budget submission. Any changes to the beginning of the year backlog should be explained in terms of the reasons for the changes (i.e., increased or decreased maintenance efforts or changes to the depot maintenance requirements).
- An assessment of the effect maintenance backlogs are having on readiness. If readiness is being adversely affected, information concerning the extent of the adverse effects and plans to correct the situation should be provided.

## Agency Comments and Our Evaluation

In commenting on a draft of this report, DOD concurred with most of the report. (See app. II for a copy of DOD's comments.) However, DOD felt that

---

(1) one section of the report implied that there was no relationship between depot maintenance funding and readiness and (2) our suggested reporting requirements identified in the Matters for Congressional Consideration would largely duplicate reporting requirements already set forth in existing DOD procedures.

Our report does not imply a lack of relationship between depot maintenance funding and readiness. It cites service officials' testimonies and internal military studies that state that the existing depot maintenance backlog has not yet affected the readiness of the forces because of (1) funding that the services have been receiving and (2) the drawdown in the forces that resulted in the redistribution of more and better equipment to the remaining forces. Moreover, our report also points out that there could be some impact on readiness if the depot maintenance funding levels were reduced to the point where the services could not repair needed inoperable equipment. It should also be remembered that the services have been able to maintain their readiness level while at the same time transferring hundreds of millions of dollars appropriated for depot maintenance to other O&M programs.

We agree that much of our suggested reporting requirement dealing with the transfer of funds from depot maintenance for other uses is included in the congressionally mandated reporting requirement. However, our suggested DOD reporting requirement would link the amount and reason for the transfer as currently required to the specific use for which the transfers were made. We believe that a combination of this additional information together with the information already required is needed so that the Congress can readily discern what the funds were used for and can decide whether these other uses should be funded at a higher level.

In the current reporting requirement, DOD is not required to address changes in maintenance backlog that occurred after the budget request was submitted. Without the more current data, the Congress has no way of discerning whether backlogs are increasing or decreasing or the reasons for the changes.

Based on comments received from DOD, we deleted our discussion and the proposed reporting requirement dealing with the amount of depot maintenance work carried forward from one fiscal year to the next. We have included a new Matter for Congressional Consideration, which would build on the backlog reporting requirement, previously discussed, by requiring DOD to report the impact of the maintenance backlogs on

---

readiness. Because this reporting requirement was added after the draft was sent to DOD for official comment, DOD comments do not address this change. We advised DOD officials of the change and they told us that rather than delaying the issuance of our report, they would respond to that suggestion after our report was issued.

---

The scope and methodology of our review are discussed in appendix I.

We are sending copies of this report to the Secretaries of Defense, the Army, the Navy, and the Air Force; the Director of the Office of Management and Budget; and the Chairmen of the House Committee on Government Reform and Oversight, Senate Committee on Governmental Affairs, and House and Senate Committees on Appropriations, Senate Committee on Armed Services, and House Committee on National Security.

Please contact me on (202) 512-5140 if you have any questions concerning this report. Major contributors to this report are listed in appendix III.



Mark E. Gebicke  
Director, Military Operations  
and Capabilities Issues

---

List of Congressional Committees

The Honorable Ted Stevens  
Chairman, Subcommittee on Defense  
Committee on Appropriations  
United States Senate

The Honorable John McCain  
Chairman, Subcommittee on Readiness  
Committee on Armed Services  
United States Senate

The Honorable John R. Kasich  
Chairman, Committee on the Budget  
House of Representatives

The Honorable C.W. Bill Young  
Chairman, Subcommittee on National Security  
Committee on Appropriations  
House of Representatives

The Honorable Bill Zeliff  
Chairman, Subcommittee on National Security,  
International Affairs, and Criminal Justice  
Committee on Government Reform and Oversight  
House of Representatives

---

# Contents

---

Letter	1
Appendix I Scope and Methodology	14
Appendix II Comments From the Department of Defense	16
Appendix III Major Contributors to This Report	24
Tables	
Table 1: Funds Requested and Received for Fiscal Years 1993 Through 1995	4
Table 2: Funding and Execution Levels by Service for Fiscal Years 1993 and 1994	4
Table 3: Maintenance Backlogs at Time of Budget Submission and End of Fiscal Years 1993 to 1995	6

---

## Abbreviations

DOD	Department of Defense
O&M	operation and maintenance

---

---

---

# Scope and Methodology

---

We reviewed studies and regulations and held discussions with depot maintenance officials to determine how the services identify their depot maintenance requirements. In addition, we compared the funding levels requested by the services to the amounts received for fiscal years 1993 to 1995. When the amounts received exceeded the amounts requested, we held discussions with service officials and reviewed budget documents to determine whether the additional funds were used for depot maintenance or for other purposes. We also compared the amount of funds received for depot maintenance to the amount of funds used for depot maintenance. When the amount of funds used for depot maintenance was less than the amount received, we held discussions with budget and program officials to identify how the remaining funds were used and why the funds were not used for depot maintenance.

To evaluate the impact of depot maintenance backlogs on readiness, we reviewed internal studies on the subject and held discussions with service headquarters officials who manage depot maintenance programs. We also reviewed testimonies by service officials before the Congress.

Our review was performed at the following locations:

- 
- |                             |   |
|-----------------------------|---|
| Department of the Army      | <ul style="list-style-type: none"><li>• Office of the Deputy Chief of Staff for Logistics, U.S. Army Headquarters, Washington, D.C.;</li><li>• U.S. Army Materiel Command, Alexandria, Virginia;</li><li>• U.S. Army Depot Systems Command, Chambersburg, Pennsylvania;</li><li>• U.S. Army Tank-Automotive and Armaments Command, Warren, Michigan; and</li><li>• U.S. Army Aviation and Troop Command, St. Louis, Missouri.</li></ul> |
| <hr/>                       |   |
| Department of the Air Force | <ul style="list-style-type: none"><li>• Office of the Deputy Chief of Staff for Logistics, U.S. Air Force Headquarters, Washington, D.C.;</li><li>• Air Force Materiel Command, Dayton, Ohio; and</li><li>• Air Combat Command, Langley Air Force Base, Virginia.</li></ul>   |
| <hr/>                       |   |
| Department of the Navy      | <ul style="list-style-type: none"><li>• Office of the Chief of Naval Operations, Washington, D.C.;</li><li>• Office of the Comptroller of the Navy, Washington, D.C.;</li><li>• Naval Air Systems Command, Washington, D.C.; and</li><li>• Naval Sea Systems Command, Washington, D.C.</li></ul>  |

---

**Appendix I**  
**Scope and Methodology**

---

We performed our review from October 1994 to March 1995 in accordance with generally accepted government auditing standards.

# Comments From the Department of Defense



ACQUISITION AND  
TECHNOLOGY

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON  
WASHINGTON DC 20301-3000



31 MAY 1995

Mr. Henry L. Hinton, Jr.  
Assistant Comptroller General  
National Security and International  
Affairs Division  
U.S. General Accounting Office  
Washington, DC 20548

Dear Mr. Hinton:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DEPOT MAINTENANCE: Funds Intended For Maintenance Are Also Used For Other Purposes," dated April 19, 1995 (GAO Code 703085), OSD Case 9897. The DoD partially concurs with the report.

The draft report includes a section entitled "Depot Maintenance Backlog Has Not Affected Readiness," implying that there is no relationship between depot maintenance funding and readiness. That implication is not correct. Adequate depot maintenance funding is an integral element of equipment readiness.

The draft report also includes suggestions that the Congress require the Services to provide various types of additional information concerning depot maintenance budgets. The DoD agrees that the types of information suggested by the GAO should be available to the Congress. However, existing DoD procedures already require that much of the information be provided to the Congress. Implementation of the GAO suggestions would result in duplicative reporting.

The Department appreciates the opportunity to respond to the draft report. The detailed DoD comments on the draft report findings and matters for Congressional consideration are provided in the enclosure.

Sincerely,

James R. Klugh  
Deputy Under Secretary of  
Defense (Logistics)

Enclosure:



GAO DRAFT REPORT - DATED APRIL 19, 1995  
(GAO CODE 703085) OSD CASE 9897

“DEPOT MAINTENANCE: FUNDS INTENDED FOR MAINTENANCE ARE ALSO  
USED FOR OTHER PURPOSES”

DEPARTMENT OF DEFENSE COMMENTS

\* \* \* \* \*

FINDINGS

- **FINDING A: Services Generally Use Same Process to Determine Maintenance Requirements.** The GAO reported that after the initial depot maintenance requirements are determined, the Services review and adjust the requirements to reflect the capability and capacity of the depots to accomplish the repairs. The GAO noted that the product of that process is referred to as executable requirements. The GAO stated that the cost of the executable requirements is then determined and the Services decide what portion of the total requirement can be funded. The GAO pointed out that the amount then becomes the basis for the Services' depot maintenance budget request submissions.

The GAO reported that once the budget process is completed and the funds are provided, adjustments may be made to the number and type of end items to be overhauled. The GAO stated that the amount then becomes the funded depot maintenance requirements. The GAO noted that the difference between the funded requirements and the total executable requirements is the maintenance backlog.

The GAO found that although the Services use similar processes to develop their depot maintenance requirements, the Army and the Navy vary significantly from the Air Force in the way they determine whether an aircraft will be sent to the depot for overhaul. The GAO explained that if an aircraft does not need to be overhauled, the Army and Navy grant a waiver for a year or until the aircraft fails inspection. The GAO reported the Air Force does not have an inspection and waiver process and, therefore, adheres to maintenance cycles based on flying hours, engineered requirements, and historical usage data. The GAO pointed out that when one of the Air Force criteria is met, the aircraft is overhauled (p. 2, pp. 3-5/GAO Draft Report).

Now on pp. 2-3.

**DoD RESPONSE:** Concur. As stated in the GAO draft report the Services use similar approaches in determining maintenance requirements.

However, the Department would like to supplement the GAO observation on page 5 that the Army has reported a 60 percent reduction and cost avoidance of about \$4 billion over the past 5 years. This estimate was provided by Army's Aviation Command and is based solely on the cost to overhaul aircraft on a five year cyclical basis minus the cost of the current "on condition maintenance" program. The estimate does not include the cost to the unit of maintaining aircraft that would have otherwise been overhauled. Therefore, the amount of \$4 billion cost avoidance is overstated to some degree. In the case of Navy Ships, the Navy ship maintenance community reviews and adjusts the requirements to reflect the capability and capacity of the shipyards to accomplish the repairs.

- **FINDING B: Increased Depot Maintenance Funds Are Not Necessarily Used for Depot Maintenance Work.** The GAO found that although the Congress has often provided the Services more funds than requested for depot maintenance, the Services do not always use those funds for that purpose. The GAO estimated that between fiscal years 1993 and 1995, the Services received about \$568 million more than the Services requested.

According to the GAO, Army and Navy officials acknowledge some of the funds provided by the Congress for depot maintenance may be used for military contingencies, other operations and maintenance (O&M) programs, or to compensate for other Congressional and Service-level budget reductions. For example, the GAO found that in FY 1994, the Navy depot maintenance program for ships and aircraft was \$467 million less than the amount the Navy provided for those purposes. The GAO noted that this amount was moved to the flying hour program, Haiti/Cuba operations, base operations, real property maintenance, and other O&M accounts. The GAO reported that Service officials indicated that if they had not received the depot maintenance funding levels that they did, they would have had to either find other sources to pay for the non-depot maintenance activities or reduce the amount of depot maintenance work performed (p. 3, pp. 5-7/GAO Draft Report).

**DoD RESPONSE:** Concur. Unless the Congress authorizes establishment of a contingency fund, the Department must to fund the costs of contingencies such as Haiti/Cuba using other accounts.

- **FINDING C: Maintenance Backlogs Tend to Decrease During the Year of Budget Execution.** The GAO found that at the time the Services submit their budget requests to the Congress, the maintenance backlogs have often been

Now on pp. 3-5.

reduced or eliminated during the year of budget execution. The GAO stated that reduction or elimination has occurred primarily because the funded depot maintenance requirements were reduced as end items of equipment were removed from the Services' inventories.

The GAO found that one reason for backlog reductions after the budget requests are submitted to the Congress can be the implementation of new initiatives. The GAO also noted that maintenance backlogs may also be eliminated if the funds provided exceed the amount requested (p. 3, pp. 7-9/GAO Draft Report).

**DoD RESPONSE:** Concur. As force structure declines, inventories decline, and the requirement for depot maintenance declines. While it is true that force structure reductions between Fiscal Year 1990 and Fiscal Year 1995 have created some turbulence within the depot maintenance program, greater stability is expected during the outyears as the Services reach their objective force structure.

In addition, the following sentence on page 7 of the draft report requires clarification: "the reduction or elimination has occurred primarily because the funded depot maintenance requirements were reduced as end items of equipment were removed from the Services' inventories. As a result, the Services can reduce their backlogs by transferring end items from the unfunded (backlog category) to the funded category." It should be recognized that requirements that were eliminated were not funded. It should also be recognized that Navy ships depot maintenance backlogs in Fiscal Year 1992 through Fiscal Year 1994 was zero.

**FINDING D: Depot Maintenance Backlog Has Not Affected Readiness.** The GAO reported that depot maintenance backlog consists of equipment items that meet the criteria for overhaul or repair, but for which funds are not available to overhaul them. The GAO pointed out that in testimonies before the Congress and internal studies, Service officials at the chief-of-staff level and officials responsible for the depot maintenance program have stated that depot maintenance backlogs have not yet affected equipment operational readiness rates. The GAO noted that officials attribute the lack of adverse effect on readiness to the funding levels, levels of depot maintenance execution, and the reduction in force levels, which has made more equipment available to the remaining forces. The GAO further noted that Service officials agree that there could be some long term effect on sustainability and modernization. The GAO explained that if depot maintenance funding levels are reduced to a point where the Services cannot repair needed inoperable items, readiness could be affected. In addition, the GAO stated that sustainability could also be affected if, rather than making needed repairs, inventory levels of major components and assemblies are reduced (p. 3, pp. 9-11/GAO Draft Report).

Now on pp. 5-7.

Now on pp. 7-8.

**DoD RESPONSE:** Partially concur. Each Service presents a unique situation.

With regard to the views of Service officials on page 10, the GAO reported that the "Army's depot maintenance backlog has not directly affected the operational readiness of Army units," and "It has been shown that funding streams and backlogs cannot be tied to readiness." The DoD agrees with the first statement, but the second statement is not entirely accurate. Army readiness has three primary components: personnel, equipment and training. Operational readiness is a sub-element of the equipment component. Operational readiness measures both the percentage of equipment authorized, as well as a percentage of the time the equipment on hand is "mission capable". It is correct that the Army has not yet experienced lower operational readiness rates due to the depot maintenance backlog. That is largely due to a combination of current Army restructuring and prior year depot maintenance funding levels.

The downsizing of the force has resulted in the deactivation of many Army units. As those units deactivate, their best and most modern equipment is distributed to units that remain in the active force structure. This redistribution provides units with equipment that both fills shortages, as well as providing a means for them to "swap" equipment that is not mission capable. Remaining equipment is returned to the Army inventory, some of which goes into the depot maintenance backlog. The Army expects that as downsizing approaches the objective force structure and equipment transfers stabilize, units will begin to experience readiness impacts from increased depot maintenance backlogs.

Historically (prior to Fiscal Year 1993) the Army's annual depot maintenance funding levels have been fairly robust (approaching 88% by Fiscal Year 1989-1992). As a result, unfunded depot maintenance backlogs have been fairly low until Fiscal Year 1993. The increased Fiscal Year 1993 and Fiscal Year 1994 backlogs will not immediately impact individual unit operational readiness. Rather, repair cycle float (equipment in the inventory that replaces unit equipment being repaired) will be consumed. As fewer repair cycle float items are repaired and returned to the inventory, unit operational readiness will become increasingly degraded.

The Army has not found a reliable methodology to directly correlate dollars spent and the operational readiness rates of unit equipment as a result of several significant factors. First, the Army has, until recently, funded depot maintenance at a healthy level. Second, the Army maintains a repair cycle float. Those assets are used to replace equipment in units undergoing repair. The readiness of unit equipment is unlikely to be adversely affected until those assets become unserviceable. Third, recent force reductions have resulted in equipment redistributions that have enabled the Army to retain the newest, most

modern weapon systems in unit inventories. Fourth, the Army has made a considerable effort to mitigate the adverse readiness effects of depot maintenance backlogs by postponing the modernization of follow-on forces and reserve Component units. Although that approach maximizes operational readiness, it also adversely affects the capabilities of units that would otherwise receive more modern, more lethal, more effective equipment.

The DoD acknowledges that, in the very near term, readiness is not expected to be adversely affected by reduced funding. However, as maintenance depots close and as the Services expend all of the equipment made available by the reductions in forces, long term readiness will be impacted by a reduction in funding. Thus, this section of the GAO draft report provides a strong rationale that funding for depot maintenance should not be arbitrarily reduced without impairing readiness. Funding levels for depot maintenance can be reduced only as the number of items requiring repair are also reduced. Any additional cuts will adversely impact readiness.

\* \* \* \* \*

#### MATTERS FOR CONGRESSIONAL CONSIDERATION

- **GAO SUGGESTION:** The GAO suggested that to improve future years' oversight of the DoD depot maintenance program, the Congress may wish to require the Services to include the following types of information as part of their budget requests.
  - The amount of funds appropriated for depot maintenance that was not used for that purpose. The GAO observed that if funds were used for other than depot maintenance, the reasons and the associated amounts should be explained.
  - The maintenance backlogs at the (1) time of budget submission and end of the most recently completed fiscal year and (2) beginning of the current fiscal year and at the time of the budget submission. The GAO stated that any increases or decreases to the beginning year backlog should be explained.
  - The amount of workload carryover from the prior fiscal year to the current fiscal year and an estimate of the workload that will be carried over to the next fiscal year. The GAO observed that if the carryover is greater than three months, a justification should be provided. The GAO further suggested that if the Congress does not agree with the justification, it may want to consider

Now on p. 8.

alternative uses of the funds. The GAO noted that the information provided should be for the most recently completed fiscal year and the current fiscal year at the time the budget requests are submitted. (pp. 11-12/GAO Draft Report)

**DoD RESPONSE:** Partially concur. The first two elements of the GAO suggestion would lead to duplicate reporting of information to the Congress. The existing Department of Defense Budget Guidance Manual ((Change 1) (DoD) 7110-1-M, IV, Budget Administration, Section 3 - Reprogramming), implements DoD policies for Reprogramming of Appropriated Funds. This DoD guidance recognizes that the practice of reprogramming Defense funds is a necessary, desirable and a timely device for achieving flexibility in the execution of the Defense programs. Procedures have been established for reprogramming actions; submitting, approving, and processing reprogramming actions, and submitting a semiannual report of programs reflecting all reprogramming actions. The existing Reprogramming Actions document is used to request the prior approval of, or provide prior notification to, the appropriate congressional committees. A Report of Programs reporting document reflects congressionally approved programs as enacted, and reprogramming actions approved by the Department. The Report is prepared twice a year.

The National Defense Authorization Act for Fiscal Year 1995, dated August 12, 1994, Title III -- Operation and Maintenance, Subtitle G-Reviews, Studies, and Reports, Section 361 also contains reporting language. Reports on transfers of certain operation and maintenance funds in Section 361 (a) states: "Annual Reports. -- In each of 1995, 1996, and 1997, the Secretary of Defense shall submit to the congressional defense committees, not later than the date on which the President submits the budget pursuant to section 1105 of title 31, United States Code, in that year, a report on the following:

(1) Each transfer of amounts provided in an Appropriation Act to the Department of Defense for the Activities referred to in subsection (c) (depot maintenance in each of the Military Departments) between appropriations during the preceding fiscal year, including the reason for the transfer.

(2) Each transfer of amounts provided in an appropriation Act to the Department of Defense for the activities referred to in subsection (c) within that appropriation for any other such activity during the preceding fiscal year, including the reason for the transfer. Similar requirements exist for midyear reports in subsequent subsections of the named title."

These DoD budgetary procedures and the congressional requirements specified in the National Defense Authorization Act clearly set forth reprogramming

reporting requirements for the Department. Consequently, there is no reason to impose additional reporting requirements on the DoD.

The third part of the GAO suggestion, regarding “workload carryover”, is not developed in sufficient detail to justify the suggestion. The draft report does not adequately take into account the affects of Operation Desert Storm. In Fiscal Years 1992 and 1993, depot maintenance workloads increased significantly after that operation. Large quantities of aircraft, vehicles, and other weapon systems, required increased depot maintenance. This increase was intentionally programmed over a period of several years in order to maintain a somewhat level depot maintenance program. The alternative would have been to hire a large number of untrained personnel for a brief period of time, or used an inordinate amount of overtime. Those events occurred at the same time as the logistics support infrastructure was being downsized. Adding to the difficulty of smooth and efficient depot maintenance programming has been the closure of several maintenance depots, civilian workforce reductions, and hiring freezes. It should also be recognized that the Congress increased the DoD depot maintenance funding over the amount requested for Fiscal Years 1992 through 1995, and directed the Department to allow for unusually high levels of funded carryover for several years.

The carryover policy would not apply to ship depot maintenance. Carryover policy applies only to unfilled customer orders. That policy is not applicable to work in progress, such as a ship depot maintenance period that starts in one fiscal year, but completes in another. For ship maintenance, customer orders are accepted by the depot only in the fiscal year of induction.

# Major Contributors to This Report

---

National Security and  
International Affairs  
Division, Washington,  
D.C.

Robert J. Lane

---

Dallas Regional Office

Kimberly S. Carson  
Bonnie S. Carter

---

Norfolk Regional  
Office

Norman L. Jessup, Jr.  
Vincent C. Truett  
Jeanett H. Reid

---

### Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

**Orders by mail:**

U.S. General Accounting Office  
P.O. Box 6015  
Gaithersburg, MD 20884-6015

**or visit:**

Room 1100  
700 4th St. NW (corner of 4th and G Sts. NW)  
U.S. General Accounting Office  
Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (301) 258-4066, or TDD (301) 413-0006.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (301) 258-4097 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

---

**United States  
General Accounting Office  
Washington, D.C. 20548-0001**

**Bulk Mail  
Postage & Fees Paid  
GAO  
Permit No. G100**

**Official Business  
Penalty for Private Use \$300**

**Address Correction Requested**

---





