DEPOT MAINTENANCE

Army Needs Plan to Implement Depot Maintenance Report’s Recommendations
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Why GAO Did This Study
Each year, the U.S. Army spends about $3 billion on depot-level maintenance and repair work for weapons systems and other equipment. However, because its data gathering and reporting processes have been limited, the Army historically has been unable to fully identify how much depot-level maintenance takes place outside its five public depots. As a result, it has not been able to determine with precision how well it was meeting statutory requirements to limit contracted depot-level maintenance work to 50 percent of the program budget. In the House report on the Fiscal Year 2001 Defense Authorization Act, Congress directed the Army to report on the proliferation of depot-level maintenance work at nondepot facilities and asked GAO to review that report. GAO examined the extent to which (1) the Army’s report identifies the amount of depot-level maintenance work done outside public depots; (2) the Army can account for its depot-level maintenance workload, as required by statute; and (3) the corrective actions in the report are likely to address the proliferation issue and enhance the Army’s reporting.

What GAO Found
The Army’s proliferation report, issued in September 2003, did not fully identify the extent of depot-level maintenance work performed outside the Army’s public depots. The report estimated that the Army underreported its fiscal year 2001 $2.7 billion depot-level maintenance program by $188.6 million but indicated that this was a rough estimate and that further analysis is needed. It attributed this underreporting largely to work performed in two categories—work that met the criteria for depot-level maintenance work but was not reported as such and work at nondepot field facilities that involved depot-level maintenance tasks. GAO’s prior reviews also identified these categories as key contributors to underreporting. While the report noted that the Army has an extensive maintenance infrastructure with redundant capabilities, it did not address the extent of this redundancy.

The lack of complete information on the extent of depot-level maintenance workloads limits the Army’s ability to fully account for this work in the Department of Defense’s (DOD) annual report to Congress on the allocation of public- and private-sector depot-level maintenance spending. The 2003 proliferation report identified key Army limitations, including inconsistencies in applying the congressionally mandated definition of “depot maintenance,” weaknesses in its management information systems, and the failure to follow established policies and procedures for authorizing depot-level maintenance work at nondepot facilities. GAO’s current analysis and prior work confirmed that these limitations make it difficult for the Army to fully account for its maintenance workload as it moves closer to the 50 percent ceiling for work performed by contractors. GAO’s most recent report on the Army’s 50-50 reporting for fiscal year 2002 showed that, after adjustments for known underreporting, the percentage of private-sector work increased to 49 percent.

If implemented, the 29 recommendations in the 2003 report could enhance the Army’s ability to report on its 50-50 data and to evaluate the proliferation of depot-level maintenance work at nondepot facilities. The recommendations, which are consistent with those that GAO has previously made, are focused on key problem areas, such as the need for an improved understanding about the 50-50 rule and for compliance with reporting policies and procedures. Efforts have been undertaken to address some of the problem areas. However, the Army has not yet developed an action plan that identifies priorities, time frames, roles and responsibilities, evaluation criteria, and resources for managing the implementation of the recommendations. Until the Army does this, it will be difficult to assess to what extent the Army is likely to meet its desired objectives. While improvements should be accomplished, the complexity and vastness of the Army’s maintenance system and continuing questions about such issues as the definition of “depot maintenance” and changing maintenance strategies could continue to present challenges in fully recording all maintenance work that should be captured.

What GAO Recommends
GAO recommends that the Secretary of the Army develop an action plan to implement the recommendations in the Army’s 2003 maintenance proliferation report. DOD concurred with GAO’s recommendation.


To view the full product, including the scope and methodology, click on the link above. For more information, contact Barry W. Holman at (202) 512-8412 or holmanb@gao.gov.

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Abbreviations

DOD  Department of Defense
GAO  General Accounting Office

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January 8, 2004

The Honorable John W. Warner
Chairman
The Honorable Carl Levin
Ranking Minority Member
Committee on Armed Services
United States Senate

The Honorable Duncan L. Hunter
Chairman
The Honorable Ike Skelton
Ranking Minority Member
Committee on Armed Services
House of Representatives

Each year the Department of Defense (DOD) submits a report to Congress showing that billions of dollars have been spent on depot maintenance and repairs for Army weapons systems and support equipment. In recent years, depot-level maintenance and repair work has expanded from the traditional fixed-location public depots to numerous nondepot repair facilities in the field. This shifting of depot-level maintenance workload to field facilities has contributed to uncertainty about the magnitude of depot-level maintenance capabilities and the distribution of work between public and private facilities. In October 1999, we reported on the Army’s first congressionally directed report on the proliferation of depot-level maintenance activities at nondepot facilities, noting that the Army faced a number of continuing challenges in attempting to address the fragmentation of depot-level maintenance work and the proliferation of depot-level maintenance facilities. We noted that the Army’s report did not

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1According to 10 U.S.C. 2460, depot maintenance workloads include (1) materiel maintenance and repair requiring the overhaul, upgrading, or rebuilding of parts, assemblies, or subassemblies and (2) testing and reclamation of equipment as necessary, regardless of the source of funds or the location where the work is performed. 10 U.S.C. 2466 requires annual reports of public- and private-sector expenditures for depot maintenance services and stipulates that no more than 50 percent of annual depot maintenance funding provided for military departments and defense agencies can be used for work accomplished by contractors. These reports are generally referred to as “50-50 reports.”
sufficiently identify the extent of depot-level maintenance work performed at nondepot facilities.²

In the House Armed Services Committee’s report on the fiscal year 2001 defense authorization act,³ Congress directed the Secretary of the Army to provide a report that identifies the proliferation of depot-level maintenance performed outside of the five public depots. The Army formally submitted its report in September 2003. The committee’s report also requested that we provide a review of the Army’s report, including an assessment of the Army’s ability to comply with 10 U.S.C. 2466, which governs the distribution of depot-level maintenance funds between public and private facilities. Our review addresses the extent to which (1) the Army’s report identifies the amount of depot-level maintenance work performed outside the public depots, (2) the Army can account for its depot-level maintenance workload as required by 10 U.S.C. 2466; and (3) the corrective actions in the Army report are likely to address the proliferation of depot-level maintenance activities and enhance the accuracy and completeness of 50-50 reporting.

To address these objectives, we drew largely from the body of work we have done in the past on the Army’s depot-level maintenance issues. In addition, we interviewed officials at Army headquarters, Army major commands, and maintenance facilities at selected field installations to gain a better understanding of the implications of the Army report’s findings and recommendations. A detailed description of our scope and methodology is included in appendix I.

Results in Brief

The Army’s 2003 report does not fully identify the extent of depot-level maintenance work performed at nondepot facilities and, thus, is not fully responsive to the mandate’s requirement that the Army identify the proliferation of these types of facilities. The report’s identification of proliferation was limited to an estimated $188.6 million that the Army might have underreported in its $2.7 billion depot-level maintenance program for fiscal year 2001. This amount was said to be a preliminary rough estimate that needed further validation and, in our view, is not fully


indicative of all the depot-level maintenance work being done at nondepot facilities. The report indicated that this underreporting was largely due to the performance of depot-level maintenance tasks by nondepot facilities in such areas as (1) programs that did not identify depot-level maintenance work tasks but met the criteria for depot-level maintenance work and (2) field-level maintenance involving depot-level tasks. From our prior work and current analysis, we agree that these two areas are major contributors to the Army’s underreporting of its depot-level maintenance work. Although the report pointed out that the Army has an extensive maintenance infrastructure with redundant capabilities and capacities, it did not provide any information on the extent of this redundancy or the types of maintenance facilities that could be consolidated. Otherwise, the Army’s report was consistent with our findings in recent years and our work for this engagement.

The lack of complete information on the extent of depot-level maintenance work performed in nondepot facilities limits the accuracy and completeness of DOD’s annual report to Congress on the allocation of depot-level maintenance funds between the public and private sectors. In our analysis of the Army’s 50-50 reporting, we have said that underreporting depot work at nondepot facilities is one of the limitations affecting the Army’s ability to fully account for its depot-level maintenance work. Consistent with our prior work in this area, the Army’s report identified several key factors affecting the Army’s ability to precisely capture and report its depot-level maintenance data at nondepot facilities. These factors include (1) the inconsistent application of the congressionally mandated definition of “depot maintenance” and related guidance, (2) weaknesses in management information systems for collecting and reporting workload data, and (3) the failure to follow established policies and procedures for authorizing depot-level work at field-level facilities and outsourcing depot-level maintenance workloads. Our current analysis and our prior work identify these factors as underlying causes affecting the Army’s determination that it has complied with the 50-50 depot-funding requirement. While neither the Army nor we can precisely quantify the extent of depot-level maintenance work that should have been included in the 50-50 analysis, this information is key for the Army to effectively manage its depot-level maintenance program and for ensuring the accurate and complete reporting of where depot-level maintenance is being performed as required by the 50-50 legislation. Such data become even more significant as the Army moves closer to the ceiling permitted for work performed by contractors. For example, the Army’s depot-level maintenance data for fiscal year 2002 indicated that funding in the private sector for depot-level maintenance was below the 50 percent
limit. However, our adjustments for known errors in reporting increased the percentage of private-sector work to 49 percent from the 46.5 percent reported by the Army. An increase of more than 1 percent in the use of the private sector to perform more depot-level maintenance in the future could cause the Army to exceed its statutory limitation and thereby be required to seek a national security waiver and notify Congress as provided for in 10 U.S.C. 2466.

If fully implemented, the recommendations in the Army’s report could improve the identification of additional depot-level maintenance work in nondepot facilities, resulting in improving the accuracy and completeness of the 50-50 reporting. The Army’s proliferation report generally addressed key problem areas, and the recommendations were consistent with recommendations we have made in the past. Efforts have been undertaken to address some of the problem areas; however, no action plan to manage the implementation has been developed. Evaluating the success of the proposed 29 recommendations will be difficult until the Army develops an action plan with priorities, time frames, responsible organizations, and evaluation criteria, and until the resources required have been identified. At the same time, while improvements should be accomplished, the complexity and vastness of the Army’s maintenance system and continuing questions about such issues as the definition of “depot maintenance” and changing maintenance strategies could continue to present challenges in fully recording all depot-level maintenance work that should be captured.

In this report, we are recommending that the Army establish a plan to manage the implementation of the recommendations in the depot proliferation report. In commenting on a draft of this report, DOD concurred with our recommendation, noting that the Army is establishing an integrated product team to develop an action plan. The response stated that some of the recommendations in the Army’s report would require modification.

The Army uses maintenance capabilities in both the public and private sectors to maintain, overhaul, and repair its military weapons systems, such as missiles, combat vehicles, tactical vehicles, aircraft, and communication and electronic equipment. The level at which maintenance work is performed depends largely on authorized capability, worker skills, and predefined work requirements. Legislative requirements—which play an important role in managing the allocation of depot-level maintenance work—mandate that DOD provide Congress with annual reports on the
distribution of funding for depot-level maintenance workloads in the public and private sectors.

The Army assigns maintenance work to four categories—unit support, direct support, general support, and depot-level support. Unit and direct support workloads, which are limited to routine or recurring requirements, such as oil changes and the removal and replacement of components, are performed at military units in field locations and funded by direct appropriations for operations and maintenance.

General support, which consists of the repair and overhaul of parts and assemblies and some end items such as trucks, is generally performed at fixed (nonmobile) industrial facilities located on Army posts, camps, and stations, and it is funded by direct appropriations for operations and maintenance. Military personnel, government-employed civilians, or contractor employees may perform this maintenance.

Depot-level support, which includes the overhaul; upgrading; and rebuilding of parts, assemblies, and subassemblies; and testing and reclamation of equipment, is the most intensive category of maintenance and requires the highest level of skilled workers and more sophisticated test and plant equipment. It traditionally has been performed by (1) government-employed civilians working at government-owned industrial facilities under the command and control of the Army Materiel Command (currently five public depots) or (2) contractor personnel working in contractor owned and operated facilities performing work specified by Army Materiel Command-managed maintenance contracts. The Army’s five government-operated maintenance depots are managed within the Army Working Capital Fund. Contract depot-level maintenance work is not managed under the working capital fund.

\[4\] The Army’s maintenance structure for aircraft and components has only three categories: unit, intermediate, and depot.

\[5\] One key exception is the cost of military personnel involved in this category of work, which is accounted for in a separate, centrally managed, Military Personnel appropriations account.

\[6\] The five public depots are located at Anniston, Ala.; Corpus Christi, Tex.; Chambersburg, Pa.; Texarkana, Tex.; and Tobyhanna, Pa.

\[7\] Using working capital funds, organizations sell goods and services to customers on the basis of rates designed to recoup the full cost of operations.
The Army has two categories of depot-level maintenance activities:

- Activities that have been designated and organized by design and purpose to primarily perform depot-level maintenance and repair tasks. These activities would include the Army Materiel Command’s public depots; the Army’s forward deployed maintenance depots; and contractor depots, primarily located at both the national and installation levels.

- Activities below the depot level that have been granted approval to perform specific depot-level tasks through a special or one-time authorization or that have been designated as a source of repair. These activities include Army National Guard Readiness Sustainment Maintenance Sites and Aviation Classification Repair Activity Depots, Army Reserve Installation Materiel Maintenance Activities, and Army Forces Command Contract Maintenance Facilities. These activities are primarily located at the installation level, and the work may be done by either government or contractor personnel.
Operations of the Army depots are guided by legislative requirements that divide the amount of depot work between the public and private sectors and add specificity to how such work is to be defined. For example, 10 U.S.C. 2464 provides for a government owned and operated core logistics capability that is sufficient to ensure an effective and timely response to a mobilization or other national emergency. Also, 10 U.S.C. 2466 generally prohibits the use of more than 50 percent of the funds made available in a fiscal year for depot-level maintenance and repair by nonfederal personnel.

In addition, 10 U.S.C. 2460 defines depot-level maintenance to encompass material maintenance or repair requiring the overhaul, upgrading, or rebuilding of parts, assemblies, or subassemblies and the testing and reclamation of equipment, regardless of the source of funds for the maintenance or repair or the location where maintenance or repair work is performed. Depot-level maintenance also encompasses software maintenance, interim contractor support, and contractor logistics support to the extent that work performed in these areas is depot-level maintenance. The statute excludes from depot-level maintenance the nuclear refueling of an aircraft carrier, the procurement of major modifications or upgrades of weapons systems that are designed to improve program performance, and the procurement of parts for safety modifications, although the term “depot maintenance” does cover the installation of parts for safety modifications. Congress has made changes to various depot-level maintenance requirements over the years. For example, the 1998 Defense Authorization Act established a statutory definition of depot-level maintenance and repair and increased DOD’s authority to use its depot-level maintenance funds for the private sector’s performance of the work from 40 to 50 percent.

On the basis of statutory language defining depot-level maintenance, the Office of the Secretary of Defense issues annual guidance to the military departments for reporting their public-private workload allocations. The

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8Interim contractor support is designed to be an interim arrangement in which a contractor provides depot-level maintenance (and sometimes other logistics support) as part of the acquisition strategy for new systems.

9Contractor logistics support is designed to be a lifetime support concept in which a contractor provides most or all elements of logistics support, including depot-level maintenance.

military departments also issue internal instructions to manage the data collection and reporting process tailored to their individual organizations and operating environments.

As we have reported in recent years in examining DOD’s compliance with its so-called “50-50 requirement” under 10 U.S.C. 2466, all of the military departments have continuing data errors and inconsistencies in reporting and problems in documenting and independently validating their annual reports. We also have recognized the limitations of their financial systems, operations, and controls, as well as their continuing inability to capture and report the full costs of depot-level maintenance programs. Some of our most recent reports on depot-level maintenance issues are listed in the Related GAO Products section of this report.

We previously reported that the Army had not sufficiently identified the extent of depot-level maintenance work performed at nondepot facilities in its April 14, 1999, report to the House Committee on Armed Services on depot proliferation. While the Army’s report indicated that 40 staff years of depot-level maintenance work was performed outside of the formal depot system by nondepot maintenance providers operating under specialized repair authorities, it also recognized that the figure was likely understated for a variety of reasons to include limitations in systems and procedures to fully quantify such work. We agreed. We also noted that in July 1999 the Army designated its Army Materiel Command as its National Maintenance Manager with responsibility for overseeing the Army’s logistics and maintenance support programs and managing maintenance facilities. In doing so, we noted then that while the Army recognized that it needed to modify and standardize Army data systems to fully account for depot-level maintenance work at all locations, it had not established clear action plans, milestones, and funding requirements for doing so.

Our September 2003 report on DOD’s compliance with the 50-50 requirement found that the Army’s latest reporting on depot-level workloads for fiscal years 2001 and 2002 had utilized a new, more centralized financial system to collect 50-50 data that corrected some of the transcription errors we had found the previous year but that we continued to find errors, omissions, and inconsistencies in its data.

\[11\text{See GAO/NSIAD-00-20.}\]

Moreover, we reported that, as in prior years, the Army underreported public- and private-sector depot-level maintenance work at field locations as it continues unfinished efforts to consolidate maintenance activities and better control the proliferation of depot-level tasks at nondepot facilities.

### Army’s 2003 Proliferation Report Did Not Fully Identify Depot-Level Maintenance Performed outside Public Depots

Although the mandate directed the Army to identify the proliferation of depot-level maintenance performed outside the public depots, the Army’s report on depot-level maintenance proliferation did not fully identify the extent of depot-level maintenance work performed at nondepot facilities. Instead, the report estimated that depot-level maintenance work valued at $188.6 million for fiscal year 2001 was not included in the Army’s depot-level maintenance data and that further validation of this amount was needed. While this estimate may not be fully indicative of depot-level maintenance work being performed outside the public depots, it indicates underreporting in this area that is consistent with the observations we have made in our prior work. Although the report recognized that the Army has redundant capabilities and capacities, it did not provide any information on the extent of this redundancy or the extent of maintenance activities that could be consolidated. We also have previously reported the existence of this problem.

While the Army’s report provided an estimate of depot-level maintenance work that was not appropriately identified as such in fiscal year 2001, it acknowledged that the amount was incomplete and needed further validation. The report listed seven specific areas where depot-level maintenance work performed by nondepot facilities was not identified and estimated this amounted to be $188.6 million. As illustrated by table 1, most of the unidentified amount occurred in field-level facilities that perform depot-level maintenance tasks. According to the report, two categories of work accounted for about 75 percent of the $188.6 million. These were facilities that performed field-level maintenance under the National Maintenance Program with embedded depot tasks and those

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See GAO/NSIAD-00-20.

The National Maintenance Program is the Army’s ongoing action to establish a fully integrated national maintenance requirements process that includes all depot-level maintenance requirements, regardless of the location of the work in a field facility or a maintenance depot.
The report pointed out that some of the unidentified depot-level maintenance work resulted from a misunderstanding between the Army Materiel Command and its subordinate commands over which organization would report this type of work.

Table 1: Categories in Which Depot-Level Maintenance Work Was Not Identified in Fiscal Year 2001

<table>
<thead>
<tr>
<th>Category of work not identified</th>
<th>Amount</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The overhaul, upgrading, and rebuilding of equipment that met the definition of depot-level maintenance.</td>
<td>$3.3</td>
<td>1.8</td>
</tr>
<tr>
<td>2. Reimbursable depot support at the installation level.</td>
<td>22.4</td>
<td>11.9</td>
</tr>
<tr>
<td>3. Maintenance covered by warranty associated with the purchase price of equipment.</td>
<td>4.0</td>
<td>2.1</td>
</tr>
<tr>
<td>4. Field-level maintenance under the National Maintenance Program with embedded depot-level tasks.</td>
<td>75.9</td>
<td>40.2</td>
</tr>
<tr>
<td>5. Contract support at a public depot.</td>
<td>10.4</td>
<td>5.5</td>
</tr>
<tr>
<td>6. Maintenance tasks performed under Specialized Repair Authority.</td>
<td>7.6</td>
<td>4.0</td>
</tr>
<tr>
<td>7. Maintenance tasks performed under One-Time Repair authorization at field-level facilities.</td>
<td>65.0</td>
<td>34.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$188.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>


The report’s identification of unidentified depot-level maintenance work performed by nondepot facilities is consistent with our prior reviews of the Army’s annual 50-50 data. For example, in our most recent report, we identified work categories such as unreported one-time repair actions and unreported work by commands that did not receive Army reporting guidance, which contributed to the Army’s inability to fully account for its depot-level maintenance work in 2002. We noted that, as in past years, the Army did not fully identify public- and private-sector depot-level maintenance work at field locations as it continued unfinished efforts to consolidate maintenance activities and better control the proliferation of depot-level tasks at nondepot locations. While neither we nor the Army can precisely identify the amount of depot-level maintenance work being

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15One-Time Repair actions are depot repairs that are accomplished at nondepot locations following an organization’s request and approval to do this work on a limited basis.

16See GAO-03-1023.
performed in nondepot maintenance facilities, our prior work and the Army’s latest report suggest that the $188.6 million estimate should not be construed as fully representing the amount of depot-level maintenance work performed at nondepot facilities.

The Army’s proliferation report pointed out that the Army’s maintenance infrastructure has redundant capabilities and capacities that could be consolidated and streamlined to be more cost-effective. While the active Army, Army National Guard, and Army Reserve operate extensive maintenance facilities, some of which have the capability and capacity to perform depot-level maintenance work, the report did not provide any data to quantify the extent of redundancy or identify any possible candidates for consolidation. It did suggest that the Army further study the issue for opportunities to streamline its current expansive depot-level maintenance infrastructure. Moreover, the Army’s full implementation of its National Maintenance Program—another report recommendation—is also intended to address streamlining the Army’s maintenance infrastructure.

While we did not attempt to identify the full extent of this maintenance infrastructure as part of this review, our analysis supports the Army report’s contention that the Army has extensive nondepot facilities, some of which have the capability and capacity for depot-level maintenance tasks and are performing depot-level maintenance work. At the Army sites we visited, we observed maintenance activities involved with all levels of maintenance for ground and aviation systems. Similar to the Army’s public depots, these activities occupied large facilities that included machine shops, automobile and heavy- equipment repair shops, paint and body shops, and sandblasting areas. The pictures in figure 2 show some contrast and similarities in maintenance facilities at depot and nondepot locations.
Figure 2: Various Army Maintenance Facilities

Source: Anniston Army Depot.
Anniston Army Depot.

Source: U.S. Army Reserve.
Army Reserve Installation Materiel Maintenance Activity, Fort McCoy, Wisconsin.

Source: U.S. Army Reserve.
Army Reserve Equipment Concentration Site, Fort McCoy, Wisconsin.

Source: Kansas Army National Guard.
National Guard Maneuver Area Training Equipment Site at Fort Riley, Kansas.
Some of the activities had the capability and capacity for depot-level maintenance activities and were performing depot-level maintenance work. For example, the Readiness Business Center at Fort Campbell, Kentucky, has been authorized to perform depot-level maintenance tasks to repair components for tactical wheeled vehicles, radios, and helicopters. Of the total $27.1 million maintenance work performed by the Business Center in fiscal year 2002, about $4.5 million, or about 17 percent, was identified as depot-level maintenance. Also maintenance officials at several facilities at Fort Riley, Kansas—three of them operated by the National Guard, one by the Fort Riley Directorate of Logistics, one by the Forces Command, and one by the Army Reserve—estimated that their maintenance work for fiscal year 2002 totaled about $58.5 million. The National Guard performed about $35 million worth of depot-level maintenance in fiscal year 2002 and expects this workload to significantly increase. More details on the Army’s maintenance infrastructure are provided in appendix II.

We have previously reported on the Army’s proliferation of facilities that perform depot-level maintenance work and the lack of a strategic plan for depots to guide its decisions on this issue. In an October 1999 report, we pointed out that the Army’s April 1999 study of the proliferation of depot-level maintenance activities at nondepot facilities did not sufficiently identify the extent of this type work.\(^{17}\) We also highlighted that the Army’s study, citing inadequate data on the subject of proliferation, did not make any recommendations for consolidating depot-level maintenance facilities. We noted that a key challenge that the Army faced was determining and overseeing the amount of depot-level maintenance capabilities controlled by major commands in the active Army and the Army National Guard. For various reasons, these commands were reluctant to reduce their present capability for performing depot-level maintenance workloads. For example, Reserve and National Guard Bureau officials said that having local maintenance facilities capable of performing some depot-level tasks was a readiness issue in that such facilities allowed their units more rapid turnaround time on equipment requiring this type of repair.

In July 2003 we reported that work performed in the Army’s public depots had declined by 36 percent from fiscal year 1987 through fiscal year 2002,

\(^{17}\)See GAO/NSIAD-00-20.
while the total depot-level maintenance program grew. We pointed out that future workload projections indicated further decline but that the full impact of the Iraq conflict on future depot-level workload was largely unknown. Among the host of factors that contributed to this decline were (1) DOD’s policy for greater reliance on the private sector for depot-level support of new weapons systems and major upgrades and (2) its increased reliance on the use of regional repair activities and private-sector contractors for work that might otherwise be done in the depots. We noted that neither DOD nor the Army had a comprehensive and current depot-level maintenance strategic plan, which was an essential aspect of ensuring future depot efficiency and viability.

Army Cannot Provide Congress with a Complete Accounting of Its Depot-Level Maintenance Work

Without complete information on the extent of depot-level maintenance work performed in nondepot facilities, DOD’s annual report to Congress cannot fully account for the allocation of depot-level maintenance funds between the public and private sectors. In our analysis of DOD’s 50-50 reporting, we have said that underreporting depot work in nondepot facilities is one of the limitations affecting the Army’s ability to fully account for its depot-level maintenance work. Consistent with our work in this area, the Army’s report on proliferation identifies a number of factors that preclude the Army from fully capturing and reporting its depot-level maintenance data at nondepot facilities. These factors include (1) inconsistent application of the congressionally mandated definition of “depot maintenance” and related guidance, (2) weaknesses in the management information systems for collecting and reporting data, and (3) the failure to follow established policies and procedures for authorizing depot-level work at field-level facilities and outsourcing work. Our current analysis and our prior work identify these factors as underlying causes affecting the Army’s determination that it has complied with the 50-50 rule. Furthermore, these limitations will become more significant as the Army approaches the statutory ceiling on the performance of depot-level maintenance work by contract.

We have reported in the past that by not having complete information on the amount of depot-level maintenance work being performed in nondepot facilities, DOD cannot provide Congress with an accurate and complete report regarding the allocation of depot-level maintenance between the public and private sectors as required by 10 U.S.C. 2466. For example, our September 2003 report stated that our prior 50-50 reports have documented continuing problems and shortcomings in accurately and consistently reporting depot-level maintenance accomplished by both public- and private-sector sources at nondepot locations. For example, one-time depot repair actions at unit-level facilities went unreported. Other nondepot work was not reported because some commands did not receive 50-50 instructions and others misapplied the guidance. Contractors performed some of this work, and military or civilian government employees performed some of it. While neither the Army nor we know the extent of unreported work nor the amount performed by public- and private-sector employees, the impact effectively limits the accuracy and completeness of DOD’s report to Congress on the allocation of depot-level maintenance funds between the public and private sectors. Additionally, as discussed below, both the Army and we have identified three key factors inhibiting the Army’s ability to accurately and completely report depot-level maintenance work performed at nondepot facilities.

A key factor inhibiting the Army’s ability to accurately and completely identify all depot-level maintenance work performed in nondepot facilities in DOD’s 50-50 report is that Army military activities inconsistently apply the congressionally mandated definition of “depot maintenance.” The Army’s proliferation report concluded that the congressionally mandated definition of depot-level maintenance is not widely known below the major command headquarters. In addition, the definition is open to interpretation, and the reporting guidance is not always well defined.

At most of the commands and installations we visited, maintenance officials said that, in determining whether a maintenance task is depot-level maintenance, they follow the guidance found in the Army’s Maintenance Allocation Charts; technical manuals; and source, maintainability, and recovery codes for reparable components rather than apply the congressionally mandated definition. They expressed concerns that the congressional definition is not always consistent with this guidance, is too broad, and is subject to too much interpretation over

what maintenance tasks should be counted as depot-level tasks. For example, officials at the National Guard Bureau said that applying the definition to repair work performed by direct support and general support activities caused uncertainty in that the bureau considered most of the work at these levels to be nondepot-level work and to identify what work should be considered depot-level work required subjective decisions. Officials at the Reserve Command said that, while only maintenance work defined by the Army’s technical manuals as depot-level work should be reported as such, under the expanded definition of depot-level maintenance, some work defined as below depot-level could involve depot-level tasks such as changing and swapping out engines and transmissions for wheeled vehicles. Officials at the installation maintenance sites we visited made similar comments.

In commenting on the proliferation report, the Army Materiel Command said that the application of the definition of depot-level maintenance contributed to the report’s findings that depot-level maintenance tasks at nondepot facilities were being underreported. The command added that tasks performed by these facilities were not distinguished as depot-level tasks in the Army guidance but, in the aggregate, these tasks may be equivalent to depot-level maintenance. Finally, the command said that the Army could only approximate the extent of work performed at nondepot facilities because it currently does not have a system to precisely capture information on maintenance work for DOD’s 50-50 report.

In prior reports, we have concluded that the Army had not revised its maintenance policies and technical manuals to reflect the expanded definition of depot-level maintenance and, as a result, any attempt to estimate its extent at local facilities would be misleading. We also recently reported that some Army commands did not receive 50-50 instructions and that others misapplied the guidance. The Army’s 2003 report indicates that the Army will have to make these changes in its maintenance policies and technical manuals. For example, in recognizing that the Army had not yet incorporated the expanded definition into its policies and procedures for 50-50 reporting, the Army’s report suggested that the Army (1) provide more explicit guidance for 50-50 reporting to help ensure that its commands better understood reporting requirements and (2) develop an easy-to-use reference guide to help the commands

\[20\] See GAO/NSIAD-00-20.
\[21\] See GAO-03-1023.
Army's Management Information Systems Are Inadequate

better determine what maintenance work should be included in the 50-50 report.

Inadequate Army management information systems are a second key factor inhibiting the Army's ability to fully capture depot-level maintenance work performed in nondepot facilities. The Army's problems with its management information systems are longstanding. In a December 2000 report, the Army Logistics Transformation Agency concluded that the Army's maintenance environment was characterized by many "stovepipe" information systems and application programs that are predominately fed data manually by maintainers and operators. It also concluded that a wide range of maintenance-related information does not exist, is not adequate, or is not accessible. In our prior reviews, we also have reported weaknesses in the Army's management information system. For example, in our 1999 report, we concluded that deficiencies in management information systems contributed to the Army's inability to develop accurate and consistent estimates of its depot-level maintenance work.22 In our September 2003 report on DOD's compliance with the 50-50 requirement, we found that the Army's latest reporting on depot-level workloads for fiscal years 2001 and 2002 had utilized a new, more centralized financial system to collect 50-50 data.23 This new system helped correct some of the transcription errors we had found the previous year, but we continued to find errors, omissions, and inconsistencies in the Army's data.

The Army's proliferation report concluded that current management information systems for capturing depot-level maintenance work at the installation level are inadequate for collecting and reporting 50-50 data. According to the report, the systems cannot, among other things, (1) archive the data in a readily accessible manner or (2) allow for the separate counting of multiple maintenance actions associated with a single work order. (A work order may include three different levels of maintenance, including depot-level maintenance, but only one maintenance code can be assigned to the order.) Also the report pointed out that collecting and reporting depot-level maintenance work outside the Army's five public depots was a convoluted and manual process.

22See GAO/NSIAD-00-20.
23See GAO-03-1023.
Policies and Procedures for Authorizing Work Are Not Always Being Followed

Another factor inhibiting the accuracy and completeness of the 50-50 report is that policies and procedures for authorizing depot-level work in nondepot facilities are not always followed. The Army’s proliferation report made the same conclusion and identified several areas where reporting officials did not believe that maintenance facilities were following policies and procedures for authorizing and reporting depot-level maintenance work. For example, the report noted that maintenance facilities at the installation level were undertaking depot-level maintenance work without having higher command authorization and that some authorized one-time repairs were not being reported. The report also concluded that some weapons systems managers were not following current DOD and Army guidance in determining sources for providing depot-level maintenance support.

In a prior report related to DOD’s process for determining depot-level maintenance repair strategies for its new weapons systems and major upgrades, we noted that many weapons systems managers, including those in the Army, were not following existing guidance regarding such tasks as adequately performing required cost comparisons between public and private facilities and coordinating maintenance support decisions between acquisition and logistics officials. We noted that service officials attributed these problems, in large part, to weaknesses in guidance, which they believed was inadequate, unclear, and sometimes contradictory.

Limitations More Significant for Future Assessment of 50-50 Compliance

As the Army moves closer to the statutory ceiling for the funding for depot-level maintenance work performed in the private sector, the limitations in the Army’s ability to precisely capture its depot-level maintenance work will become more significant. For fiscal year 2002, the Army’s reported data ($2.7 billion for the total program) indicated that its funding in the private sector for depot-level maintenance remained below the 50-percent limit. However, our adjustments for known errors in reporting for that year increased the percentage of private-sector work to 49 percent from the 46.5 percent reported by the Army. An increase of more than 1 percent in the use of the private sector to perform more depot-level maintenance in the future, could cause the Army to exceed its

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25See GAO-03-1023.
statutory limitation. Consequently, the Army would be required to seek a national security waiver and notify Congress as provided for in 10 U.S.C. 2466(b).  

With regard to estimates of future compliance, the Army’s report noted that the Army might exceed the 50 percent ceiling for contractor support by fiscal year 2006. More recently, an official from the Army Materiel Command said that, for fiscal years 2002 and 2003, the Army experienced a 3 to 5 percent increase in its contract requirements for depot-level maintenance because increased operational requirements made the public depots unable to meet the total demand for depot-level maintenance work. She pointed out that, if this trend were to continue, the Army might have to seek a waiver from the Secretary of Defense, possibly as early as fiscal year 2004, to exceed the 50 percent limitation for work performed by the private sector. Another official at the Army Materiel Command said that the Army’s depot-level maintenance work in 2004 might increase by about $2.5 billion because of operational requirements for Army equipment deployed in the Middle East. He also said that, in an effort to keep up with maintenance demands, the Army’s five public depots have used extensive overtime, added second work shifts, hired temporary employees, and allowed some retirees to return to work. In his view, the public depots could not meet the demands of the increased maintenance work and the Army would have to use more contractors.

The Army report’s recommendations are focused on key problem areas and are consistent with recommendations we have made in the past. If fully implemented, the recommendations in the Army’s proliferation report could improve the identification of additional depot-level maintenance work in nondepot facilities, and the accuracy and completeness of 50-50 reporting. Efforts have been undertaken to address some of the problem areas; however, no action plan to manage the implementation has been developed. Evaluating the success of the proposed 29 recommendations will be difficult until the Army develops an action plan with priorities, time frames, responsible organizations, evaluation criteria, and the resources required to implement these recommendations. If actions are not implemented in a timely way, the Army will not likely have the

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31 10 U.S.C. 2466(b) provides that the Secretary of Defense may waive the 50 percent limitation if the Secretary determines that a waiver is necessary for reasons of national security and notifies Congress regarding the reasons for the waiver.
comprehensive information that it needs in the near term to comply with the 50-50 reporting requirements or to effectively manage the existing excess maintenance capabilities and infrastructure. On the other hand, the extent of improvements likely to be achieved in the long term is uncertain, given previous delays and the significant challenges that the Army faces in instituting solutions to ensure the consistent application of 50-50 reporting criteria.

The Army report’s recommendations present an array of corrective measures that are focused on four key areas in which the Army could better evaluate the proliferation of depot-level maintenance facilities and manage its depot-level maintenance program. Appendix III lists the 29 recommendations. Basically, the key areas represent a need for the following:

- **Improved communication and emphasis for the 50-50 requirement.** The 14 recommendations in this area address improving the 50-50 process. They include conducting annual 50-50 workshops, issuing clear guidance for 50-50 reporting, publicizing information about the depot-level maintenance program in professional publications, ensuring that compliance with the 50-50 rule becomes a priority, and developing an easy-to-use reference guide to help reporting activities better identify depot-level maintenance work that should be reported.

- **Improved management information systems.** The three recommendations in this area address continuing efforts to develop a single integrated management information system capable of capturing and reporting depot-level maintenance work at nondepot facilities.

- **Enhanced compliance with policies and procedures for depot-level maintenance operations.** The nine recommendations in this area address revising policies to ensure consistency in compliance with all applicable legislation, regulations, and policies; developing a policy requiring the acquisition of access to system technical data for use by government or other contract maintenance activities; and developing and implementing a plan for documenting baseline data to compare contractor and public depot support costs.

- **Develop the National Maintenance Program and consolidate maintenance activities.** The three recommendations in this area address efforts to develop the National Maintenance Program and to conduct further analyses to identify opportunities for consolidating depot-level maintenance facilities.
Of the Army proliferation report’s 29 recommendations to improve the identification and reporting of depot-level maintenance data, 3 were specifically directed toward managing the proliferation of depot-level maintenance at nondepot facilities. One of the recommendations identified the need for additional study and identification.

The proliferation report’s recommendations are consistent with our prior recommendations regarding the Army’s proliferation of depot-level maintenance facilities and the 50-50 reporting process. For example, in September 2003, we recommended that the 50-50 reporting guidance be appropriately disseminated to reporting organizations and individuals and that staff be properly trained in a timely way to apply the guidance.\(^{27}\) In October 1999, we recommended that the Army address the following challenges:\(^{28}\)

- *Improving its management information systems.* Our recommendation was that the Army identify requisite action items, time frames, and funding requirements for improving the Army’s information management systems to fully identify the magnitude and cost-effectiveness of depot-level maintenance work at various locations within the Army.

- *Finding opportunities to consolidate maintenance activities.* We recommended that the Army establish (1) clear time frames and action plans for assessing requirements for the various types of depot-level maintenance facilities and (2) plans for achieving necessary consolidations and reductions of excess capabilities.

- *Enhancing the National Maintenance Program.* We recommended that the Army incorporate the depot-level maintenance capabilities of both active and reserve components under the National Maintenance Program and assign the national maintenance manager with requisite responsibility and authority for depot-level maintenance capabilities in active and reserve facilities.

\(^{27}\)See GAO-03-1023.

\(^{28}\)See GAO/NSIAD-00-20.
While we made these recommendations 4 years ago, they continue to be essential to addressing the problems of the proliferation of depot-level maintenance facilities and inaccuracies in 50-50 reporting.

The Army’s 2003 report noted that the Army had taken numerous steps since 1999 to improve its management of the proliferation of depot-level maintenance facilities and its 50-50 data. However, the report pointed out that the Army needed to implement the report’s recommendations before it can claim with complete confidence that it is meeting the 50-50 requirement. Headquarters officials responsible for the report told us that the Army maintenance organizations concurred with the report’s recommendations. The Army has already begun implementing some of its report’s recommendations such as holding annual workshops and revising its guidance to include the congressional definition of depot-level maintenance. However, it has not yet developed an overall action plan for managing the implementation of all of the recommendations and, in particular, for setting priorities for the more-critical recommendations.

As the report indicates, corrective actions are essential to improving the Army’s ability to better manage the proliferation of maintenance facilities and capture data for 50-50 reporting. Some of the critical recommendations, such as the need to identify opportunities for consolidating depot-level maintenance facilities, set up a single integrated management information system capable of capturing all depot-level maintenance data, and develop a National Maintenance Program to better manage depot-level maintenance work have been in process for several years. Thus, the identification of specific actions would appear necessary to help the Army accomplish the implementation of these recommendations more timely. A plan would include (1) the Army’s priority for implementing the recommendations, (2) the Army organizations accountable for implementation, (3) the specific time frames for accomplishment, (4) whether the benefits of accomplishment support the cost of implementation, (5) the funding required and the source of funds, and (6) the criteria to determine the effectiveness of the recommendations once they are implemented.

Officials at the Army Communications-Electronics Command said that streamlining maintenance facilities is a good idea, but they do not have the tools that would enable the command to fully implement the proliferation report’s recommendations in this area. They said that updating Army Regulation 750-1 (Army Materiel Maintenance Policy) and conducting 50-50 workshops were a step in the right direction, but that both actions
need to be more comprehensive in educating field-level personnel on policy and requirements. For example, they pointed out that just reiterating the congressional definition of depot-level maintenance in Army Regulation 750-1 did little to add clarity to the definition. Additionally, the last two workshops were spent largely on training for the Depot Maintenance Operations Planning System, a new system to be used by all Army major commands and acquisition managers to capture and report annual 50-50 workload data. According to these personnel, this system appears extremely complex and training should be aimed at those who are actually responsible for reporting maintenance data. Officials at the National Guard Bureau generally disagreed that the Army report’s recommendations will ensure accurate 50-50 reporting—especially in view of the apparent disconnect between the recommendations and the Army’s maintenance transformation process, and the Army’s plans for moving to two-level maintenance.\footnote{The Army plans to reduce the size of its logistics infrastructure by combining the current levels of maintenance into two levels: field-level, which will be “repair and return to user,” and sustainment-level, which will be “repair and return to supply.”}

Army Communications-Electronics Command officials also suggested that, for timely and effective implementation, the Army establish a working group of representatives with subject matter expertise from all levels within the Army to oversee the implementation. Officials at Army headquarters who were responsible for the report told us that they did not yet have a formal action plan established. They said they were planning to establish a working group in December 2003 to review the recommendations and determine what actions needed to be taken.

As previously discussed the Army has taken steps to improve its management of the proliferation of depot-level maintenance facilities and its 50-50 reporting. The Army’s 2003 report and our analysis indicate that some of the key actions related to improving the Army’s long-standing issues in effectively identifying the proliferation of depot-level maintenance facilities and improving its 50-50 reporting have been in process for several years. The magnitude of long-term improvements likely to be realized remains uncertain, given prior delays in instituting solutions and the inconsistent understanding and application of 50-50 reporting criteria.
During our review, we observed that several actions related to the recommendations had been under way for a number of years but that completion dates had slipped and funding had become uncertain. For example, the recommendation that the Army continue efforts to establish a fully integrated national maintenance requirements determination process that includes all depot-level maintenance requirements refers to a program known as the National Maintenance Program. The Army initiated the program in July 1999 and planned to implement it by fiscal year 2004. However, full implementation has slipped to fiscal year 2006. Additionally, required funding to complete the program is uncertain. Army Materiel Command officials said that the program’s goal is to centrally coordinate and control depot-level maintenance work by developing standards for items being repaired at qualified repair sources. They said that (1) the program is helping to better identify and manage facilities that perform depot-level maintenance outside the public depots; (2) the number of maintenance facilities in the program has declined from 60 in fiscal year 2000 to 45 in fiscal year 2003, and these are expected to further decline to 25 in fiscal year 2005 as the Army decides which facilities will be qualified to perform depot-level maintenance work; and (3) the command was working with other commands to reduce the number of nondepot maintenance facilities.

Full implementation of the National Maintenance Program appears to be a key initiative in addressing the proliferation of depot-level maintenance facilities. At the same time, our analysis indicates that, although the concept of the National Maintenance Program could help improve future annual reporting and eliminate some of the current fragmented and duplicative depot-level maintenance workload assignments, it is too early to assess the program’s full impact. The extent to which the program can resolve all the problems related to the proliferation and inaccurate and incomplete identification of depot-level maintenance work performed in nondepot facilities is unclear. The Army’s 2003 report noted that the Army’s schedule for completing the implementation of the National Maintenance Program has slipped to fiscal year 2006. During our review, we noted that, as of October 2003, the Army had completed standards for only 737—about 18 percent—of the 4,148 candidates for the program. While an estimated development cost of about $120 million has already been spent, the Army is a long way from having the required standards that are needed for the program. An Army Materiel Command official said that the Army was not planning to provide any additional funding for the further development of these standards.
In a prior report, we observed that, while the program is intended to consolidate and distribute overhaul work for components returned to the supply system, the evolving management framework will continue to allow local maintenance facilities to repair items returned directly to using organizations—maintenance-to-maintenance transactions that could meet the statutory definition of depot-level maintenance. Additionally, the program did not include some other depot-level maintenance work. For example, it does not address the allocation of depot-level maintenance requirements for overhauling, rebuilding, or upgrading major end items such as tactical wheeled vehicles that are currently being overhauled in field-level maintenance facilities or by contracts managed by field-level organizations even though this work meets the statutory definition of depot-level maintenance work.

With regard to resolving deficiencies in management information systems, it is uncertain when the required changes that will be capable of capturing and reporting depot-level maintenance workloads performed in nondepot facilities will be operational. In October 2003, the Army began testing the transition of its database for Specialized Repair Authority and One-Time Repair authorizations into an automated system referred to as the Joint Computer-Aided Acquisition and Logistic Support system. The Army’s 2003 report described this as an interim initiative to capture and report on maintenance work performed under these two types of authorizations. While this initiative will automate the capturing of this work, it will not identify all depot-level maintenance work that may be performed in field-level facilities. For example, it will not capture depot-level maintenance actions performed on equipment that will be returned directly to the user without going through the Army’s supply system. A single integrated management information system is hoped for when the Army’s evolving Logistics Modernization Program is fully implemented. Testing at the first site, the Tobyhanna Army Depot, is ongoing, but problems have occurred. Earlier estimates of completion are about 18 to 24 months, but some

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30See GAO/NSIAD-00-20.

31The Joint Computer-Aided Acquisition and Logistic Support system is a multiservice program for developing the infrastructure to logistically support weapons systems throughout their life cycle.
delays are expected. Additionally, to what extent it will resolve all the deficiencies in the current systems is uncertain.

Conclusions

We believe that the Army’s implementation of our prior recommendations, as well as the recommendations made in the Army’s proliferation report, are essential to providing the Army with more precise information for crucial decisions in the area of the Army’s depot-level maintenance infrastructure. Their timely and effective implementation depends largely on the necessary emphasis from senior Army leadership. If actions are not implemented in a timely manner, the Army will unlikely have the comprehensive information that it needs to determine the extent of proliferation and effectively manage its excess capabilities and the infrastructure it has—key data needed for complying with the existing reporting statute, identifying excess infrastructure and making appropriate consolidations, and making appropriate decisions for an additional round of base realignments and closures that has been authorized for 2005.

The Army has not yet developed a plan for implementing the recommendations in the Army proliferation report. We believe it is essential that the Army have such a plan to help ensure the timely and effective implementation of the recommendations. Such a plan would include evaluating the priority for implementation and identifying the time frame for implementing the recommendations, the responsible organizations, and the criteria for measuring the desired results.

While improvements should be accomplished, the complexity and vastness of the Army’s maintenance system and continuing questions about such issues as the definition of depot-level maintenance and changing maintenance strategies could continue to present challenges in fully recording all depot-level maintenance work.

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32In July 2002, the Army changed the name of this program from the Wholesale Logistics Modernization Program to the Logistics Modernization Program. This is a new information system that is intended to help manage the Army’s supply, maintenance, and transportation functions. Beginning in July 2003, the Logistics Modernization Program will replace many of the Army’s old logistics information systems.
To ensure the timely and effective implementation of the recommendations in the Army’s 2003 proliferation report to help the Army improve its management of maintenance operations, including the proliferation of depot-level maintenance facilities, and more precisely capture and report depot-level maintenance data, we recommend that the Secretary of the Defense direct the Secretary of the Army to establish a specific plan to manage the implementation of the 29 recommendations identified in the 2003 proliferation report. The plan should include the priority and time frames for implementation, the responsible organizations for implementing the plan, and the criteria for measuring success.

The Department of Defense provided written comments (see app. IV) on a draft of this report. In commenting on the draft, the Office of the Deputy Undersecretary of Defense for Logistics and Materiel Readiness concurred with our recommendation that the Army establish a plan to manage the implementation of the 29 recommendations identified in the 2003 depot maintenance proliferation report. The Department noted that the Army is in the process of establishing an integrated product team to develop an action plan to address the 29 recommendations to include reevaluating the validity and modifying the recommendations where appropriate. The Department also stated that the Army expects to have an action plan in place no later than March 31, 2004. The Department’s response noted specifically that the recommendation contained in the Army’s report related to the designation of core work needs to be revised. We recognize that some adjustment to the recommendations may be necessary as the implementation plan is developed. Whether some recommendations require modification for implementation is not as significant for the Army as is the need for timely action and follow through to address the issues identified in the Army’s depot maintenance proliferation report.

We are sending copies of this report to interested congressional committees; the Secretary of Defense; the Secretary of the Army; and the Director, Office of Management and Budget. We will make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.
If you or your staff have questions regarding this report, please contact me at (202) 512-8412 or holmanb@gao.gov or Julia Denman, Assistant Director, at (202) 512-4290 or denmanj@gao.gov. Other major contributors to this report were Nancy Benco, Wayne Gilliam, and Bobby Worrell.

Barry W. Holman
Director, Defense Capabilities and Management
Appendix I: Scope and Methodology

To answer the Senate and House Committees on Armed Services mandate contained in Report of the Committee on Armed Services, House of Representatives, Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, we reviewed the Army’s Fiscal Year 2002 Study of the Proliferation of Depot Maintenance-Type Activities Phase II Report, dated July 31, 2003. We interviewed Army officials and analyzed pertinent information regarding that report at (1) Army Headquarters in the Washington, D.C., area; (2) Headquarters, Army Materiel Command in Alexandra, Virginia; (3) three subordinate commands—the Army Aviation and Missile Command, Huntsville, Alabama; Communications-Electronics Command, Fort Monmouth, New Jersey; and the Tank-automotive and Armaments Command, Warren, Michigan; (4) Headquarters, National Guard Bureau, Arlington, Virginia; (5) Headquarters, Army Forces Command, Atlanta, Georgia; and (6) Headquarters, Army Reserve Command, Atlanta, Georgia. Also, we interviewed managers and reviewed pertinent information regarding maintenance facilities located at Fort Campbell, Kentucky; Fort McCoy, Wisconsin; Fort Riley, Kansas; and Fort Rucker, Alabama. We made extensive use of our prior work related to Army depot-level maintenance.

To determine the extent to which the Army’s report identified the total amount of depot-level maintenance work performed at nondepot facilities, we examined the requirements of section 2466 of title 10, U.S. Code, and Army regulatory provisions for 50-50 reporting. We analyzed the report’s scope and methodology, findings, and disclosure of the amount it identified and compared these data with our prior work done on the Army’s annual 50-50 reporting process. We interviewed the study group manager, Army officials, and maintenance managers about the nature of maintenance work performed by nondepot facilities and about whether it was being reported as required. Because the Army has no central database or readily available data, we did not attempt to determine the Army’s universe of facilities that perform depot-level maintenance.

To answer whether the Army can accurately account for its depot-level maintenance workloads and the key issues that preclude accurate reporting, we examined the report’s findings to determine what areas were identified as contributing problems. We used our prior work on the Army’s depot-level maintenance program to correlate, compare, and test the consistency of the identified problems with the ones we had previously reported. We interviewed the study group manager, Army officials, and maintenance personnel about the relevancy of the findings and the application to the Army’s depot-level maintenance operations.
To answer whether the corrective actions identified in the Army's report are likely to address the proliferation issue and enhance the Army's reporting, we examined the recommendations to determine how effectively they were linked to the identified problems. We also compared the recommendations with those that we had previously made to test for consistency. Finally, we discussed the relevancy of the recommendations with the study group manager, Army officials, and maintenance representatives.

We conducted our analysis of the Army's report from July through October 2003 in accordance with generally accepted government auditing standards.
Appendix II: Army Maintenance Sites

The Army operates a number of maintenance facilities and has an extensive infrastructure for the maintenance of its military weapons systems and support equipment. For example, as we reported in April 2003, the Army employs about 10,000 personnel at its five public depots to overhaul, repair, and upgrade its ground and air combat systems, subsystems, and assemblies. The Army also has a vast number of other maintenance facilities operated by U.S. government-employed civilians and contractors. For example, we reported in October 1999 that the Army had another 102 maintenance facilities that were potential providers of depot-level maintenance services within the continental United States—28 active Army, 2 Army Reserve, and 72 Army National Guard.

In addition, the Army operates maintenance activities that provide maintenance below the depot level. For example, as of August 2003, the Forces Command reported that it had maintenance facilities at 10 installations that provide direct support for vehicle maintenance; the Army reserve had about 160 maintenance facilities located throughout the United States that perform unit, direct, and general maintenance support; the National Guard had additional maintenance facilities performing unit and direct support maintenance; and Army installations had a number of maintenance facilities that perform various levels of maintenance.

We visited 17 of the Army, Army Reserve, and Army National Guard maintenance sites. These 17 sites performed maintenance work valued at more than $500 million during fiscal year 2002; employed more than 4,700 military, civilian, and contractor personnel; and occupied facilities with more than 2 million square feet. Table 2 provides summary capacity and capability information about the sites.

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2See GAO/NSIAD-00-20.
## Appendix II: Army Maintenance Sites

### Table 2: Capacity and Capability Information on 17 Sites That GAO Visited

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<th>Installation</th>
<th>Organization</th>
<th>Government and contractor staff</th>
<th>Facility size in square feet</th>
<th>Fiscal year 2002 maintenance</th>
<th>Capability to perform depot maintenance</th>
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</tbody>
</table>

Sources: Fort Campbell, Kentucky: Readiness Business Center, Forces Command CMF, National Guard UTES; Fort McCoy, Wisconsin: Reserve IMMA, Reserve ECS, National Guard MATES; Fort Riley, Kansas: Forces Command CMF, National Guard RSMS, National Guard ATEAM, National Guard MATES, Reserve ECS; and Fort Rucker, Alabama: ACLC, DEL, ATSC, National Guard UTES, Reserve ECS.

*Data represent National Maintenance Program and Specialized Repair Authority.
†Data represent National Maintenance Program.
‡Data include National Maintenance Program and One-Time Repairs.
§Data include Specialized Repair Authority.
ªData include National Maintenance Program, Specialized Repair Authority, and One-Time Repairs.

**Legend**

ACLC (Aviation Center Logistics Command)—This organization, which reports to the Aviation and Missile Command, performs all levels of aviation maintenance in support of Fort Rucker’s flight-training program. A contractor performs this maintenance work.

ATSCOM (Air Traffic Services Command), a newly formed organization, provides worldwide direct, general, and limited depot-level maintenance for air traffic control systems. The maintenance data reported represents two components—F Company of the 58th Aviation Regiment and the Air Traffic Control Activity.
Appendix II: Army Maintenance Sites

CSMS (Combined Support Maintenance Shop)—Army National Guard facilities that provide direct support and general support levels of maintenance for National Guard surface equipment (trucks, tanks, etc.).

DEL (Directorate of Engineering and Logistics)—A Fort Rucker organization that performs organizational support, direct support, and general support for vehicles, construction equipment, and fire-fighting equipment. A contractor performs this maintenance work.

DOL (Directorate of Logistics)—Fort Riley organization that performs general support maintenance for tanks, trucks, construction equipment, small arms, etc. It also provides limited organizational and aviation intermediate maintenance. A contractor performs this maintenance work.

Forces Command CMF (Forces Command Contractor Maintenance Facility)—These maintenance facilities report to Forces Command and perform organizational and direct support maintenance on items such as trucks, trailers, tracked vehicles, vans, and generators. Contractors perform the maintenance work.

National Guard ATEAM (Advanced Turbine Engine Army Maintenance)—This Army National Guard facility rebuilds M1A1 tank engines. Its work, which is considered depot-level maintenance, is limited to National Guard assets.

National Guard MATES (Maneuver Area Training Equipment Site)—Army National Guard maintenance facilities that provide unit, direct support, and general support maintenance for assigned equipment. These sites are established to preposition selected items of equipment and are located at or near a training area.

National Guard RSMS (Readiness Sustainment Maintenance Site)—This National Guard facility at Fort Riley rebuilds 5-ton cargo trucks and trailers. Its work, which is considered depot-level maintenance, is generally limited to National Guard assets. Employees of the state of Kansas perform the work.

National Guard UTES (Unit Training and Equipment Site)—A National Guard facility that stores and performs organizational maintenance on tracked and wheeled vehicles for National Guard units within a specific geographic area.

Readiness Business Center—A Fort Campbell organization that performs general support maintenance for wheeled vehicles and intermediate and limited depot-level maintenance for helicopters. Contractors perform the maintenance work.

Reserve ECS (Equipment Concentration Site)—Army Reserve facilities that store and maintain selected equipment for Army Reserve units in a specific geographic area. The maintenance work is performed by both government and contractor employees.

Reserve IMMA (Army Reserve Installation Materiel Maintenance Activity)—The facility provides organizational, direct, and general support maintenance for tactical vehicles—High Mobility Multi-purpose Wheeled Vehicles, trucks, trailers—for Army Reserve units located at or near Fort McCoy. For the most part, contractor employees perform the maintenance work.
Appendix III: Army Report’s Issues and Recommendations

The Army’s Fiscal Year 2002 Study of the Proliferation of Depot Maintenance-Type Activities identified 7 issues and made 29 recommendations for the following improvements to enhance the Army’s ability to (1) evaluate the proliferation of nondepot facilities that perform depot-level maintenance and (2) identify and report on its 50-50 data. These recommendations were consistent with our prior recommendations—noted in referenced GAO products.

Issue 1: Title 10 Definition of Depot Maintenance and 50-50 Reporting Policy Guidance

Recommendations:

- Post the new Army Regulation 750-1 as soon as possible to the Army Publications Agency Web site. Posting the regulation will contribute to the education of Army activities on the congressional definition of “depot maintenance” and the 50-50 reporting process.

- Continue to conduct annual 50-50 workshops and issue clear guidance regarding depot maintenance policies to major commands, program executive officers, and program managers.

- Use Headquarters, Department of the Army, senior-level maintenance boards to communicate depot maintenance policies.

- Publish depot maintenance information articles in professional publications.


Issue 2: Accuracy of Army’s Current 50-50 Reports

Recommendations:

- The Army Deputy Chief of Staff (G-4) should ensure that compliance with the 50-50 rule becomes an Army priority and that command emphasis is applied to correct all reporting problems.

- Army G-4 should submit an amended 50-50 report for fiscal year 2002.
Issue 3: Specialized Repair Authority and One-Time Repair Workload Reporting Requirements

Recommendations

- Army G-4 should provide applicable major commands with immediate and specific guidance to reinforce compliance with current Specialized Repair Authority and One-Time Repair policies. Strong emphasis should be placed on collecting One-Time Repair data for 50-50 reporting purposes.

- Current policy and procedures regarding the approval and tracking of One-Time Repair should be expanded in Army Regulation 750-1.

- Major commands should appoint an installation or local Specialized Repair Authority coordinator to ensure that (1) all major command facilities at an installation are provided the most current information on Specialized Repair Authority and One-Time Repair policies and (2) the appropriate Specialized Repair Authority and One-Time Repair production data are submitted properly through the installation or local regional major command Specialized Repair Authority coordinator to the major command headquarters. Similarly, the National Guard Bureau should appoint Specialized Repair Authority coordinators for each state, territory, and the District of Columbia.

- Army G-4, in coordination with the Army Materiel Command (AMC), should direct the Aviation and Missile Command to terminate the existing Aviation Repair Authority process and immediately comply with all Headquarters, Department of Army, Specialized Repair Authority policies.

Appendix III: Army Report’s Issues and Recommendations

Issue 4: Army G-4 Guidance Regarding Depot Maintenance Reporting Procedures
Recommendations

- Army G-4 should revise the 50-50 standard operating procedures to provide the major commands, program executive officers, and program managers with more explicit guidance regarding those 50-50 reporting requirements that are still causing confusion,

- Army G-4 should coordinate with major commands, program executive officers, and program managers to ensure that the standard operating procedure revisions are clearly understood and that the 50-50 standard operating procedures address the upgrade and modification programs.

- Army G-4 should develop a “decision tree” (an easy-to-use reference guide) to better distinguish between those programs that should be and should not be reported.

[See also GAO-02-95 and GAO/NSIAD-99-154.]

Recommendations

- AMC should continue efforts to establish a fully integrated national maintenance requirements determination process that includes all depot maintenance requirements.

- The Army should complete the implementation of the National Maintenance Program by fiscal year 2006 as currently planned.

- The Army should conduct further analyses to identify opportunities for consolidating depot-level maintenance activities.

[See also GAO/NSIAD-00-20.]

Issue 6: Management Information System Requirements for Improving Current Methods of Capturing and Reporting 50-50 Data
Recommendations

- The Army should develop an integrated management information system capable of capturing and reporting depot maintenance workloads below the organic depot level. AMC should consider
Appendix III: Army Report’s Issues and Recommendations

replacing the interim Specialized Repair Authority business system—the combined Joint Computer-Aided Logistics Support System/Logistics Integrated Database/Army Electronic Product Support Systems—with a single integrated Specialized Repair Authority tracking and workload system through the development of the Logistics Modernization Program and as the various major command feeder systems are either replaced or consolidated by way of the development of the Global Combat Support System-Army.

- Army G-4 should query AMC’s Logistics Integrated Database monthly to ensure that major command activities are using the new Department of the Army Pamphlet 738-750 maintenance codes for inputting workload data into automated systems to account for Specialized Repair Authority and One-Time Repair tasks embedded in maintenance workloads at the installation level.

- Army G-4 should continue to support AMC’s efforts to develop a Maintenance Contract Database under the National Maintenance Program.

[See also GAO-02-95 and GAO/NSIAD-00-20.]

Issue 7: DOD and Army Policies Affecting Army’s Ability to Manage the Proliferation of Depot Maintenance Activities

Recommendations

- New weapons systems should be designated as core or non-core up front in the system’s life cycle at Milestone C (Production and Deployment). The system’s Logistics Support Plan should be revised accordingly on the basis of core depot assessment and presented at Milestone C for approval.

- The Army should adopt a new core depot assessment process for weapons systems that have not yet undergone core determination analyses.

- The Army should continue to revise/replace flawed Department of the Army policies that apply to the Depot Source of Repair (DSOR) decision process. The primary objectives of this effort should be the consistent compliance of all applicable legislation, regulations, and policies, and to ensure that the organic depots are not excluded from the DSOR decision process.
The Army should audit/review program executive officer, program manager, and AMC activities to ensure that they are following guidance on core logistics requirements, weapons system support strategies, and the DSOR decision process in accordance with the Assistant Secretary of the Army for Acquisition, Logistics, and Technology [ASA (ALT)] memorandum dated January 9, 2003, entitled Depot Considerations in Acquisition.

The ASA (ALT) should develop an Army acquisition policy that requires program executive officers and program managers to acquire access to system technical data owned by the original equipment manufacturer for use by appropriate organic or contractor maintenance facilities during the performance of system logistical support.

The ASA (ALT), Army G-4, and AMC should establish a partnership with an approved memorandum of agreement to integrate acquisition weapons system requirements with traditional end item and secondary item overhaul requirements to (1) assist AMC in maximizing the capabilities of the five organic depots to meet core requirements and (2) seek a renewed commitment from all parties that the depots will not be excluded from the DSOR process without the required analyses being conducted.

Army G-4, ASA (ALT), and AMC should work closely together to develop and implement a plan for documenting baseline data to compare contractor costs with organic support costs.

Army G-4, ASA (ALT), AMC, and AMC’s major subordinate commands should work closely with Headquarters, Department of the Army ASA (ALT) staff to market the depots with the program executive officers and program managers at every opportunity.

Army G-4, ASA (ALT), and AMC should work closely together to explore future opportunities to expand the number of public/private partnerships as part of the Army’s overall industrial base strategy.

Appendix IV: Comments from the Department of Defense

DEPUTY UNDER SECRETARY OF DEFENSE FOR LOGISTICS AND MATERIAL READINESS
3500 DEFENSE PENTAGON
WASHINGTON, DC 20301-3500

DEC 12 2003

Mr. Barry W. Holman
Director, Defense Capabilities and Management
U.S. General Accounting Office, Room 4440B
441 G Street, NW
Washington, D.C. 20548

Dear Mr. Holman:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, “DEPOT MAINTENANCE: Army Needs Plan to Implement Depot Maintenance Report’s Recommendations,” (GAO Code 350413/GAO 04-220). The Department concurs with the report’s recommendation with qualifications. GAO recommended the Secretary of Defense direct the Secretary of the Army to establish a specific plan to manage the implementation of the 29 recommendations in the Army’s 2003 proliferation report. While the Department agrees with this recommendation in concept, some of the 29 recommendations in the Army Report will require modification, as discussed in our detailed response to the draft report’s recommendation.

The Army is in the process of establishing an Integrated Product Team (IPT) to revalidate the 29 recommendations in its proliferation report and to develop an action plan to address them. The Army expects to have a final action plan in place not later than March 31, 2004. The Department’s detailed response to the GAO recommendation is in the enclosure. The DoD appreciates the opportunity to comment on the draft report.

Sincerely,

[Signature]
Diane K. Morales

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Appendix IV: Comments from the Department of Defense

GAO CODE 350413/GAO-04-220

"DEPOT MAINTENANCE: ARMY NEEDS PLAN TO IMPLEMENT DEPOT MAINTENANCE REPORT'S RECOMMENDATIONS"

DEPARTMENT OF DEFENSE COMMENTS TO THE RECOMMENDATION

RECOMMENDATION: The GAO recommended that the Secretary of Defense direct the Secretary of the Army to establish a specific plan to manage the implementation of the 29 recommendations identified in the 2003 proliferation report. The plan should include the priority and time frames for implementation, the responsible organizations, and the criteria for measuring success. (Page 21/Draft Report)

DoD RESPONSE: Concur with qualifications. The Department agrees in concept that the Secretary of the Army should establish a specific plan to manage the implementation of the 29 recommendations in the 2003 proliferation report. However, some of the recommendations in the report will require modification. For example, under issue seven in the proliferation report, the first recommendation states "New weapon systems should be designated as core or non-core up front in the system's life cycle at Milestone C (Production and Deployment)." The recommendation is in error since weapon systems are not core. Core consists of skills, equipment and facilities that must be sustained. The required decision to be made by Milestone C is whether workload from a system will be used to sustain core capability requirements.

The Army is in the process of establishing an Integrated Product Team (IPT) to develop an action plan to address the 29 recommendations. As part of its review, the IPT will reevaluate the validity of the 29 proliferation report recommendations and modify them where appropriate. It is anticipated that this IPT will conduct its initial meeting before the end of the calendar year with an initial draft action plan available for staffing not later than January 31, 2004. The Army expects to have a final action plan in place no later than March 31, 2004.
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