

October 2002

DEPOT MAINTENANCE

Change in Reporting Practices and Requirements Could Enhance Congressional Oversight





Highlights of GAO-03-16, a report to Congressional Committees

Why GAO Did This Study

Under 10 U.S.C. 2466, the military services and defense agencies can use no more than 50 percent of annual depot maintenance funding for work by private-sector contractors. The Department of Defense (DOD) is to submit two reports to the Congress annually on the costs of public- and privatesector depot maintenance workloads: a "prior-years" report on the past 2 fiscal years and a "futureyears" report on the next 5. Section 2466 also requires GAO to report to the Congress on whether DOD complied with the so-called "50-50 requirement" in the prior-years report and whether the future-years projections are reasonable. This report fulfills that requirement.

What GAO Recommends

Because of the inexactness of budget estimates beyond the current and upcoming budget years, the future-years report has limited utility. Since GAO cited the same problem in prior reviews and the volatile nature of budget estimates will likely continue, GAO makes the elimination or modification of the future-years-report requirement a matter for congressional consideration. GAO also recommends that the Secretary of Defense act to improve 50-50 reporting in problem areas. DOD agreed with most GAO recommendations, but disagreed with parts of two recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-03-16.

To view the full report, including the scope and methodology, click on the link above. For more information, contact David Warren at (202) 512-8412 or warrend@gao.gov.

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What GAO Found

While DOD's prior-years report for fiscal years 2000 and 2001 showed the U.S. Army and Navy to be below the 50-percent funding limitation on private sector workloads and the Air Force to be above it, continuing weaknesses in DOD's data gathering and reporting processes prevented GAO from determining with precision whether the services complied with the 50-50 requirement. As in past years, GAO found errors and omissions in the data. For example, the Army erroneously reported workloads at two commands in millions of dollars instead of thousands of dollars, resulting in a \$414 million—or 8 percent—overstatement of both public- and private-sector obligations for the 2 years in total.

Because of the changing nature of budget projections and supporting data deficiencies, the future-years report does not provide reasonable estimates of public- and private-sector depot maintenance funding allocations for fiscal years 2002 through 2006. The services tend to place less emphasis and priority on collecting and validating future-years data. The reported projections are based, in part, on incorrect data, questionable assumptions, and some inconsistencies with existing budgets and management plans. For example, the Navy did not report depot maintenance workloads for a missile system and a ship defensive system, understating funding for private-sector work each year by an estimated \$162 million and public-sector work by about \$80 million.



Past and Projected Percentage of Depot Maintenance Funds Allocated to the Private Sector, as DOD Reported

Source: DOD "50-50" Reports, Feb. 4 and Apr. 12, 2002.

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Abbreviations

DOD	Department of Defense
OSD	Office of the Secretary of Defense

Table 5: GAO Changes to Air Force Prior-Years Report

Table 6: Reporting Quality Compared to Last Year

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25



United States General Accounting Office Washington, DC 20548

October 18, 2002

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

The Honorable Bob Stump Chairman The Honorable Ike Skelton Ranking Minority Member Committee on Armed Services House of Representatives

Under 10 U.S.C. 2466, not more than 50 percent of annual depot maintenance funding provided to the military departments and defense agencies can be used for work accomplished by private-sector contractors. The legislation provides that the 50-percent limitation for a fiscal year can be waived based on a determination that a waiver is necessary for reasons of national security and notification to the Congress of the reasons for the waiver.¹ Section 2466 also directs the Department of Defense (DOD) to submit two reports to the Congress annually on publicand private-sector depot maintenance workloads. The first report is to identify the percentage of funds expended by each military department and defense agency during the preceding 2 fiscal years for the performance of depot maintenance workloads by the public and private sectors (the "prior-years report"). The second report is to project the same information for the current and 4 succeeding fiscal years (the "future-years report"). For 2002, DOD issued the prior-years report in February 2002 and the future-years report in April 2002.

Section 2466 also requires us to submit our views to the Congress on whether DOD complied with the so-called "50-50 requirement" in the prior-years report and whether the projections in the future-years report

¹ Section 2466(b) was recently amended to permit only the Secretary of Defense to waive the requirement. (Sec. 341, P.L. 107-107, Dec. 28, 2001). Previously, the secretary of a military department could waive the requirement.

are reasonable.² Accordingly, this report discusses whether (1) the military departments met the 50-50 requirement for fiscal years 2000 and 2001 and (2) the projections for fiscal years 2002 through 2006 represent reasonable estimates. As agreed with your offices, we also examined DOD's efforts to improve the reporting process and sought to identify further opportunities for improvement. To accomplish these objectives, we analyzed the 50-50 reported data and each service's procedures and internal management controls for collecting, aggregating, and validating depot maintenance information for purposes of responding to the section 2466 requirements.

Results in Brief

While DOD's prior-years report for fiscal years 2000 and 2001 showed the Departments of the Army and Navy to be below the 50-percent funding limitation on private-sector workloads and the Air Force to be above it, continuing weaknesses in DOD's data gathering and reporting processes prevented us from determining with precision whether the services were in compliance with the 50-50 requirement.³ As in past years, we found errors and omissions in the data. For example, the Army erroneously reported workloads at two commands in millions of dollars rather than in thousands of dollars, resulting in a \$414 million-or 8 percentoverstatement of both public- and private-sector obligations for the 2 years. Also, the Marine Corps did not report most depot maintenance workloads from the command responsible for system acquisitions and upgrades, understating private-sector work by \$59 million and publicsector work by \$43 million for the 2 years. Given these weaknesses, the prior-years report at best provides a rough approximation of the allocation of depot maintenance workload between the public and private sectors. In that regard, it does provide useful information to the Congress in exercising its oversight role and to DOD officials in managing the depot maintenance program.

Because of the changing nature of budget projections and supporting data deficiencies, the future-years report does not provide reasonable estimates of public- and private-sector depot maintenance funding allocations for fiscal years 2002 through 2006. The services tend to place less emphasis

 $^{^2}$ Based on the congressional mandate regarding the DOD 50-50 requirement, this will be the fifth year that we have reported on the prior-year numbers and the third year reporting on the future-year numbers.

³ The Secretary of the Air Force issued a national security waiver for both years as provided by 10 U.S.C. 2466.

and priority on collecting and validating future-years data. The reported projections are based, in part, on incorrect data, questionable assumptions, and some inconsistencies with existing budgets and management plans. For example, the Navy did not report depot maintenance workloads for a missile system and a ship defensive system, understating funding for private-sector work each year by an estimated \$162 million and public-sector work by about \$80 million. The Air Force understated the installation of modifications and contract baseline changes totaling \$336 million over the 5-year reporting period, which would increase the private-sector percentages, and understated exempted private-sector workloads by a total of \$206 million for the 4 years specified by the amended statute,⁴ which would decrease private-sector percentages. Such problems, coupled with the inexactness of program estimates beyond the budget year, limit the usefulness of the future-years report for congressional and DOD decision makers. For example, although the Air Force future-years report does not project a need for additional waivers during this period, we believe the Air Force will continue to be significantly challenged in this regard, particularly because the conditions that led to the waivers for the past 2 years have not materially changed.

There are abundant opportunities to improve both the 50-50 reporting process and results. Although in past years the services' reporting improved incrementally, their efforts to improve 50-50 data collection and reporting during this most recent reporting period were not as widely apparent. Indeed, the overall quality of the reporting process in terms of data accuracy, procedures, and supporting documentation stayed about the same or declined. The Office of the Secretary of Defense and each service did improve guidance somewhat to incorporate some of our findings and recommendations from last year's report, but priority and emphasis from top management of the services appear to be flagging. Army and Air Force auditors reviewed and corrected 50-50 data before it was reported to the Congress, but the Navy again did not use its audit service to independently validate data. In addition to addressing the individual errors and inconsistencies we found in each service's data, we identified three systemic problem areas that the services could improve for future 50-50 reports-the double counting of repair costs for components incorporated into an overhaul of a larger system or

⁴ The National Defense Authorization Act for Fiscal Year 2002 (P.L. 107-107, Dec. 28, 2001) amended 10 U.S.C. 2474 to exempt qualified public-private partnerships from the 50-percent limitation for fiscal years 2002-2005.

subsystem, the underreporting of depot work performed at nondepot locations, and the underreporting of depot repair work managed by system program offices. Expanding and clarifying guidance, improving management processes and controls, and addressing several problem-reporting areas can provide better, more useful information for congressional oversight and DOD management.

Because of the inexactness of the budget estimates for those years beyond the current year and the upcoming budget year, the future-years report has limited utility. Given that we have seen the same problem in our prior assessments of earlier 50-50 reports and that the volatile nature of budget estimates is not likely to change, we are making the elimination or modification of the requirement for the future-years report a matter for congressional consideration. We are also recommending executive action by the Secretary of Defense to improve 50-50 reporting in several problem areas.

DOD provided official oral comments on a draft of this report. The department agreed with most of our recommendations and cited a number of corrective actions they plan to take. However, DOD disagreed with portions dealing with the potential double counting of some depot-level reparables and the reporting of nonnuclear carrier workload. The agency comments section of this report contains more details on DOD's positions and why we believe the recommendations are still appropriate.

Background

Governing Legislation and Previous Reports Concerning the 50-50 Requirement

The Congress has on several occasions amended section 2466 and other title 10 provisions to provide guidance to DOD regarding the allocation of depot maintenance work between the public and private sectors. Amendments in 1997 increased the annual amount of depot funds that could be used for contracting from 40 percent to 50 percent and defined "depot maintenance" in statute for the first time, including additional categories of contract work that DOD had not always reported as depot work before.⁵ A 1999 amendment established the requirement for the future-years report.⁶

Section 2460 of title 10 defines depot maintenance to encompass material maintenance or repair requiring the overhaul, upgrade, or rebuilding of parts, assemblies, or subassemblies and the testing and reclamation of equipment, regardless of the source of funds or the location at which maintenance or repair is performed. Depot maintenance also encompasses software maintenance, interim contractor support,⁷ and contractor logistics support⁸ to the extent that work performed in these categories is depot maintenance. The statute excludes from depot maintenance the nuclear refueling of an aircraft carrier, the procurement of major modifications or upgrades of weapon systems, and the procurement of parts for safety modifications.

The Office of the Secretary of Defense (OSD) has issued guidance to the military departments for reporting public-private workload allocations. The guidance is consistent with the definition of depot-level maintenance and repair in 10 U.S.C. 2460.⁹ The military departments have also issued internal instructions to manage the data collection and reporting process, tailored to their individual organizations and operating environments.

⁸ Contractor logistics support is designed to be a lifetime support concept in which a contractor provides most or all elements of logistics support, including depot maintenance.

⁹ Because of the difficulty of segregating installation costs for safety modifications from costs for installing other modifications (e.g., for improved performance), OSD's guidance specifies that all modification installation costs be reported when an installation is considered to be a depot-level service.

⁵ These provisions were contained in the National Defense Authorization Act of Fiscal Year 1998 (P.L. 105-85, Nov. 18, 1997).

⁶ This provision was in the National Defense Authorization Act for Fiscal Year 2000 (P.L. 106-65, Oct. 5, 1999).

⁷ Interim contractor support is designed to be an interim support arrangement in which a contractor provides depot maintenance (and sometimes other logistics support) as part of the acquisition strategy for new systems.

Section 2474 of title 10 directs DOD to designate public depots as Centers of Industrial and Technical Excellence and to improve their operations so as to serve as recognized leaders in their core competencies.¹⁰ Section 342 of the National Defense Authorization Act for Fiscal Year 2002 amended 10 U.S.C. 2474 to exclude qualifying public-private partnerships¹¹ from the 50-percent funding limitation on contracting. Section 342 provides that the funds expended for the performance of depot-level maintenance by nonfederal government personnel located at the centers shall not be counted when applying the 50-percent limitation if the personnel are provided pursuant to a public-private partnership. This exclusion only applies to depot maintenance funding for fiscal years 2002 through 2005, although DOD is still required to report the exempted funds separately in the 50-50 reports. On January 10, 2002, OSD issued an addendum to the 50-50 guidance for implementing the partnering exclusion and setting criteria for qualifying partnerships. Additional clarification was issued on February 5, 2002.

This report is one in a series on the 50-50 requirement.¹² In prior years, we have reported on continuing data errors and inconsistencies in reporting by the military departments and problems in documenting and independently validating 50-50 data. We have recommended increasing management attention to and emphasis on the 50-50 reporting process, improving guidance in specific maintenance categories, and using the service audit agencies to check the data and procedures. Our prior reports also recognized the limitations of DOD's financial systems, operations, and controls. Our audits of DOD's financial management operations have

¹⁰ Core competencies are depot-level maintenance capabilities to be retained in public depots to meet defense strategic and contingency plans and for which the military departments believe that DOD should be a recognized leader in the national technology and industrial base.

¹¹ OSD's guidance defines a public-private partnership for depot maintenance as an agreement between a public-sector depot maintenance activity and one or more private industry or other entities to perform work or utilize facilities and equipment. Such an arrangement includes use of public facilities, equipment, and employees to perform work for the private sector under certain defined circumstances; private-sector use of public-sector equipment and facilities to perform work for the public sector; and work-sharing agreements using both public- and private-sector facilities and/or employees.

¹² See U.S. General Accounting Office, *Depot Maintenance: Management Attention Required to Further Improve Workload Allocation Data*, GAO-02-95 (Washington, D.C.: Nov. 9, 2001) and *Depot Maintenance: Action Needed to Avoid Ceiling on Contract Workloads*, GAO/NSIAD-00-193 (Washington, D.C.: Aug. 24, 2000). Other related reports are listed at the end of this report.

	routinely identified pervasive weaknesses in financial systems, operations, and internal controls that impede its ability to provide useful, reliable, and timely financial information for day-to-day management and decision making. ¹³ To date, none of the military services or major DOD components has passed the test of an independent financial audit. A continuing inability to capture and report the full cost of its programs represents one of the most significant impediments facing DOD. Nonetheless, the data
	used to develop the 50-50 report are the only data available and are accepted and used for DOD decision making and for congressional oversight.
Summary of Data in DOD's 50-50 Reports	Table 1 provides a consolidated summary of DOD's 2002 prior-years and future-years reports to the Congress on public- and private-sector workload allocations for depot maintenance. The amounts shown are DOD's record of actual obligations incurred for depot maintenance work in fiscal years 2000 and 2001 and projected obligations for fiscal years 2002-2006 based on the defense budget and service funding baselines. ¹⁴ The percentages show the relative allocations between the public and private sectors and the exempted workloads. Adding the private and private-exempted percentages together shows what the private-sector amount would be reported as, absent the recent legislation. The Army projects that it will exceed the 50-percent limitation in fiscal year 2006, but the report to the Congress stated that appropriate action will be taken to address this issue and to ensure that the Army complies with the 50-50 requirement. The Navy projects that it spercentage of funds for private-sector work will be relatively level. After issuing waivers for the past 2 years, the Air Force projects that it will be under the 50-percent limitation throughout this period.

¹³ See U.S. General Accounting Office, *DOD Financial Management: Integrated Approach, Transparency, and Incentives Are Keys to Effective Reform,* GAO-02-537T (Washington, D.C.: Mar. 20, 2002).

¹⁴ Although 10 U.S.C. 2466 specifies reporting of funds expended in the prior years and projected to be expended in the future years, DOD's past and current 50-50 reports are based on obligation data. A DOD official explained that obligation data are considered to be more appropriate because of the statutory requirement to report funds made available in a given fiscal year and because expenditure data may not be completely recognized in the accounting records for a year or more following the funds' obligation.

Table 1: DOD Reported Depot Maintenance Wo	orkload Allocations
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Dollars in millions							
	Prior fiscal	years		Futu	re fiscal years		
	2000	2001	2002	2003	2004	2005	2006
Army							
Public	\$1,362	\$1,460	\$1,532	\$1,854	\$2,049	\$2,115	\$2,223
	55.1%	54.8%	52.7%	57.2%	53.7%	53.5%	49.1%
Private	\$1,108	\$1,204	\$1,285	\$1,297	\$1,679	\$1,749	\$2,307
	44.9%	45.2%	44.2%	40.0%	44.0%	44.3%	50.9%
Private exempted	а	a	\$89	\$90	\$86	\$89	а
	а	а	3.1%	2.8%	2.2%	2.2%	a
Total	\$2,470	\$2,664	\$2,905	\$3,241	\$3,814	\$3,953	\$4,530
Navy⁵							
Public	\$4,292	\$4,194	\$4,701	\$4,856	\$4,940	\$4,746	\$5,295
	56.7%	54.4%	53.4%	53.2%	53.8%	51.7%	57.3%
Private	\$3,274	\$3,512	\$4,075	\$4,237	\$4,175	\$4,376	\$3,945
	43.3%	45.6%	46.3%	46.5%	45.5%	47.6%	42.7%
Private exempted	а	а	\$30	\$29	\$59	\$66	a
	а	а	0.3%	0.3%	0.6%	0.7%	a
Total	\$7,566	\$7,706	\$8,807	\$9,122	\$9,174	\$9,188	\$9,240
Air Force							
Public	\$3,000	\$3,289	\$4,117	\$4,261	\$4,386	\$4,485	\$4,557
	48.5%	48.1%	53.3%	53.5%	53.9%	54.2%	53.7%
Private	\$3,181	\$3,551	\$3,599	\$3,686	\$3,734	\$3,774	\$3,935
	51.5%	51.9%	46.6%	46.3%	45.9%	45.6%	46.3%
Private exempted	a	а	\$14	\$16	\$16	\$16	a
	a	a	0.2%	0.2%	0.2%	0.2%	а
Total	\$6,181	\$6,840	\$7,729	\$7, 962	\$8,136	\$8,275	\$8,491

^aUnder section 342 of the National Defense Authorization Act for Fiscal Year 2002 (P.L. 107-107), contract funds for qualified public-private partnerships are excluded from the calculation of private-workload percentages for fiscal years 2002-2005, but must be reported separately.

^bMarine Corps data are reported as part of the Navy total. The 50-percent limitation on contracting in 10 U.S.C. 2466 applies to each military department.

Source: DOD's "50-50 Reports," dated Feb. 4 and Apr. 12, 2002.

Weaknesses in Data Preclude Determinations of Compliance in Prior-Years Report	DOD's prior-years report for fiscal years 2000 and 2001 showed the Departments of the Army and Navy to be below the 50-percent funding limitation on private-sector workloads and the Air Force to be above it (see table 1). However, recurring weaknesses in DOD's data gathering and reporting processes prevented us from determining with precision whether the services had complied with the 50-50 requirement. We identified significant errors and omissions in 50-50 data, such as the Army mistakenly reporting funds for some workloads in millions rather than thousands of dollars and the Navy not reporting depot maintenance on a missile program and a ship defensive system.
Army	We could not determine with precision whether the Army was in compliance with the 50-50 requirement for fiscal years 2000 and 2001. This is in contrast to last year, when we found relatively few errors in the Army's data and reported that its reporting process was generally sound and adequately implemented. We concluded in that report that the Army met the 50-50 requirement for 1999 and 2000. However, this year we found a significant number of errors in the Army's data and do not have sufficient confidence in the reporting process to conclude that the Army met the 50-50 requirement for 2000 and 2001. In this year's review, we identified errors and revised the Army's 50-50 report by a total of \$328 million in fiscal year 2000 and \$499 million in fiscal year 2001. ¹⁵ In contrast, last year's review identified errors totaling \$53 million for fiscal year 2000 and only \$4 million for fiscal year 1999. These results indicate a trend that undermines our confidence in the Army's data and reporting process. We acknowledge that our revision of the Army's private-sector workload percentages for 2000 and 2001 are approximately the same as the revised percentages we calculated last year for 1999 and 2000. Nonetheless, due to the significant number and dollar value of errors in the Army's data and the trend we describe above, we do not have sufficient confidence in the reporting process to conclude that the Army met the 50-50 requirement for 2000 and 2001. Table 2 summarizes the errors and omissions we identified during this year's review and the resulting impacts on the public- and private-sector allocations. Correcting for the problems we found would increase the

¹⁵ These figures constitute the absolute value of all errors found, in other words the summing of all errors whether positive or negative, public or private.

private-sector percentages by 2 percent and 1.6 percent for fiscal years 2000 and 2001, respectively.

Table 2: GAO Changes to Army Prior-Years Report

Dollars in millions	Duion fice	
	Prior fisc 2000	2001 an years
Public workload dollars reported	\$1,361.5	\$1,460.4
Percentage reported	55.1%	54.8%
Transcription errors	(\$168.3)	(\$113.2)
Reported other command's funds	(\$5.5)	(\$5.9)
Outdated data	(\$10.1)	(\$117.6)
Repairs at nondepot locations	\$0	\$27.3
Upgrades and rebuilds	\$1.6	\$3.8
Revised public workload	\$1,179.2	\$1,254.8
Revised percentage	53.1%	53.2%
Private workload dollars reported	\$1,108.0	\$1,203.8
Percentage reported	44.9%	45.2%
Transcription errors	(\$37.0)	(\$95.3)
Reported other command's funds	(\$66.4)	(\$69.7)
Outdated data	\$30.3	\$10.8
Repairs at nondepot locations	\$0	\$51.3
Upgrades and rebuilds	\$8.3	\$4.3
Revised private workload	\$1,043.2	\$1,105.2
Revised percentage	46.9%	46.8%

Note: Dollar amounts in parenthesis are negative.

Source: GAO analysis of DOD data.

- *Transcription errors.* As a result of transcription errors in compiling the Army's prior-years report, depot maintenance funds for two major commands were reported in the millions rather than thousands of dollars, greatly overstating both public and private workloads by a total of \$414 million for 2000 and 2001—an 8 percent overstatement. The overstatement is greater for the public sector.
- *Other command's funds*. The Army's report incorrectly included funds that were to be reported by the U.S. Special Operations Command. Both public and private workloads were overstated, but more so on the latter.

OSD's guidance specifies that each military service should report its appropriated funds for support of special operations and that the U.S. Special Operations Command should report depot maintenance funded by its defensewide appropriation. The U.S. Special Operations Command properly reported these funds.

- *Outdated data*. Several errors involved data used in the prior-years report that was subsequently changed. One command initially used outdated budget estimates to report its depot maintenance funding, later updating the information to reflect actual recorded obligations for the year. The data were not revised in time to be incorporated in the Army's report. Another command's submission was not adjusted to correct for an error identified by the Army Audit Agency.
- Nondepot locations. Two commands did not report depot maintenance workloads associated with the Army's ongoing efforts to consolidate maintenance activities. This understated private-sector funds by \$51.3 million and public-sector funds by \$27.3 million. Officials at these commands said it was now the responsibility of a third command to report those funds, but an official from that command replied that it was not yet ready to assume reporting responsibilities.
- *Upgrades and rebuilds.* We identified several other errors with relatively small impacts on the 50-50 allocations: an unreported vehicle upgrade effort, whose program officials were unaware of the 50-50 reporting requirement, and two programs that reported old information.

Navy

We also could not determine precisely whether the Navy complied with the 50-50 requirement. The net effect of the errors and inconsistencies we identified would add more than 4 percent to the private-sector share in both 2000 and 2001. Table 3 shows our adjustments to the Navy's reported data and impacts on public-private sector allocations. Note that this table does not include the Marine Corps' data, which are added to the Navy's data for reporting compliance with the 50-50 requirement. Our adjustments show the Navy-only data as exceeding the 50-percent private-sector limitation in 2001. Adding in the adjustments we made to the Marine Corps' data (from table 4 following this section) would also show the Department of the Navy as exceeding the 50-percent limit. Although the lack of precision in the data and the limited number of reporting programs we reviewed do not enable us to determine compliance with the 50-50 requirement, we believe that the Navy is much closer to the private-sector limitation than what was reported to the Congress.

Dollars in millions	Prior fiscal years	
	2000	2001
Public workload dollars reported	\$4,140.7	\$3,999.8
Percentage reported	56.2%	53.6%
Missile maintenance	\$50.0	\$50.0
Component repairs	(\$69.4)	(\$67.0)
Private workload reported as public	\$0	(\$78.2)
Public workload reported as private	\$0	\$0.9
Depot-level software maintenance	\$29.8	\$29.8
Modifications installations	\$0	\$23.0
Revised public workload	\$4,151.1	\$3,958.3
Revised percentage	52.4%	49.4%
Private workload dollars reported	\$3,229.6	\$3,459.6
Percentage reported	43.8%	46.4%
Missile maintenance	\$150.0	\$150.0
Component repairs	(\$30.8)	(\$33.0)
Private workload reported as public	\$0	\$78.2
Public workload reported as private	\$0	(\$0.9)
Depot-level software maintenance	\$12.2	\$12.2
Carrier overhaul and modifications	\$387.1	\$356.7
Surface ship inactivations	\$29.1	\$53.6
Duplicate reporting	-	(\$22.0)
Revised private workload	\$3,777.2	\$4,054.4
Revised percentage	47.6%	50.6%

Table 3: GAO Changes to Navy Prior-Years Report

Note: Dollar amounts in parenthesis are negative.

Source: GAO analysis of DOD data.

• *Missile maintenance.* One command did not report \$200 million in fiscal year 2001 funding for depot maintenance on the Trident missile— \$150 million for contract work and \$50 million for work accomplished by government personnel. Navy officials did not initially consider the component repairs and missile recertification efforts to be depot-level maintenance, but they later agreed with us and stated that the funds will be reported in the future. For illustrative purposes in table 3, we assumed the same amounts were unreported for fiscal year 2000.

- *Component repairs*. Some repairs were counted twice in the 50-50 data, once when a component was repaired and the second time when it was installed into a weapon system or subsystem. Available data for fiscal year 2001 indicate that the amounts double counted were about \$67 million and \$33 million, respectively, for the public and private sectors. To estimate the overstatements in fiscal year 2000, we assumed the same magnitude of the double count relative to the total reported workload that year. In commenting on a draft of this report, DOD officials argued that the repair of components and use of those components during system overhaul are separate and distinct transactions, and both should be reported as consistent with title 10. We continue to believe that reporting both distorts the actual amount of depot work and that an adjustment should be made in these situations to give a more accurate accounting for 50-50 purposes. This issue is discussed further in the agency comments section of this report.
- Public and private workloads wrongly reported. Several commands wrongly reported private-sector work as public sector or vice versa. For example, a spreadsheet formula error caused one command to misreport \$29 million of contract work as public. Another command's clerical error in compiling its submission had the same effect. An official discovered the error when preparing for our visit. A more rigorous up-front review and data validation effort might have corrected these mistakes before their inclusion in the annual report to the Congress.
- *Software maintenance*. Officials did not report \$42 million of depot-level software maintenance for the Aegis program. Government employees accomplished \$29.8 million of the total workload—about three-fourths—while the private sector did the remaining \$12.2 million. We assumed the same amount of work for both years.
- *Modification installations.* The Navy's report did not include \$23 million in funding for installing two major upgrades. Although they had received 50-50 guidance, officials did not know that major upgrades accomplished with procurement funds were defined as depot maintenance for reporting purposes.
- *Carrier overhauls*. The Navy apparently underreported the costs of depot maintenance work on nuclear aircraft carriers when that work was done in the private sector in conjunction with the nuclear refueling of the carriers. Section 2460 excludes from depot maintenance the nuclear refueling of an aircraft carrier. However, nuclear refueling work typically is done under contracts that include other, separately priced work that does not appear to relate to nuclear refueling. For example, one of those contracts called for work on the underwater part of the carrier hull and on catapults and arresting gear, which are used for launching and landing aircraft. Although this work often has been done during the same time

frame and under the same contract as nuclear refueling work, in some cases, this work has been done separately from the nuclear refueling. In this latter case, the nonnuclear work has been counted as depot maintenance. Nonetheless, the Navy treats the costs of all work under contracts that include nuclear refueling work as subject to the exception for nuclear refueling of an aircraft carrier and therefore reports none of the costs of those contracts as depot maintenance. Navy program officials reviewed the contracts and identified the funding for depot maintenance and repair workloads that are not related to nuclear refueling. Table 3 shows the impact if that portion of the maintenance work is counted for 50-50 purposes—\$387.1 million for fiscal year 2000 and \$356.7 million for fiscal year 2001. We note that the guidance provided by the Navy for depot maintenance reporting does not directly address this issue; rather, it simply states that nuclear refueling of aircraft carriers is to be excluded from depot maintenance reporting. This issue is further discussed in the agency comments section of this report.

Surface ship inactivations. Reporting funds for inactivation work on nonnuclear surface ships would increase private-sector reporting by a total of \$82.7 million for the 2-year reporting period. As we reported last year, the Navy inconsistently reports inactivation activities. Its reports include the funding for public-sector nuclear ship inactivations but do not include funding for nonnuclear ship inactivations done by contractors. Navy officials said that the relatively complex nuclear ship inactivations are considered to be equivalent to depot maintenance, while the less complex nonnuclear ship inactivations are not. The Navy's revised 50-50 guidance reflects this concept, and officials reiterated this position in commenting on our draft report. According to a Navy maintenance official, however, inactivation workloads on nuclear and nonnuclear ships have much in common, differing mainly in the removal and disposal of the nuclear power plant. We continue to believe that inactivations of nonnuclear ships should be included in the 50-50 reports because OSD's reporting guidance does not make this distinction of relative complexity and requires reporting of all depot maintenance, regardless of location and source of funding. Also, DOD's financial management regulation includes inactivation activities as depot maintenance.¹⁶

¹⁶ DOD Financial Management Regulation 7000.14-R, vol. 6, ch. 14 prescribes depot maintenance reporting requirements and includes inactivation as a depot maintenance activity. It defines inactivation as the servicing and preservation of an item before it is placed in storage or in an inactive status.

• *Duplicate reporting.* One command mistakenly reported funds for contract work that were properly reported by another command. This mistake resulted in double counting \$22 million.

Marine Corps

The Marine Corps' data for the prior-years report—which is included with the Navy's data for purposes of determining compliance with the private-sector limitation—are incomplete and inaccurate. Compared to the other military services' programs, the Marine Corps' depot maintenance program is small, but the errors we found were substantial relative to the size of the total workload. Table 4 summarizes the collective errors we found and shows that, if corrected, the private-sector allocations would decrease by 5 percent for fiscal year 2000 and would increase by about 9 percent for fiscal year 2001.

Table 4: GAO Changes to Marine Corps Prior-Years Report

Dollars in millions		
	Prior fiscal years	
	2000	2001
Public workload dollars reported	\$150.8	\$194.3
Percentage reported	77.2%	78.8%
Mathematical and recording errors	\$7.8	\$16.9
Systems Command programs	\$40.4	\$2.2
Contracting-out work	(\$1.0)	(\$1.6)
Revised public workload	\$198.0	\$211.8
Revised percentage	82.2%	70.0%
Private workload dollars reported	\$44.5	\$52.2
Percentage reported	22.8%	21.2%
Mathematical and recording errors	(\$7.8)	(\$17.2)
Systems Command programs	\$5.1	\$54.3
Contracting-out work	\$1.0	\$1.6
Revised private workload	\$42.8	\$90.9
Revised percentage	17.8%	30.0%

Note: Dollar amounts in parenthesis are negative.

Source: GAO analysis of DOD data.

• *Mathematical and recording errors.* The Marine Corps' prior-years submission contained several mathematical and recording errors due to inaccurately transcribing data from source documentation to the final

report. These errors resulted in categorizing work on numerous items as contract work, even though the command providing the source data clearly reported the work as performed by government depots. For the 2 years, funding for the public sector was understated by \$24.7 million and for the private sector overstated by \$25 million.

- *Systems Command programs.* The Systems Command is responsible for acquiring and upgrading weapon systems. Most of its seven product groups and five program managers, which are independent from the product groups, did not report procurement funds mainly used for private sector depot-level-maintenance work. The Systems Command also did not report depot maintenance for the largest program maintained in the public sector. These errors understated private-sector funding by \$59 million and public-sector funding by \$43 million for 2 years. Failure to report the depot maintenance appears to have resulted from a combination of factors, including misunderstanding as to what should be reported, limited dissemination of the 50-50 reporting guidance, and an ongoing reorganization in the Systems Command that further complicated the situation.
- *Contracting-out work*. Officials at the two maintenance bases did not correctly report a total of \$2.6 million in fiscal year 2000 and 2001 workloads. These workloads were contracted out but were reported as part of the public-sector amounts. This resulted in overstating public work and understating private work by the same amounts.

Air Force

The Air Force's data, as presented, reaffirmed last year's 50-50 reports to the Congress that the Air Force had exceeded the 50-percent limitation on funds for private-sector work in both fiscal years 2000 and 2001. We identified errors in the data that add almost 3 percent to the private sector's share in each year, thereby increasing the amount by which the Air Force exceeded the limitation.

As authorized under 10 U.S.C. 2466, the Secretary of the Air Force waived the 50-50 requirement for fiscal years 2000 and 2001, citing reasons of national security. On January 11, 2000, the Air Force notified the Congress that the Secretary was waiving the requirement for fiscal year 2000. The Air Force's explanation for the waiver was based primarily on the need to use temporary contracts to support transitioning workloads from closing depots. We reported, however, that those temporary contracts represented only a minor share of the contract workload.¹⁷ We noted that the more significant factors were recent Air Force policies and management actions that substantially increased outsourcing and left little flexibility for the Air Force to respond to emergencies and stay under the 50-percent limitation. On July 31, 2001, the Air Force notified the Congress that the Secretary was also waiving the requirement for fiscal year 2001. The Air Force again cited the impacts from transitioning workloads, contractor field teams, and temporary contract personnel performing depot maintenance at a government facility. It also cited significant increases in workload and cost on several existing depot maintenance contracts.

Table 5 summarizes the errors we found and the impacts on the public-private sector allocations.

¹⁷ See U.S. General Accounting Office, *Depot Maintenance: Air Force Faces Challenges in Managing to 50-50 Ceiling*, GAO/T-NSIAD-00-112 (Washington, D.C.: Mar. 3, 2000) and *Depot Maintenance: Air Force Waiver to 10 U.S.C. 2466*, GAO/NSIAD-00-152R (Washington, D.C.: May 22, 2000).

Table 5: GAO Changes to Air Force Prior-Years Report

Dollars in millions	Prior fisc	al vears
	2000	2001
Public workload dollars reported	\$3,000.0	\$3,288.5
Percentage reported	48.5%	48.1%
Component repairs	(\$315.7)	(\$354.0)
General and administrative	(\$45.8)	(\$64.7)
Other	\$0	\$1.9
Revised public workload	\$2,638.5	\$2,871.7
Revised percentage	46.1%	45.3%
Private workload dollars reported	\$3,181.3	\$3,550.9
Percentage reported	51.5%	51.9%
Component repairs	(\$156.7)	(\$175.0)
General and administrative	\$45.8	\$64.7
Modification installations	\$16.8	\$15.8
Support contracts	(\$5.8)	\$5.6
Contractor augmentees	\$5.4	\$5.2
Other	\$0	(\$4.0)
Revised private workload	\$3,086.8	\$3,463.2
Revised percentage	53.9%	54.7%

Note: Dollar amounts in parenthesis are negative.

Source: GAO analysis of DOD data.

• *Component repairs*. Our review of Air Force workloads determined that funding for some component repairs was counted twice in 50-50 data, once when the item was repaired and the second time when it was installed into a weapon system or major subsystem during its overhaul. According to fiscal year 2001 data, the duplicate reporting for the Air Force was about \$354 million and \$175 million for the public and private sectors, respectively. We calculated the estimated amounts for fiscal year 2000 by assuming the same magnitude of the double count relative to the total workloads financed through the working capital fund. As discussed in the earlier section on the Navy, DOD did not agree with our adjustments for components when they are installed in systems; the agency comments section includes a fuller discussion of this issue.

- General and administrative. As in past years, Air Force officials continue ٠ to adjust the 50-50 data for the salaries and overhead expenses of government employees administering depot maintenance contracts funded through the working capital fund. Officials subtract these amounts (for example, \$64.7 million in fiscal year 2001) from the private-sector funding—where they are accounted for within the working capital fund and add them to the public-sector funding for 50-50 reporting. Air Force officials told us that they believe these costs should be reported as part of the public sector since government employees incur them. However, consistent with our prior assessments, we believe that it is appropriate to count these general and administrative costs for managing depot maintenance contracts as part of the private-sector costs of doing business. Although this type of cost is not specifically addressed, OSD's 50-50 guidance requires that the costs for all factors of production—labor, material, parts, indirect, and overhead—associated with a particular repair workload should be counted in the sector accomplishing the actual maintenance. Accordingly, in table 5 we reversed the Air Force adjustments to again report these funds in the private-sector amounts. We note that this may not be an issue much longer if the Air Force implements its plan to remove contract depot maintenance from the working capital fund by 2004.
- *Modification installations.* We identified numerous modification installation projects performed by contractors that were not reported or were reported incorrectly in the Air Force's 50-50 report. Correcting for these would add a total of \$32.6 million to private-sector funding for the 2 years. Installations are funded and reported in several different ways, which complicates reporting. Also, officials recognize that the data sources used are not always complete and up-to-date.
- Support contracts. We identified several errors in reported funding for interim and contractor logistics support contracts. Funding for one contract was reported according to the year of appropriation rather than the year of obligation, as prescribed by guidance. Another workload had been reported twice in the 50-50 data, once as funded by direct appropriation and once as financed through the working capital account. We also identified software depot maintenance costs that had not been reported on trainer programs.
- *Contractor augmentees.* We identified some augmentees working on engines at one depot that were not included in the 50-50 report. The underreporting totaled \$10.6 million for the 2 years. Augmentees are contractor personnel working temporarily at a government facility to accomplish work originally planned for the public sector. We have noted the underreporting of augmentees in prior reviews.

• Future-Year Projections Are Not Reasonable and Not Very Useful	Other. We identified several other relatively small errors in the 50-50 data for fiscal year 2001, including public-sector workload that was reported as private sector, a transcription error, and an uncorrected error found by Air Force auditors. The projections of the Army, the Navy, and the Air Force in DOD's 50-50 report for fiscal years 2002 through 2006 are not reasonable estimates of the future allocations of funding for public- and private-sector workloads. The future-year projections have constantly changed, particularly for years beyond the budget year. We also noted that they are based, in part, on incorrect data, questionable assumptions, and some inconsistencies with existing budgets and management plans. With so many errors and frequent changes, the future-years data may be misleading and not very useful to congressional and DOD decision makers, particularly the further estimates are in the future. While we have identified these shortcomings in the past, the problems continue.
Future-Year Estimates Are Not Reasonable	Future-year estimates are not reasonable because they represent budget and planning data that change over time, incorporate the same errors found in prior-year data, and also have other problems. The budget and planning data used to project the share of depot maintenance work to be performed in the public and private sectors in the future are estimates. At best, they provide only rough estimates of future funding allocations and these estimates change over time. We analyzed the services' past projections of the mix of their depot maintenance work 1, 2, 3, and 4 years in the future and found that predictability declined as time moved out into the future. For example, compared to the future-years report submitted to the Congress last year, the Army reported substantially more workload in total and increased private-sector percentages this year. This year's projections for the allocation of depot maintenance work to the private sector increased about 1.5 percent over last year's estimates for both fiscal year's estimates of the percentage of private-sector Army maintenance work in fiscal years 2004 and 2005, respectively. We saw similar patterns in the Navy's and Air Force's projections of the future workload mix. Again, changes in reporting from prior years were more pronounced as time into the future increased. In the Navy's case, between the report issued in 2001 and the report issued in 2002, the Navy's projected mix for fiscal year 2002 changed only about 1.7 percent from last year's estimate. Given the closeness of the services to the percentage limitation on funding for private-sector work, a change in outyear estimates of 5 percent over a year

suggests the instability of this information could greatly limit its value to decision makers as a predictor of the actual balance of workload in some future year.

The services made many of the same errors in their future-year projections as they made in the prior-years report and made other mistakes as well. Regarding the repeat of errors, we found the following in the future-years data:

- The Army's data had errors due to clerical mistakes, unreported programs, and uncertain reporting responsibility for workloads associated with the national maintenance program. The net effect of these errors would add about 1 percent to the private-sector allocations during each year of the reporting period.
- The Navy's data did not include the Trident missile work and Aegis software maintenance, understating private-sector funding an estimated \$162 million per year and understating public-sector funding about \$80 million per year. In addition, depot maintenance work on nuclear aircraft carriers and inactivation of nonnuclear ships were not reported and component repairs were double counted. The net effect of all the errors we found would add from 3½ to 4 percent to the private-sector allocations annually, moving the Navy very close to the limit, if not over.
- The Marine Corps' data did not include millions of dollars in planned work for both the public and private sectors that was not reported for numerous acquisition programs managed by the Systems Command and programs that were in the source-of-repair process. We estimate that the net effect of this error would more than double the private sector's percentage share of the Marine Corps' maintenance work over the 5-year reporting period.
- The Air Force's data did not include private-sector funding for modification installations and contract-cost growth totaling about \$336 million for the reporting period. Other problems noted included double counting of component repairs, inappropriate adjustment for general and administrative expenses, and unreported contractor augmentees. The double-counted reparables would significantly reduce both the public- and private workloads while the other errors would increase the private-sector work. For the 5-year reporting period taken as a whole, the net effect from these adjustments would add 2.5 percent to the private-sector share, with varying but similar amounts added each year.

We also identified additional errors in the future-years report not found in the prior-years report, particularly with the amounts considered exempt from the section 2466 percentage limitation as a result of recent

	legislation. The Navy overstated the funds it excluded because officials misapplied the new guidance concerning public-private partnerships. For example, under that guidance, workload must be performed by private industry or other entity outside of DOD at a Center for Industrial and Technical Excellence in order to be considered exempt from the 50-percent limitation. The Navy, however, exempted the cost of contractor-provided material to its naval air depot partner, even though government personnel were responsible for performing the maintenance workload. Under the circumstances, since the workload was not performed by private industry or other entity outside of DOD, it does not appear that this situation qualified for the exemption. Correcting for the error increases the private-sector funding and percentage share by a small amount.
	The Air Force understated exempted private-sector workloads by a total of \$206 million over the 4 years specified by the amended statute. In the 50-50 report, officials excluded only part of the budgeted funding for a software maintenance workload accomplished by a contractor at a public depot. It appears that the entire workload should have been excluded. Correcting for the error decreases the private-sector funding and percentage share by a small amount. Officials said the excluded provision was passed in the midst of the reporting cycle and that there were questions about implementing guidance and uncertainties as to the application of this new requirement.
Future-Years Data Are Not Very Useful	The uncertainty and instability of budget estimates combined with the errors and omissions we found result in a future-years report that is not very useful to congressional and DOD decision makers. As previously discussed, the further into the future the estimate is, the more errors and assumptions are made in the projection, and the less likely the data will be useful as a predictor. For example, in 2001, we reported that while the Army future-years' workload allocations showed an increasing public-sector share, after adjusting the reported numbers to correct for errors and omissions, the net effect was an increase in the private-sector share of work. ¹⁶ We also reported that the Marine Corps' future-year data did not accurately reflect the planned decrease in total revenues, the impact of new systems going to the private sector for support, and the anticipated decrease in the public depot workforce.

¹⁸ GAO-02-95.

The future-years report issued in 2002 also included some potentially misleading information. For example, after 2 years of waiving the 50-percent limitation on private-sector work, the Air Force now projects that it will not exceed the ceiling in any of the next 5 years. Our analysis of the backup support for the Air Force's data indicates this assessment is likely to change and the service will continue to be challenged to comply with the 50-50 requirement. First, the conditions leading to the need for waivers in fiscal years 2000 and 2001—policies and management actions to increase outsourcing—have not materially changed. Also, as discussed previously, our review of selected data identified errors and omissions that would collectively increase the private-sector share each year, placing additional pressure on the Air Force as it seeks to manage within the 50-percent limitation.

Additionally, the Air Force's expectations about future compliance are based not on performing more work in the public depots, but rather on projections of big price increases for public-sector work already being performed. The assumptions about workload execution, business plans, and budgets that would need to occur for this to happen are already changing. For example, the Air Force's projections assume that 100 percent of the programmed public-sector work will be performed. However, in 7 of the last 8 years, actual production hours accomplished by Air Force depots were less than estimated in budgets—by as much as 9 percent less. Further, Air Force officials told us that large price increases generally cause customers to order less work than planned, since there is a limited depot maintenance budget to work with. They also noted that "must-pay" bills created by contractual arrangements for high priority systems such as the C-17 and F-117 are increasing and tying up repair budget resources. Finally, the biggest factor in the projected public-sector price increases is the result of parts increases, which are also likely to have an effect on the prices of repairs accomplished in the private sector.

DOD officials agreed that the planning and budget data available for making future projections beyond the budget year are not very useful as a predictor of the balance of future workloads between the public and private sectors. They also noted that when the services are within a few percentage points of the 50-50 ceiling, as they are now, the accuracy of the conclusions drawn from the unreliable future projections do not provide a very good basis for forecasting the future. Some suggested eliminating the future-years report and combining information in the prior-years report with estimated funding for the current year in which DOD is operating and the budget year, which is 1 year beyond the current year.

Opportunities Exist to Improve 50-50 Reporting	 Notwithstanding the reporting problems discussed in previous sections, opportunities still exist to improve the 50-50 process and results. Improving the quality and accuracy of data can make the reports more useful to the Congress in exercising its oversight role and more useful to DOD as a management tool. In addition to helping maintain compliance with the 50-50 requirement, such data can be used by DOD officials in determining whether to support a new weapon system or major upgrade in the public or private sector and in evaluating the impacts of depot policies and practices. 		
	Compared to prior years, service efforts to improve 50-50 data collection and reporting for this most recent reporting period were not as widely apparent. Our assessment this year is that the overall quality of the services' efforts stayed about the same or declined compared with last year's effort. We also identified three unresolved systemic problem areas that complicate reporting and distort data, and which could be improved by the services.		
Improvements Minimal This Year	In prior years we noted incremental improvements by DOD in the 50-50 reporting process and results. But our overall assessment this year is that quality of reporting—in terms of accuracy, procedures, and supporting documentation—has stayed about the same or has declined, as shown in table 6. Individually, the Army and Marine Corps' efforts were of lesser quality, the Air Force stayed about the same, and the Navy improved its management process, although we found more errors and inconsistencies in the Navy's data this year than last. OSD and each service did improve guidance somewhat to incorporate the findings and recommendations in our 2001 report; ¹⁹ but the services' priority and overall emphasis from top management on the 50-50 reporting requirement seem to be waning. The Navy and the Marine Corps did not use their audit services to validate data; the Army and the Air Force did to good effect, but we note that the Air Force is considering reducing audit service efforts next year.		

¹⁹ GAO-02-95.

Service	Accuracy	Procedures	Documentation
Army	Declined	Declined	Declined
Navy	Declined	Improved	About the same
Marine Corps	Declined	Declined	Declined
Air Force	About the same	About the same	Declined

Table 6: Reporting Quality Compared to Last Year

Source: GAO analysis of service reporting processes, management controls, and data.

Army

Overall, we found the Army's errors were more numerous and more significant than those found in previous 50-50 reports. Some errors can be attributed to reorganizations or changeover in personnel and the resulting loss of institutional knowledge about 50-50 reporting processes and procedures. While a variance analysis likely would have spotlighted the most significant error—the mistaken reporting of depot funding for two commands in millions, rather than thousands of dollars, Army officials did not conduct even a simple check to compare the reporting commands' data in the current report with that in last year's report. Although Army Audit Agency auditors found and corrected a number of errors in the initial submissions of 50-50 data by various Army commands, the auditors did not catch this error because these two relatively small commands were not included in the scope of the audit.

Navy

While the Navy has taken steps to improve its reporting process, we found a higher error percentage in the Navy's 50-50 reports this year than we have found in previous years. The Navy improved its guidance to focus on areas we had cited previously as needing improvement and the 50-50 office selectively reviewed more submissions this year to check accuracy and documentation. Nonetheless, our review identified substantial errors and inconsistencies in the Navy's data. Further, although we have previously recommended audit service review of 50-50 data, the Navy again did not ask for an independent review by the Naval Audit Service or the Navy Inspector General. Consequently, very little of the Navy's data were validated through an extensive third-party review.

The benefit of independent review is illustrated by the Philadelphia supply office's use of its command evaluation office to improve the quality of its submission. The reviewer detected and corrected a computation error that overstated maintenance work. Also, upon reviewing the errors and omissions that we identified in the 50-50 data, Atlantic Fleet officials said they are considering asking their Inspector General to review current and subsequent submissions. According to these officials, all of the errors we found would likely have been detected and corrected had it undergone a third-party review.

Marine Corps	The Marine Corps' data collection and validation processes were very inadequate, and it appears that little priority and management attention was accorded the 50-50 reporting process. Officials did not disseminate the guidance to all potential reporting offices or follow up to ensure that offices understood data reporting responsibilities. Most weapon system and support system managers were unfamiliar with the guidance and 50-50 reporting requirements. Several organizations that should have reported did not report at all and various transcription errors and omissions would likely have been caught with even limited management oversight and account reconciliation.
	Internal checks and balances were also inadequate to ensure that all appropriate organizations reported or that the reported data were accurate and complete. Little data validation was accomplished at any level in the reporting chain and few attempts were made to ensure compliance with OSD, Navy, and Marine Corps guidance. For example, the largest Marine Corps reporting component did not have a focal point for checking information before forwarding it to the central 50-50 office compiling the overall report. This situation was made even more difficult because of the Systems Command's reorganization.
	Finally, the Marine Corps did not perform an internal or external audit of the 50-50 reporting, and documentation was inadequate. A 1999 Naval Audit Service "quick look" identified several weaknesses with the reporting process. While the guidance was subsequently improved, it appears that other corrective actions were not taken. We found that an audit trail was not adequately maintained to support the collection and aggregation of data, making data review and verification difficult. Worksheets to support the numbers reported in the future-years report were not maintained.

Air Force

After several years of steady improvement, the Air Force 50-50 data collection process plateaued this year in terms of quality. The management process and controls were very similar to last year's. Air Force auditors and we identified about the same level of problems as last year and continued to find that the records to document data collection processes, data sources, and estimating methods were not always adequately maintained, particularly for acquisition programs.

As before, the Air Force held a planning meeting of major reporting offices to discuss this year's taskings and problem areas that had been previously identified. The most notable addition to guidance resulted from a recommendation we made last year regarding modifying budget estimates in the future-years report to better reflect changes in plans. Past reviews noted that the Air Force projections did not accurately reflect historical program execution rates and expected changes in workload from source-of-repair decisions for new and upgraded weapon systems. Execution data and source-of-repair information indicated that the future contract workload was expected to increase the private-sector share significantly. Accordingly, we recommended last year that guidance be expanded and clarified to allow for revising budgetary estimates to better reflect known and anticipated changes to workloads, workforce, priorities, and performance execution rates. Such actions would achieve more reasonable projections of depot requirements where historical data indicate that budget and programming data are unrealistic. In implementing this recommendation, Air Force officials in the future-years report added \$314.7 million for new contract workload estimates in fiscal year 2002 and an additional amount of \$224.5 million to the private-sector amounts for the remaining 4 years of the reporting period. Officials added less than \$4 million for new public workload estimates in the same time period.

The Air Force Audit Agency again reviewed portions of the Air Force's data, making substantial corrections to the data submission. It did not review quite as much workload as in prior years, but the error rate was comparable with recent years. Air Force officials said that the audit effort might be reduced or eliminated in the future to focus on other areas. Clearly, the participation of the audit agency has improved the quality of the Air Force's data.

Unresolved Systemic Problems Complicate Reporting and Distort Data	While we have been reviewing DOD's 50-50 reports for 4 years, we continue to find unresolved systemic problems complicating 50-50 reporting and distorting the data. These problems include the double counting of funding for repair of components incorporated into an overhaul of a larger system or subsystem, the underreporting of depot work performed at nondepot locations, and the underreporting of repair work managed by system program offices.
Double Counting Repair Costs	As discussed earlier in this report, the process the Air Force and the Navy use to calculate their 50-50 data can result in some component repair costs being reported twice: once when the item is repaired and a second time when the repaired item is installed into a piece of equipment at a contractor or military depot repair activity. For example, when a service has a radio circuit card repaired, the service includes the repair cost in its 50-50 report. Later, when that circuit card is installed into a radio as part of a depot-level overhaul of the weapon system, the service again reports the cost of the circuit card in its 50-50 report as part of the material costs for the overhaul. While a lack of data precludes precisely quantifying the impact of duplicate 50-50 repair-cost reporting, indications are that the magnitude may be material in the Air Force and less so in the Navy. Correcting for the double count would reduce the public-sector amounts more than the private sector's in both services, thereby increasing the private-sector share of the total funds reported. We did not review this issue in the Army, but OSD officials stated that the same condition would likely exist in the Army. The double counting of repair costs is particularly problematic since the Congress in 1996 asked DOD to report the depot maintenance mix in direct labor hours as well as in dollars. DOD officials, however, stated that they did not collect direct labor hour data from contractors and could not provide a reasonable labor hour comparison estimate. Since that time, DOD has reported 50-50 data in total dollars, which include labor and material costs. We have previously reported ²⁰ that including the cost of material in the 50-50 reporting is a complicating factor and that it is difficult to accurately associate all material costs to assure that public- and private-sector activities are being measured based on comparable data. In our 1996 report, we stated that reporting workload in direct labor hours

²⁰ U.S. General Accounting Office, *Defense Depot Maintenance: More Comprehensive and Consistent Workload Data Needed for Decisionmakers*, GAO/NSIAD-96-166 (Washington, D.C.: May 21, 1996).

	could address the material cost issue and provide a more accurate picture of the workload mix. This could potentially be useful also in rectifying the double counting of reparables since the double count occurs when the reparable cost is included as a material cost in the overhaul of the system or subsystem.	
	In its comments on our draft report, DOD stated that it was appropriate to count both the initial repair and subsequent cost of material since both were separate transactions. We think an adjustment is warranted in these situations to more accurately reflect work. The agency comments section later in this report discusses this issue further.	
Underreporting of Work at Nondepot Locations	Since the early 1990s, the distinction between depot-level maintenance and lower levels of maintenance at field and regional locations has become increasingly vague as the services move depot workloads to operating locations, redefine required levels of maintenance, consolidate maintenance organizations, and adopt new business philosophies. We have previously reported how these actions have complicated the 50-50 process and resulted in underreporting depot maintenance in the Army and the Navy. ²¹ Our 50-50 review this year focused on the Air Force and found similar circumstances.	
	The Air Force appears to be underreporting public- and private-sector depot maintenance workloads by an undetermined amount because its 50-50 reporting focuses primarily on those workloads and maintenance locations managed and funded by the Air Force Materiel Command, including operations financed through the working capital fund. It does not capture depot-type work being performed at field locations that are funded directly by the training and combat commands. Our work shows that this command-centric approach may be too limiting because we identified depot maintenance-like tasks being carried out in a wide variety of locales outside the Materiel Command's purview that have not been reported in the 50-50 data. These locales include operating bases, regional	

²¹ GAO-02-95.

maintenance sites, contract field teams,²² and Air National Guard maintenance shops.

Historically, the Air Force organized the depot maintenance mission to encompass only Materiel Command organizations and operations financed through the working capital fund and acquisition program office appropriations. As a consequence, only Materiel Command organizations receive 50-50 guidance and are tasked to report depot maintenance work. This does not appear to be sufficient due to changes in maintenance philosophy and approach and a clarification of the definition of depot maintenance in title 10. Depot maintenance is defined there as material maintenance or repair requiring the overhaul, upgrading, or rebuilding of parts, assemblies, or subassemblies, and the testing and reclamation of equipment as necessary, regardless of the source of funds for the maintenance or repair or the location at which the maintenance or repair is performed.

Examples of maintenance activities we identified that appear to include depot maintenance follow:

• Ninety percent of B-1B engine overhauls is not reported in 50-50 data. It is accomplished at Dyess and McConnell Air Force Bases by both contract and government personnel and is funded by direct appropriations of the Air Combat Command and the Air National Guard. Ten percent of the overhauls, accomplished at the Materiel Command's Oklahoma City Air Logistics Center and financed through the working capital fund, is reported in the 50-50 data. Officials at McConnell said the overhauls accomplished there and at Dyess—and the repair capabilities at the bases—are essentially the same as that at the air logistics center. The fiscal year 2001 work at McConnell was valued at \$30 million for materials used; personnel salaries and other costs were not charged to the Air Force customer. Dyess did not provide a cost estimate, but officials said the workload is comparable to McConnell's.

²² Air Force regulations define a contract field team as contract maintenance personnel accomplishing depot-level maintenance and modification at military installations or on-site. The work involves depot-level maintenance tasks and may include concurrent organizational and intermediate level tasks. The contractor provides supervision, personnel, and hand tools, and the government provides maintenance equipment, supplies, and special tools. The Air Force 50-50 guidance defines depot maintenance to include depot field teams, which can be contract field teams or organic field teams of government workers deployed to field locations. The Air Force manages several contracts that the services use to order contract field team services.

- McConnell also opened a B-1B avionics repair facility in 1998 that, although classified as an intermediate facility, frequently does depot-type repairs and has an agreement with the Materiel Command's Warner Robins Air Logistics Center to handle its depot maintenance overflow. Officials said the facility has depot-type repair equipment and that its mechanics are trained in depot repairs. None of the \$27.2 million in work done at the avionics facility in fiscal year 2001 was reported as depot maintenance for 50-50 purposes. However, much of the work is equivalent in complexity and skills involved to the B-1B avionics work done at Warner-Robins Air Logistics Center, which is reported in the 50-50 data. For example, the McConnell facility repaired transmitters for the depot, which did not have enough capacity to do the entire transmitter workload. The Air Force plans to shut down the McConnell avionics facility in 2003.
- A contract field team at Randolph Air Force Base accomplishes maintenance work on trainer aircraft, about \$10 million annually. Funds for this workload are reported in the 50-50 data because the work is financed through the working capital fund managed by the Materiel Command. Other contract field teams accomplish maintenance work on the same trainer aircraft at regional locations, including engine work at Laughlin Air Force Base. This work, about \$8 million per year at Laughlin and an unknown amount at other locations, is funded and managed by the Air Education and Training Command, but is not reported in the 50-50 data. Much of the work at these sites is considered to be intermediate level tasks, but officials say the workload and the site capabilities in terms of skilled technicians and plant equipment are very similar to that of the public and private depots.
- The location and reporting status of C-5 engine overhauls and modifications have changed over the years because of changed maintenance philosophy and base closures. The workloads are now accomplished at a contractor facility and at two Air Mobility Command regional repair centers located on Dover and Travis Air Force Bases. The work at the contractor facility is counted as depot maintenance in the 50-50 reports, but the work at the regional sites—valued at about \$5.5 million per year and performed by contract and government personnel—is not reported. Several years ago, the Air Force revised its maintenance philosophy and moved some work from these regional sites to the Materiel Command's San Antonio Air Logistics Center, where it was reported as depot maintenance. With the 1999 closure of San Antonio, some of the depot work returned to the regional sites and was not reported as depot maintenance. Now, officials plan to decrease the work at one or more of the regional sites and send it to the privatized facility located on the site of the closed San Antonio depot, where it will again be reported for 50-50 purposes. Air Mobility Command maintenance officials

said the capabilities at the regional sites to do complete engine overhauls and major modifications are equivalent to those at public depots and major contractor facilities.

In November 2001, the Air Force Materiel Command and the Air National Guard signed a memorandum of agreement for the Guard to assist in overflow depot maintenance work from the air logistics centers. The Guard had already been doing this at several sites, including McConnell as previously discussed. Also, Guard personnel at the Rickenbacker Airport overhaul small gas turbine engines and auxiliary power units for several Air Force customers. During its 8 years of operation, they charged about \$26 million in material and transportation costs to their customers, but they did not charge for personnel costs, which are paid by the Guard. None of this work was reported for 50-50 purposes. According to Guard officials, they are doing depot and depot-type work at several other locations and are looking to expand opportunities in this area. Under the agreement, funding for these workloads is to be reported in the future as depot maintenance to the extent the Guard substitutes or performs overflow work for the public depots. It is unclear, however, whether all costs associated with the Guard's performance of future depot maintenance work will be captured. For comparability with repairs done at depots and contractor facilities, labor costs would have to be included, lest the depot workload be understated.

It is unclear what portion of the work in the situations above and at other nondepot activities should be reported as depot maintenance. The previous examples illustrate the transitory nature of reporting as locations and funding sources change. We recognize that much of the work is properly categorized as intermediate level maintenance work and that there is a difference between the depot and intermediate levels in terms of the skills involved, the equipment used, and the repair specifications involved. However, it appears that government and contractor personnel at several non-Materiel Command and nonworking capital funded locations are performing work that is very similar if not equivalent to depot maintenance and that the Air Force is not considering this at all in the 50-50 mix. These locations and their operating commands do not receive the 50-50 data call instructions, which would at least offer an opportunity to determine its applicability. In determining not to report certain activities in the 50-50 data, the Air Force is in effect adopting a de facto policy of using location, command affiliation, and funding source as bases for decisions, whereas OSD and Air Force guidance clearly states that depot maintenance should be reported regardless of the location or funding source used.

We also note that the Air Force has prescribed procedures for making changes in the level of maintenance for individual workloads and for obtaining approval to do depot maintenance at nondepot locations. From our discussions with Air Force and Air National Guard personnel, it appears that the formal process is not always followed and that there is no tracking mechanism to determine how often such actions occur, where they occur, and for which items. According to officials, an informal system is used more often to get approvals for depot repairs over the telephone from Materiel Command officials. The command focal point told us that they are evaluating improvements to the formal system.

In comments on our draft report, DOD stated that Air Force policy provides that depot level repair can only be done at approved locations. In providing oral comments, Air Force officials said they had reviewed some of the situations we cited and believed the work to be intermediate-level maintenance. They agreed with the intent of our recommendation, which was to determine the potential and extent of depot-level maintenance accomplished at nondepot locations, and stated that they would further evaluate this issue to ensure the next 50-50 data call was complete and comprehensive.

In previous years we have reported on similar matters concerning the Army and the Navy. With regard to the Army, we reported²³ about the proliferation of its depot maintenance work at nondepot locations and its efforts to consolidate workloads and craft a national maintenance program. We determined that the Army did not sufficiently identify the extent of depot maintenance-type work performed at nondepot facilities and was unable to develop accurate and consistent estimates of its depot maintenance-type work. This occurred partly because its reporting criteria were not consistent with the definition in 10 U.S.C. 2460. Since then the Army has made efforts to identify all depot maintenance performed in field-level activities. Although some progress has been made, a recent Army-sponsored study of the proliferation of depot maintenance-type activities concluded that not all depot maintenance being performed in specialized repair activities is being reported. Army officials said the study determined that the definition of depot maintenance has not been institutionalized and much depot maintenance data are not being reported.

²³ See U.S. General Accounting Office, Depot Maintenance: Army Report Provides Incomplete Assessment of Depot-type Capabilities, GAO/NSIAD-00-20 (Washington, D.C.: Oct. 15, 1999).
For example, several major commands did not report component repair, refurbishment, and other overhaul programs. This would suggest that the Army requires additional emphasis in the oversight and control of its maintenance activities and processes. When depot work is performed at field locations without the rigorous standards maintained at a depot, the Army cannot assure that its equipment will be as reliable as it needs to be to respond to future contingencies.

We have also previously reported²⁴ on the Navy's regionalization of maintenance activities, which is consolidating depot and intermediate levels of maintenance at common locations. After attempting to develop a reporting system at Pearl Harbor—the first regional site—that would isolate depot from intermediate tasks, the Navy revised its 50-50 guidance for this year to require that all maintenance at consolidated locations should be reported as depot maintenance. Accordingly, the Navy's prior-years report includes work at Pearl Harbor that is classified as intermediate-level maintenance and that was not reported previously for 50-50 purposes. The Navy's future-years report includes similar actions at other regional sites as they come on board.

Underreporting of Depot Repair Funding Provided by System Program Offices As previously discussed, some weapon system program offices in each of the military departments did not report depot maintenance funding for weapon systems that should have been reported. These errors are difficult to identify, because it is more difficult to identify something that is not reported at all than to find errors in data that are reported. Nonreporting system office officials told us that they did not think they were required to report depot repair costs they managed under temporary or long-term logistics support contracts. Both OSD and the military departments have developed guidance that specifies that depot maintenance and repair costs should be reported, regardless of the source of the funds or the location of the work. However, we reported²⁵ in the past that system program offices sometimes do not recognize or respond to logistics guidance regarding 50-50 reporting requirements or adequately consider impacts on the

²⁴ See U.S. General Accounting Office, *Depot Maintenance: Key Financial Issues for Consolidations at Pearl Harbor and Elsewhere Are Still Unresolved*, GAO-01-19 (Washington, D.C.: Jan. 22, 2001).

²⁵ See GAO/NSIAD-00-193, GAO/T-NSIAD-00-112, and U.S. General Accounting Office, Defense Depot Maintenance: DOD Shifting More Workload for New Weapon Systems to the Private Sector, GAO/NSIAD-98-8 (Washington, D.C.: Mar. 31, 1998).

50-percent limitation during the decision-making process when determining whether a new system or upgrade should be supported in the private or the public sector. For example, the failure to recognize the impact on 50-50 requirements led to the assignment of the repair work for so many new weapon systems to the private sector that the Air Force has for 2 years exceeded the 50-percent funding limitation on work performed in the private sector.

Conclusions

Although we cannot tell with precision whether the military departments met the 50-50 requirement, the prior-years report does provide a rough approximation of the allocation of depot maintenance workload between the public and private sectors. This information is useful to the Congress in its oversight role and to DOD officials in deciding support strategies for new systems and in evaluating depot policies and practices. On the other hand, the future-years report is not a very useful tool for informing the Congress and DOD officials about likely future compliance because it does not provide a reasonable estimate of projected public-private sector workload balances. This occurs because of the changing nature of projections, a combination of errors and omissions, less emphasis by the services on the collection and validation of future-years data, and the use of ever-changing budgetary estimates to construct projections. Furthermore, such budget projections and assumptions get more difficult to make accurately as the distance into the future increases because of their very speculative and volatile nature. We believe that these problems are likely to continue because of the uncertainty associated with estimating depot maintenance workload allocations between the public and private sectors beyond 2 years. The cost-effectiveness of continuing to collect and aggregate data for 4 years in the future is questionable given the problems we have identified with the estimates. With such estimating problems added to reports of the Air Force being above the ceiling and the Army and the Navy approaching the ceiling, all military departments will be challenged to managing their depot maintenance programs to remain within the 50-percent limitation.

Furthermore, after several years of incremental improvements, the overall quality and direction of DOD's reporting seem to have plateaued. In addition, service plans to not use third-party checks or to decrease the involvement of auditors without identifying controls or plans to substitute for the loss of independent review are a concern. Acting on these plans is likely to result in less accurate and comprehensive 50-50 reports. While the 50-50 guidance has improved over the years, several areas of guidance still do not adequately address a number of problems, including (1) exemption

	for partnering workloads, (2) double counting of component repair costs, (3) depot workloads accomplished at nondepot locations, and (4) proper reporting by system program offices. In addition, the complexity of the 50-50 process and changes in how maintenance is managed will present continued challenges to the services in making significant improvements to their collection, documentation, and reporting processes.
Matter For Congressional Consideration	Because of the continuing limitations in the value of outyear information, inherent difficulties in projecting future requirements and capabilities and the volatility of such projections, the Congress should consider altering the 50-50 reporting requirement in 10 U.S.C. 2466 to recognize the current shortcomings in the future-years reporting. Possible alternatives are to (1) eliminate the requirement for the future-years report; (2) modify the future-years report to include only the current year and the next budget year (the 2 future-year projections that are generally more realistic); or (3) combine the prior- and future-years reports to include the prior, current, and the next budget years. The revised 50-50 report could also be required to include an explanation of actions each military department is taking to comply, or remain in compliance, with the 50-percent ceiling.
Recommendations for Executive Action	To improve the 50-50 data collection, validation, and reporting processes, we recommend that the Secretary of Defense require the Assistant Deputy Under Secretary of Defense for Maintenance Policy, Programs, and Resources, in conjunction with the secretaries of the military departments, clarify guidance on (1) the exemption of partnering workloads from the 50-50 requirement and (2) the treatment of component repair costs to prevent the double counting in 50-50 reports when the repaired items are used in higher-level assemblies; the Secretary of the Navy to (1) direct the use of the Naval Audit Service to review and validate 50-50 processes and data during next year's and subsequent reporting cycles and (2) revise its guidance in order to report nonnuclear-related depot maintenance and modification work accomplished on aircraft carriers in conjunction with nuclear refueling overhauls as discussed in this report; the Secretary of the Army to (1) initiate steps to improve management and controls of the 50-50 data collection and documentation process and (2) finalize and issue guidance concerning the reporting of depot maintenance at nondepot locations; the Secretary of the Air Force to determine the extent and nature of depot maintenance and depot-like tasks accomplished at nondepot locations

	 (including field and regional maintenance centers) and apart from Air Force Materiel Command reporting responsibility and, pending the outcome of that determination, revise Air Force 50-50 guidance and management processes for tasking, collecting, and validating data in order to ensure more complete and consistent reporting of 50-50 data; and the Commandant of the Marine Corps to (1) initiate steps to improve management and controls of the 50-50 data collection and documentation process and (2) ensure that 50-50 reporting guidance is disseminated and understood by all potential reporting organizations.
Agency Comments and Our Evaluation	DOD provided official oral comments on a draft of this report. DOD agreed with most of our recommendations and cited a number of corrective actions it plans to take. However, DOD disagreed with parts of two recommendations; these are discussed below. DOD also provided technical comments, which we incorporated in the report as appropriate.
	DOD disagreed with the part of our first recommendation addressing the double counting of repair costs of components used in higher-level assemblies. We stated that reporting both the cost of the original repair of a component as well as the cost of that repaired component when it is installed in a system or subsystem during an overhaul distorts the aggregation of workload data for determining the mix of work between the public and private sectors. DOD officials said that the repairs of components and the use of those items during system overhaul are two distinct and separate transactions. According to DOD, both transactions are depot-level maintenance events that must be reported based on the provisions of title 10.
	We continue to believe that reporting both actions distorts the reporting because the cost of the repair of some items can be counted twice. For example, an item can be counted when it is repaired and a second time as a material cost of installing the item in a system overhaul. DOD does not disagree that its treatment of component repair costs results in counting those costs twice in some cases. Nevertheless, according to DOD, it is consistent with congressional intent to report both as funds made available for depot maintenance. In our view, there is no reason to conclude that the intent of title 10 requires double counting component repair costs. A more reasonable reading is that DOD can implement those provisions so as to allow for adjustments in reporting to more accurately reflect the cost of depot work. We continue to believe that DOD can clarify its guidance to prevent double counting of repairs when the repaired items are used in higher-level assemblies.

DOD also disagreed with the part of the recommendation made to the Navy concerning the reporting of nuclear carrier overhauls. DOD officials noted that for a variety of practical reasons, a Navy contract for the nuclear refueling of an aircraft carrier typically includes not only the removal and replacement of the nuclear reactor core but also necessary repair and modernization efforts for the ship. They stated that to date the Navy has treated all costs associated with the nuclear refueling of an aircraft carrier, including all such non-nuclear repair and modernization efforts, as subject to the exclusion. Therefore, the Navy has reported none of the funds made available for aircraft carrier nuclear refueling overhauls as depot-level maintenance and repair.

We continue to believe that the cost of depot repairs and upgrades not directly associated with nuclear refueling tasks during a refueling availability should be reported. Many maintenance tasks performed at the same time as a nuclear refueling are not related to refueling activities, and when these tasks are performed during other types of availabilities, they are reported as depot maintenance. Further, the funding associated with these other tasks is clearly identifiable in the carrier overhaul contract and in financial records. In our view, without some nexus between that work and nuclear refueling, it would be inconsistent with the plain language of section 2460 to exempt that work from reporting simply because it was performed during a nuclear refueling availability.

We are sending copies of this report to the Secretary of Defense, the Secretary of the Army, the Secretary of the Navy, the Commandant of the Marine Corps, the Secretary of the Air Force, the Director of Office of Management and Budget, and interested congressional committees. We will also 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. Appendix I contains our review scope and methodology and appendix II lists key contributors. Please call me on (202) 512-8412 or Julia Denman on (202) 512-4290 if you or your staff have any questions concerning this report.

David K. Warren

David R. Warren, Director Defense Capabilities and Management

Appendix I: Scope and Methodology

To determine whether the military departments met the 50-50 requirement in the prior-years report, we analyzed each service's procedures and internal management controls for collecting and reporting depot maintenance information for purposes of responding to the section 2466 requirement. We reviewed supporting details (summary records, accounting reports, budget submissions, and contract documents) at departmental headquarters, major commands, and selected maintenance activities. We compared processes to determine consistency and compliance with legislative provisions, Office of the Secretary of Defense (OSD) guidance, and military service instructions. We selected certain programs and maintenance activities for a more detailed review.¹ We particularly examined reporting categories that Department of Defense (DOD) personnel and we had identified as problem areas in current and past reviews; these areas included interserviced² workloads, contractor logistics support, warranties, software maintenance, and depot maintenance at nondepot locations. We evaluated processes for collecting and aggregating data to ensure accurate and complete reporting and to identify errors, omissions, and inconsistencies. We coordinated our work, shared information, and obtained results of the Army and Air Force service audit agencies' data validation efforts.

To determine whether the future-year projections were based on accurate data, valid assumptions, and existing plans and represented reasonable estimates, we followed the same general approach and methodology used to review the prior-years report. Although the future-years report is a budget-based projection of obligations, the definitions, guidance, organization, and processes used to report future data are much the same as for the prior-years report of actual obligations. We discussed with DOD officials the main differences between the two processes and the manner in which the data were derived from budgets and planning requirements and key assumptions made in the outyear data.

For reviews of both 50-50 reports, we performed certain checks and tests, including variance analyses, to judge the consistency of this information

¹ We selected the programs reviewed based on size and importance, leads obtained from internal auditors, and any previously identified areas of concern. Given the nature of our sample, the results are not projectible to the universe of depot maintenance activities. We also did not audit the integrity of DOD's financial systems and accounting data used to prepare the 50-50 reports.

² Interserviced workload is maintenance that one military service performs on equipment owned and funded by another service.

with data from prior years and with the future-years budgeting and programming data used in DOD's budget submissions and reports to the Congress. For example, we compared each service's 50-50 data reported in February and April 2002 for the period 2000 through 2005 with data reported for these same years in the 50-50 reports submitted in 2001. We found repeated and significant changes, even though the estimates were prepared only about 1 year apart. This comparison helped us identify large transcription errors and unreported costs that the Army had made, which resulted in the data reported to the Congress erroneously indicating an increase in the percentage of depot maintenance work assigned to the public sector. This comparison also revealed a greater increase in the Navy's shift to more private-sector workload than had been projected last year.

Variance analysis showed that congressional and DOD decision makers were given quite a different view of the public-private sector workload mix than that presented just last year.

Several factors concerning data validity and completeness were considered in our methodology and approach to reviewing the prior- and future-years reports. One key factor is the continuing deficiencies we have noted in DOD's financial systems and reports that preclude a clean opinion on its financial statements and that result in limited accuracy of budget and cost information. Another factor is that documenting depot maintenance workload allocations between the public and private sectors is becoming more complicated by the consolidation of maintenance activities and the performance of depot-level maintenance at field locations. These complicating factors (1) make it more difficult to identify work that meets the statutory definition of depot maintenance, (2) complicate workload reporting, and (3) result in underreporting of depot maintenance for both the public and private sectors. In addition, changes in business philosophy and approach can make analysis more difficult. For example, many new contracts are performance-based and may not discretely identify maintenance activities or account separately for their costs. This can result in under- and overreporting of depot maintenance work performed in the private sector. It also forces more reliance on the contractor for providing information needed in 50-50 reporting and may result in DOD officials having to use more assumptions and estimating methodologies in lieu of contract data.

To review DOD's efforts to improve the accuracy and completeness of reports, we discussed with officials managing and coordinating the reporting process their efforts to address known problem areas and respond to recommendations by the audit agencies and us. We compared this year's sets of instructions with last year's to identify changes and additions. We reviewed efforts to identify reporting sources and to distribute guidance and taskings. We asked primary data collectors to provide their opinions on how well efforts were managed and data verified and to identify "pain points" and ideas they had to improve reporting. We reviewed prior recommendations and service audit agency findings to determine whether known problem areas were being addressed and resolved.

We interviewed officials, examined documents, and obtained data at OSD, Army, Navy, Marine Corps, and Air Force Headquarters in the Washington, D.C., area; Army Materiel Command in Alexandria, Virginia; Naval Sea Systems Command in Washington, D.C.; Naval Air Systems Command in Patuxent River, Maryland; Marine Corps Materiel Command in Albany, Georgia; Air Force Materiel Command in Dayton, Ohio; Army Audit Agency in Washington, D.C.; Air Force Audit Agency in Dayton, Ohio; several public depots managed by the military departments' materiel commands; and selected operating bases. We conducted our review from February to June 2002 in accordance with generally accepted government auditing standards.

Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact	Julia C. Denman (202) 512-4290
Acknowledgments	In addition to the name above, John Van Schaik, Bruce Fairbairn, Chris DePerro, Jane Hunt, Larry Junek, Robert Malpass, Andy Marek, Frederick Naas, John Strong, and Bobby Worrell made key contributions to this report.

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