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DEFENSE DEPOT MAINTENANCE

Public and Private Sector Workload Distribution Reporting Can Be Further Improved



**National Security and
International Affairs Division**

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The Honorable Strom Thurmond
Chairman
The Honorable Carl Levin
Ranking Minority Member
Committee on Armed Services
United States Senate

The Honorable Floyd Spence
Chairman
The Honorable Ike Skelton
Ranking Minority Member
Committee on National Security
House of Representatives

On February 5, 1998, the Department of Defense (DOD) submitted a report to Congress on the distribution of depot maintenance workloads for fiscal year 1997. As required by the National Defense Authorization Act for Fiscal Year 1998, we reviewed DOD's report on the percentage of depot maintenance funding provided to the public and private sector activities. Specifically, this report (1) provides our assessment of the completeness and consistency of workload distribution data reported by the military departments and defense agencies for fiscal year 1997 and (2) analyzes the procedures DOD used to define and quantify funding for depot maintenance workloads. In addition, as requested by the Readiness Subcommittee of the Senate Armed Services Committee and the Military Readiness Subcommittee of the House Committee on National Security, the report provides preliminary information on public and private sector workload distributions projected for fiscal years 1998 through 2003 and changes being considered by the Office of the Secretary of Defense (OSD) and the military departments that could impact future reporting.

Background

Depot-level maintenance and repair involves the overhaul, upgrade, and rebuilding of military systems, subsystems, parts, and assemblies. This requires extensive shop facilities, specialized equipment, and highly skilled technical and engineering personnel. Traditionally, public sector maintenance and repair activities are conducted at 22 major government-owned and government-operated depots¹ and a number of

¹Major depots employ at least 400 personnel. Two major Air Force logistics centers (San Antonio and Sacramento) are in the process of closing and a naval warfare center (Keyport) is being downsized to less than 400 employees.

other government-owned facilities, including post-production software support activities, naval warfare centers, and Army arsenals. According to DOD officials, private sector maintenance and repair is conducted at about 1,100 contractor-operated facilities at various geographic locations.

Since the early 1990s, the distinction between depot-level maintenance and other levels of maintenance and manufacturing work has become increasingly vague. Depot-level maintenance activities are performed in traditional situations, but are also performed by civilian and active-duty military personnel in military units and by contractors at various field locations. Funds for depot-level maintenance activities come from several sources—DOD’s working capital fund; its operations and maintenance appropriation; its research, development, testing, and evaluation appropriation; and its procurement appropriation.

Legislative Requirements on Public and Private Sector Workload Distribution

The allocation of depot maintenance workload between the public and private sectors is governed by 10 U.S.C. 2466. The statute applicable during fiscal year 1997, which was often referred to as the 60/40 rule, provided that not more than 40 percent of funds² made available to a military department or defense agency for depot-level repair and maintenance was to be used to contract for performance by nonfederal personnel. These percentages apply to each individual military department and defense agency. The fiscal year 1998 Defense Authorization Act, which was approved on November 18, 1997, amended 10 U.S.C. 2466, increasing the percentage of work that can be contracted to nonfederal government personnel to not more than 50 percent. The act also amended 10 U.S.C. 2466 to require that no later than February 1 of each year, the Secretary of Defense is to submit a report to Congress concerning performance during the preceding fiscal year of depot-level maintenance and repair workloads for the public and private sectors. Further, not later than 90 days after the Secretary has submitted the annual report to Congress, we are to report on whether the DOD complied with the public and private sector workload distribution requirements for the preceding fiscal year.

How depot maintenance workloads are defined and what factors of production are included are key factors influencing the collection and analysis of depot-level maintenance funding provided to the public and private sectors. Although Congress has required DOD to report public and

²As requested by OSD’s implementing guidance, the data reported by the military departments and defense agencies represents obligations for fiscal year 1997 and projected obligations for fiscal years 1998-2003. Hereafter in this report, we refer to this information as funding data.

private sector workload distribution data in all but one year since 1991, definitions describing the workloads for reporting purposes were not separately identified in statute. Moreover, working definitions were provided in a variety of DOD directives, regulations and publications. The services applied these definitions using ad hoc procedures to prepare the prior-year reports.

The 1998 Defense Authorization Act added a new provision, 10 U.S.C. 2460, which defines depot-level maintenance and repair workloads. The provision specifies that depot-level repair and maintenance includes (1) the overhaul, upgrading or rebuilding of parts, assemblies, or subassemblies; (2) testing and reclamation of equipment; (3) all aspects of software maintenance classified by DOD as depot maintenance as of July 1, 1995; and (4) interim contractor support (ICS) and contractor logistics support (CLS) to the extent it involves depot-level maintenance services.³ The provision also specifies that all depot-level repair and maintenance workloads are to be included, regardless of funding source. The provision excludes from depot-level maintenance workload (1) the procurement of major modification or upgrades of weapon systems that are designed to improve program performance, (2) the procurement of parts for safety modifications, and (3) the nuclear refueling of aircraft carriers.

Prior Reports Concerning Public and Private Sector Workload Distribution Reporting

In May 1996, we reported that DOD's report of public and private sector depot maintenance workload allocations did not provide a complete, consistent, and accurate picture of depot maintenance workloads because it did not include funding for (1) interim contractor support and contractor logistics support, (2) labor for installation of modification and upgrade kits, and (3) software maintenance support costs.⁴ In that report, we suggested that Congress may wish to consider requiring that these workload categories be included in future 60/40 reports, regardless of funding source.

Similarly, in January 1998, we reported that DOD's approach for collecting information on public and private sector depot maintenance workload allocations did not provide complete and consistent reporting for the same

³CLS is contractor-provided, long-term, total life-cycle logistics support that combines depot-level maintenance along with wholesale and selected retail material management functions. ICS is contractor-provided logistics support, including depot-level maintenance work obtained as part of the initial acquisition strategy for new systems.

⁴Defense Depot Maintenance: More Comprehensive and Consistent Workload Data Needed for Decisionmakers (GAO/NSIAD 96-166, May 21, 1996).

workload categories that we reported in May 1996. We noted that DOD's guidance to the military departments was imprecise, leaving room for varying interpretations on data to be reported. To improve upon the accuracy of future 60/40 reports, we recommended that DOD develop a standardized methodology for annually collecting depot maintenance funding data for the public and private sectors, including specific definitions of the types of workloads and defense activities that should be reported.⁵ As discussed later, OSD acted upon information contained in a September 1997 draft of our January 1998 report. In December 1997, OSD issued guidance that addressed many of the concerns we raised regarding how the workload distribution data should be collected and aggregated to provide more complete and consistent reporting.

Results in Brief

In February 1998, DOD reported that the military departments and defense agencies allocated a total of \$10.3 billion in depot maintenance funds for fiscal year 1997—\$6.5 billion, or 63 percent, to public sector facilities and \$3.8 billion, or 37 percent, to private sector contractors. Our work shows that the military departments did not develop complete and consistent workload distribution information. For example, for fiscal year 1997, we identified depot-level maintenance workloads valued at about \$1.9 billion—about \$300 million for public sector workloads and \$1.6 billion for private sector workloads—that were not included in DOD's report. While recognizing the lack of clarity in the reporting requirements, if included the public sector share of depot maintenance funding would have been \$6.8 billion, or about 56 percent, and the private sector share about \$5.4 billion, or about 44 percent.

This condition exists for three reasons. First, OSD guidance—while substantially improved over prior years—leaves room for varying interpretations of reporting requirements for several workload categories. Second, the military departments and defense agencies have not developed internal procedures and systems to facilitate timely and accurate reporting. Third, the military departments, defense agencies and OSD have not resolved questions concerning whether or not funding for some depot-level workloads should be included in computing the public-private mix as required by 10 U.S.C. 2466. Without accurate data and consistent reporting between the two sectors, the data provides only a broad indication of the relative mix of funding provided to the public and private sectors. Thus, until the problems are corrected, future reports of

⁵Defense Depot Maintenance: Information on Public and Private Sector Workload Allocations (GAO/NSIAD-98-41, Jan. 20, 1998).

public and private sector workload distribution will continue to be inaccurate.

Although DOD is not required by statute to report estimates of future workload mix, it is essential that DOD maintain this data to support the oversight and management of depot maintenance activities and to monitor compliance with 10 U.S.C. 2466. Based on preliminary data developed by the military departments and defense agencies, total DOD-wide depot-level maintenance funding will increase from \$13.4 billion in fiscal year 1998 to \$15.4 billion in fiscal year 2003. While not yet resolved, the Air Force and the Army are considering changes in future reporting criteria for several workload categories that could reduce the amount of reported depot-level funding in future years.

DOD Report of Depot Maintenance Funds Allocated to the Public and Private Sectors Is Inaccurate

In February 1998, DOD reported that the military departments and defense agencies allocated a total of \$10.3 billion in depot maintenance funds for fiscal year 1997—\$6.5 billion, or 63 percent, to public sector facilities and \$3.8 billion, or 37 percent, to private sector contractors. Our work shows that the military departments did not develop complete and consistent workload distribution information. For example, for fiscal year 1997, we identified depot-level maintenance workloads valued at about \$1.9 billion—about \$300 million for public sector workloads and \$1.6 billion for private sector workloads—that were not included in DOD's report. These categories are summarized in table 1. While recognizing the lack of clarity in the reporting requirements, if included the public sector share of depot maintenance funding would have been \$6.8 billion, or about 56 percent, and the private sector share about \$5.4 billion, or about 44 percent.

Table 1: Our Estimate of Depot Maintenance Funding Not Reported in DOD's Fiscal Year 1997 Workload Distribution Report

Dollars in millions

Category	SOCOM	Navy	Army	Air Force	Total
ICS/CLS	\$85.0	\$40.7	\$97.0	\$622.5	\$845.2
Modification/upgrade			51.7	67.0	118.7
Software support			48.3	48.3	
Nonworking capital fund facilities		84.0 ^a	51.0	2.7	137.7
Classified and intelligence support				358.0	358.0
Ship maintenance		259.8			259.8
Air Guard and Reserve				81.0	81.0
Materials		42.3	2.8		45.1
Total	\$85.0	\$426.8	\$202.5	\$1,179.5	\$1,893.8

Note: SOCOM (Special Operations Command).

^aThe Navy received \$168.1 million for maintenance support at nonworking capital fund activities. Military officials stated that these funds support both depot-level and intermediate-level work; however, funding for the two maintenance levels cannot be separately identified. Our analysis assumes that 50 percent, or about \$84 million, was for depot-level work.

In reviewing a draft of this report, DOD questioned or provided clarifying information about several of the estimates in our draft report. We analyzed the data provided and, in some cases, revised the estimates. DOD's comments and our changes, where appropriate, are presented in the following discussions describing each workload category. In the subsequent report section, we show that these reporting problems occurred primarily because of weaknesses in the DOD criteria for identifying depot-level maintenance workloads and in the military services' data collection procedures.

Funding for ICS and CLS Workloads

As requested by OSD's December 1997 data collection and reporting guidance, the services identified about \$845.2 million for the funding of depot-level maintenance workloads categorized as ICS, CLS, and other similar arrangements such as flexible sustainment. However, DOD chose not to report this amount in the 1997 report because (1) the Air Force developed preliminary data but did not report this information to OSD; (2) DOD officials did not want to report data for the other services without similar information from the Air Force; and (3) in its view, DOD had no statutory obligation to report these funds until fiscal year 1998.

We agree that the statute did not specifically require these workloads to be reported until fiscal year 1998. Nevertheless, we previously reported that DOD did not include ICS and CLS in calculating the percentage of depot maintenance funding allocated to the private sector.⁶ We have also reported that these contract maintenance activities are increasing significantly, particularly for new systems.⁷ Each year since DOD has been developing public-private sector workload distribution data, including fiscal year 1997, OSD has asked the services to identify the amount of workload included in the ICS and CLS categories. Further, in most of the years DOD reported public-private sector mix data to Congress, it provided the ICS and CLS data separately to enable the decisionmakers to assess the overall impact on public and private sector workload distribution.

The Air Force Materiel Command identified \$622.5 million in ICS and CLS funding, but Air Force headquarters staff did not report this information to OSD. The Air Force said it was uncertain of the amount of depot-level maintenance funding in the ICS and CLS categories because of data inconsistencies identified by the Air Force Audit Agency. Subsequent to DOD's congressional report, the Air Force added this information to its internal records identifying public and private sector workload distribution. We did not review in detail the information supporting this data. However, we did note that OSD guidance specifically directed the Air Force to report C-9 maintenance funding it manages for the Defense Health Program. Supplemental reporting instructions from Air Force headquarters specified that funding for the cryptology systems support office was to be included in the workload distribution report. The ICS and CLS funding data includes \$25.2 million for maintenance and repair of C-9 aircraft for the health program and \$60.2 million for depot-level support of cryptology programs. Later in this report we discuss other public and private sector funding provided to nonworking capital funded facilities for cryptology programs.

Funding for Modification and Upgrade Workloads

OSD directed the military departments and defense agencies to report maintenance and repair workloads involving the overhaul, upgrade, or rebuilding of weapon systems, regardless of the source of funds. While OSD's guidance states that depot-level maintenance workloads do not

⁶Defense Depot Maintenance: Information on Public and Private Sector Workload Allocations ([GAO/NSIAD-98-41](#), Jan. 20, 1998); Defense Depot Maintenance: More Comprehensive and Consistent Data Needed for Decisionmakers ([GAO/NSIAD-96-166](#), May 21, 1996); and Depot Maintenance: Issues in Allocating Workloads Between the Public and Private Sectors ([GAO/T-NSIAD-94-161](#), Apr. 12, 1994).

⁷Defense Depot Maintenance: DOD Shifting More Workload for New Weapon Systems to the Private Sector ([GAO/NSIAD-98-8](#), Mar. 31, 1998).

include procurement of modifications or upgrades that are designed to improve performance, or the procurement of parts for safety modifications, OSD directed the services to report funding for installation of all modification and upgrade kits.

Our work did not disclose any incomplete reports of Navy funding for installation of modification and upgrade kits. While the Air Force and the Army data for 1997 included funding provided to public sector facilities for installation of modification and upgrade kits, they did not report about \$118 million in procurement funding provided to private sector contractors for this work. Reporting funding data for one sector but not the other is inconsistent with OSD guidance and provides misleading information about the relative mix of funding.

Navy's Report

The Navy reported \$290.3 million in procurement and operations and maintenance appropriation funding for installing modification kits on naval aircraft and ships; 43 percent was provided to public depot activities and 57 percent to private sector contractors. Navy aviation officials stated that because OSD's guidance specified that all modification installation work should be included, they made no effort to separate funding for installation of modifications designed to improve weapon system performance from installation of modifications designed to correct safety deficiencies. For example, the Navy's report included \$7.6 million for public depot employees to install laser designators to enhance the operational capabilities of F-14 aircraft. In addition, the report includes \$12.8 million for contractor installation of new airframe components and systems to extend the operational service life of P-3 aircraft.

Air Force's Report

The Air Force reported \$119.7 million in procurement appropriation funds paid through the Air Force depot maintenance working capital fund for installation of modification and upgrade kits by public depots and \$1.2 million for installation of modification and upgrade kits by private sector contractors. However, the Air Force did not report at least \$67.0 million in direct appropriation funded payments. Air Force officials were initially concerned about duplicate reporting and errors found by the Air Force Audit Agency in similar types of contractor support and decided not to report this funding to OSD and Congress. After the workload distribution report was sent to Congress, the Air Force internally revised its fiscal year 1997 workload distribution data to include \$47.3 million recorded in a headquarters-managed database for monitoring modification installation contract funding. Further, the Air Force is using this database to support its fiscal years 1998-2003 workload distribution estimates. In

reviewing the database and other supporting documents, we noted that an additional \$19.7 million for contractor installation of modification kits on aircraft for intelligence programs was not recorded in the database and should have been reported under the current guidelines. Air Force Materiel Command workload distribution data for fiscal years 1998 through 2003 indicates that these workloads will be included in future reports. We also noted other possible errors and omissions in the database. For example, the T-1A aircraft and simulator programs are not part of the database, but budget documents and information reported by the Air Force Materiel Command indicate modification installation efforts during fiscal year 1997.

Army's Report

For five major Army weapon systems,⁸ the Army reported operations and maintenance funding totaling \$137.2 million for support of various modification and upgrade projects, of which \$120.2 million was provided to public sector depots. However, we identified at least \$51.7 million in procurement funding for contractor and public depot installation of modification and upgrade kits that were not reported.⁹ An official representing the Assistant Secretary of the Army for Research, Development, and Acquisition stated this funding was not reported because the Army believes 10 U.S.C. 2460 does not require that funding should be reported for major modification and upgrade projects financed through the procurement appropriation. However, this interpretation was not consistent with OSD's December 1997 reporting guidance, which directed the services to report funding for installation of modification and upgrade kits when the installation is considered a depot-level service. Further, subsection (a) of 10 U.S.C. 2460 states that depot-level maintenance is to include all of the specified workload functions "regardless of the source of funds for the maintenance or repair."

Funding for Software Maintenance Workloads

OSD specified that depot-level maintenance included funding for the maintenance and repair of computer software supporting deployable weapon systems and their components, space control systems and their components, and automated test equipment. The Army report included

⁸These weapon systems are the Paladin, Abrams, Bradley, M113 family of vehicles, and Apache. These are the Army's five largest upgrade and modification projects involving depot-level maintenance tasks.

⁹We also identified an additional \$1.1 billion in procurement funding that supported major modification and conversion projects; however, program officials could not separately identify funding for new hardware (kits) and funding for installation services.

\$142 million, the Navy \$168 million, and the Air Force \$443 million.¹⁰ However, the Air Force did not report \$48.3 million in nonworking capital funds provided for depot-level software maintenance accomplished at the Space Systems Software Group at Peterson Air Force Base, Colorado—\$47 million for work performed by private sector employees and \$1.3 million for work performed by federal employees. In commenting on a draft of this report, Air Force officials told us they did not report these funds because, in their view, the Space Systems Support Group generally did not perform depot-level maintenance. In its November 1997 report, the Logistics Management Institute stated that the military departments had not adopted a consistent approach and methodology for identifying and reporting depot-level software maintenance funding.¹¹

We continue to believe the \$48.3 million should have been reported based on the Space Systems Software Group charter and the memorandum of understanding signed by the Air Force Materiel Command and Space Command in 1993. The charter and memorandum make the Materiel Command responsible for lifetime system support, to include level 2 software maintenance on launch vehicles and critical ground systems. Level 2 tasks are defined as designing, coding, modifying, and testing all changes in operational mission and support software and databases, which, according to Air Force officials, are categorized as depot-level maintenance workloads.

In January 1998, we reported¹² that for the previous reporting period, the Air Force did not report software maintenance funding for the Peterson Air Force Base, Colorado, software support activity. In commenting on our 1997 draft report on the public-private mix of depot maintenance workloads, the Air Force acknowledged that funding for the Colorado facility should have been included in the Air Force's depot maintenance data for that year and it is unclear why the Air Force has changed its position on this issue. We continue to believe the work is depot maintenance and should be reported.

¹⁰This amount includes funding of \$17.9 million processed through the working capital fund for depot-level software maintenance by the Space Systems Support Group at Peterson Air Force Base, Colorado.

¹¹Maintenance of Department of Defense Mission Critical and Mission Support Software: A Preliminary Characterization, Logistics Management Institute (LG518TI/Nov. 1997).

¹²Defense Depot Maintenance: Information on Public and Private Sector Workload Allocations (GAO/NSIAD-98-41, Jan. 20, 1998).

Funding for Depot-Level Maintenance Workloads Performed by Nonworking Capital Fund Activities

OSD directed the services to include in their compilations of public and private sector workload distributions the funding for maintenance work done by nonworking capital funded activities. Traditionally, DOD has not recognized these activities as depot maintenance providers.¹³ DOD was not consistent in reporting the amount of funding for depot-level maintenance tasks accomplished by these providers. For example, the active Army did not report about \$51 million for depot-level tasks accomplished at integrated sustainment maintenance and repair sites at various Army field activities. The Army categorizes integrated sustainment maintenance facilities as direct support and general support facilities, which are maintenance support layers below depot level. However, the Army Materiel Command allows integrated sustainment maintenance facilities to accomplish depot-level tasks under special repair authorities. Army officials told us funding for these workloads was not included in the Army's report of depot-level maintenance funding because the integrated sustainment maintenance facilities are not traditionally recognized as depot-level maintenance providers. On the other hand, the Army Reserve and National Guard reported \$17.6 million in operations and maintenance funding for repairing wheeled vehicles at these same type facilities. In commenting on a draft of this report, Army officials stated that depot-level work accomplished at integrated sustainment maintenance facilities under special repair authorities would be included in future reports and that the reporting inconsistencies between the active and reserve components will be addressed in future workload distribution reporting.

Likewise, the Navy did not report any of the \$168.1 million¹⁴ it received for maintenance support at Trident Refit Facilities in Bangor, Washington, and Kings Bay, Georgia. While officially labeled as intermediate-level maintenance and repair facilities, the activities were specifically designed to provide incremental depot overhaul and repair of the Trident submarine fleet and depot-level repair of Trident equipment. OSD and Navy officials agreed that these funds supported some depot-level maintenance tasks. However, the amounts specifically provided for depot-level workloads could not be separately identified. Our analysis of depot-level maintenance funding that was not included in DOD's workload distribution report

¹³In recent years, the distinction between depot-level repair and other levels of repair has become increasingly obscure. DOD's 22 public depots are financed with working capital funds. Customers desiring depot-level services from these facilities reimburse the working capital fund with appropriated monies. Nonworking capital funded maintenance and repair facilities are financed through direct appropriations, and customers are not charged on a per item basis as they are for operations funded through the working capital fund.

¹⁴This amount does not include funds received for military salaries.

assumes that 50 percent of the total funding for these facilities, or \$84 million, supports depot-level maintenance work.

In providing comments on a draft of this report, OSD and Navy officials acknowledged that the Trident Refit Facilities do accomplish some depot-level tasks. However, while they did not agree with our assumption that as much as half of the total funding for the facilities could be attributed to depot-level work, they could not provide an alternative estimate. Officials also stated that funding for the refit facilities should not be reported because the facilities have no refueling capability and are excluded from DOD's list of major depot-level maintenance depot activities. Notwithstanding these comments, we believe the portion of the refit facilities' workload that is depot-level work should be reported as such. Further, the capability to do a refueling is not a requirement for a ship repair facility—either public or private—to be considered as a depot-level maintenance provider. For example, currently only two private shipyards have refueling capability, yet many others are considered by the Navy to be depot-level repair facilities. Finally, the refit facilities are authorized to perform depot-level repairs of numerous repairable components and were specifically designed for the incremental overhaul and repair of the Trident fleet. Therefore, we believe the Navy needs to develop a methodology to analyze and document the amount of depot-level maintenance funding made available to the refit facilities prior to the next public and private sector workload distribution reporting cycle.

The Air Force did not report \$2.7 million for private sector support of depot-level maintenance work at a nonworking capital funded facility supporting cryptology workloads. However, the Air Force reported \$10.5 million in public sector funding for the same facility. As previously discussed, the Air Force also did not fully report nonworking capital funding for installation of modification and upgrade kits and space system software maintenance. Further, former San Antonio engine repair workloads are now being performed by contractors working at Military Airlift Command bases in California and Delaware; however, these nonworking capital funded activities were not included in the Air Force's data call. In commenting on a draft of this report, Air Force officials acknowledged that work on the TF39 engine was previously performed in a public depot and reported as depot-level workload under the two-level maintenance concept. However, they stated that an Air Force policy change transitioned the TF39 engine to a three-level maintenance concept and reclassified the former San Antonio work as an intermediate-level workload. Further, this policy change and workload reclassification from

depot-level to intermediate-level enabled the Air Force to drop this work from its workload distribution report. While we agree that the distinction between depot-level repair and other levels of repair has become increasingly obscure, we continue to believe funding for the repair of TF39 engine workloads should be reported in the public and private sector workload allocations.

Funding for Classified and Intelligence Programs

OSD asked the services to include in their public and private sector workload distribution reports depot-level maintenance funds for classified programs (special access required) and military systems and equipment required for foreign intelligence support whenever the military department managed or controlled the source of funds. However, we observed one instance where the Air Force reported \$1.4 million for public sector work in this area, but did not report \$358 million for private sector work. Air Force officials cited several reasons for not reporting this work: (1) concerns raised by the Air Force Audit Agency for similar contractor supported workloads; (2) concerns about releasing sensitive data; and (3) because funding for most of the work was programmed and budgeted by other agencies. The Air Force gave no explanation of why it could report the data for the public sector. We observed that, in previous years, the Air Force has included funding for some classified and intelligence programs in its collection of depot workload allocation data. We also noted that this data was presented in an unclassified summary form.

Funding for Ship Maintenance

The Navy reported \$1.5 billion in operations and maintenance funding for the overhaul and repair of naval ships. The public shipyards received \$786 million, or 51 percent, and the private sector \$741 million, or about 49 percent. We found that the Navy did not report about \$259.8 million in miscellaneous support funding. According to Navy officials, they did not have enough time to do the data collection and analysis required to allocate this amount between the public and private sectors.

Funding for Air National Guard and Air Force Reserve

Our work shows that the Air Force understated by about \$81.3 million, the amount of funding managed by one of its air logistics centers for depot-level support of Air National Guard and Air Force Reserve aircraft and related components. An initial draft of this report estimated this amount at \$198 million. In commenting on a draft of this report, Air Force officials acknowledged confusion over responsibilities for reporting and documenting audit trails for this workload. Air Force officials claimed that

funding for this workload was included in the compilation of public and private sector workload distribution report provided to Congress. However, our follow-on review and analysis indicates that the center included \$117 million of the \$198 million in its compilation of public and private sector workload distribution data that was submitted to Congress in February 1998. Subsequently, after the workload distribution report was sent to Congress, the Air Force determined that the center managed funding totaling \$198 million, or an additional \$81 million over the amount included in the report to Congress. We adjusted the figure contained in our draft report to reflect the understated reporting of \$81 million, rather than the \$198 million reflected in our earlier draft.

During the data collection process, the Air Force collected several sets of data from its logistics centers and changed data collection methodologies. For example, the data developed by the center for the report that was sent to Congress was based on the agent perspective (funding for work accomplished at the center). The later update was developed on the principal perspective (total funding managed by the reporting entity without regard to the location where the work is performed). It is possible that some of this funding could have been reflected in the amounts reported for the other air logistics centers. Nonetheless, variations in reported funding were shown in several successive data submissions where funding estimates changed substantially in total for each center and by percents of public and private sector distribution.

The Air Force's inability to crosswalk from one data set to another raises questions about the accuracy and completeness of reported depot-level funding data. Further, these uncertainties and inconsistencies illustrate why we believe the services need to establish and implement detailed procedures and systems to consistently identify and report funds made available for depot-level maintenance workloads.

**Funding for
Government-furnished
Material**

OSD required that the public and private sector workload funding distribution data collection include all factors of production. Thus, public sector workload data should include purchases of government-furnished material used in the production of repair and maintenance services conducted by public depots and private sector workload data should include the value of parts provided by the contractor as well as government-furnished materials provided by DOD in the production of repair and maintenance workloads assigned to the contractors. In two instances, we found that the services did not report the value of

government-furnished materials provided to private sector contractors. The Navy did not report \$42.3 million for purchases of parts and materials provided to the private sector ship maintenance contractors. Likewise, the Army did not report material costs for reparable items furnished to contractors for use in contract repair. For example, the Army did not report \$2.8 million for parts financed with procurement appropriation funding that were furnished to the contractor for repair of the Apache Longbow aircraft.

Funding Provided to Nonfederal Workers Classified as Public Sector Workload

Our work shows that the Army reported funding provided to nonfederal workers as public sector workloads. For example:

- The Army National Guard reported as a public sector workload about \$7 million in operations and maintenance funding provided to nonfederal employees in several states for depot-level repair of night vision devices and tactical wheeled vehicles. National Guard officials stated that they reported it this way because they considered the employees as federal workers, even though they were not. Our discussions with officials from the Oregon National Guard indicate that depot-level repair of night vision devices is performed by 16 state employees who were hired to accomplish this workload. Once the work is completed, they will be terminated. In commenting on a draft of this report, Army officials stated that this reporting discrepancy will be corrected prior to the next public and private sector workload distribution reporting cycle.
- The active Army inadvertently classified \$1.1 million in funding for contractor-employed field teams as public sector workload.

Data Collection Procedures Are Better but More Needs to Be Done

The reporting problems identified in the preceding section are largely attributable to weaknesses in the DOD criteria for identifying depot-level maintenance workloads and the military departments' data collection and reporting procedures for compiling and summarizing the percentage of public and private sector workload distribution. Although Congress has required reports on public and private sector workload distribution data in all but one year since 1991, the data has been collected each year on an ad hoc basis. In December 1997, shortly after Congress established the current data collection and reporting process in the 1998 Defense Authorization Act, OSD issued more thorough data collection requirements to the military departments. However, as in the past, the services used ad hoc procedures to collect the requested information. As a consequence, the services' responsiveness to the request varied and each service

experienced varying degrees of difficulty developing the data. Because they did not have adequate internal data collection procedures and systems to facilitate timely, complete, and accurate workload distribution reports, the Air Force and the Army asked their audit agencies to review and comment on the data collection and reporting process. Without accurate and consistent reporting between the public and private sectors, the data reported to Congress provides only a broad indication of the relative mix of work assigned to the two sectors. Until reporting problems are corrected, future reports of public and private sector workload distribution will continue to be inaccurate.

OSD Substantially Improved Its Guidance

Overall, OSD's new data collection guidance to the military departments is more comprehensive than earlier guidance it issued for prior reporting periods. However, we found that the guidance could have been more specific for reporting (1) modifications and upgrade work and (2) funds for work performed by one military department but budgeted and received by another service or defense agency.

On December 5, 1997, about 2 weeks after Congress established the current workload reporting process, the Deputy Under Secretary of Defense (Logistics) issued detailed guidance to establish a standardized methodology for collecting and reporting depot-level maintenance funds provided to the public and private sectors. In line with the fiscal year 1998 Defense Authorization Act, this guidance summarized depot maintenance workload definitions specified by 10 U.S.C. 2460 and included various supplemental workload definitions and reporting instructions.

Also, OSD held meetings with key personnel from each military department and defense agency to discuss and clarify data requirements. OSD's guidance specifically required them to report funding for (1) depot-level maintenance performed by DOD employees; (2) depot-level maintenance work contracted for performance by nonfederal employees; (3) depot-level maintenance work obtained from interim contractor support, contractor logistics support, and other similar contractual arrangements; (4) depot-level software maintenance performed by DOD employees; (5) depot-level software maintenance contracted for performance by nonfederal employees; and (6) depot-level maintenance work done by nonfederal employees working at government-owned and operated facilities.

Based on our review, this guidance, though improved from prior years, contained several ambiguities that contributed to inconsistent and incomplete reporting. For example:

- The guidance required the services to report all funding for installation of modification and upgrade kits when the installations were considered depot-level services. The guidance also stated that procurement of modifications and upgrades were to be excluded from reporting when the modifications were designed to improve program performance. As stated previously, Navy aviation officials interpreted the guidance to require reporting of all modification work, but the Army interpreted the guidance to exclude funding for modification and upgrade installation work financed through the procurement appropriation.
- The guidance specifies that the principal military department or agency responsible for programming and budgeting should report funding made available for depot maintenance workloads. The military department or defense agency performing the work on behalf of another would be considered an agent and, therefore, would not be required to report. However, the guidance specifically required the Air Force to report funding for maintenance programs it managed in support of Defense Medical Program funded aircraft. Similar questions have not been resolved with regard to reporting responsibilities for other workload categories, including intelligence programs, foreign military sales, interservice workloads, and items having dual sources of repair.

OSD officials stated that guidance for these situations will be updated for the next reporting cycle.

Military Services Still Lack Comprehensive Procedures and Systems to Facilitate Timely and Accurate Workload Distribution Reports

The military services do not have the procedures and support systems to provide consistent, accurate, and timely reporting of public and private sector depot maintenance workload distribution data. Further complicating the 1997 report, the military departments solicited information from hundreds of different commands, organizations, and program management offices, some of which had not been involved in identifying and reporting depot maintenance workload distribution data in the past.

OSD directed the services and defense agencies to provide information on fiscal year 1997 depot-level maintenance funding no later than January 5, 1998, and to submit a second report of planned depot-level maintenance funding for fiscal years 1998 through 2003 by February 17, 1998. However,

these time frames were not met. The Navy submitted its information for fiscal year 1997 funding on January 6, the Army on January 16, and the Air Force on February 2, 1998. The Navy submitted its report on future year funding on March 17 and the Army on April 1, 1998. As of June 1998, the Air Force headquarters staff said they had not yet completed their analysis of future year workload information. However, the Air Force Materiel Command developed preliminary data that was submitted to Air Force Headquarters for further analysis.

Services Seek Assistance From Audit Agencies

The Air Force and the Army recognized the potential for incomplete and inconsistent reporting of public and private workload distribution reports. Accordingly, each asked its audit service to review its data collection process and recommend procedural changes.

Air Force auditors identified numerous errors and inconsistencies in workload distribution data compiled by the Air Force Materiel Command, including duplicate reporting, overstated reporting of funding provided to contractors, and use of budget projections rather than actual obligations. As a result of the Air Force Audit Agency's findings, the Command required a second data call of its field activities to improve the consistency and quality of the data. However, this updated information was not provided to Congress. Air Force officials stated that the updated information was not provided to Congress, because the revised numbers would not impact compliance with 60/40 thresholds.

Army auditors identified funding for depot-level maintenance services that the Army did not include in its workload distribution reports, including (1) private sector support obtained through manufacturer warranties, (2) funding for depot-level maintenance workloads at nonworking capital funded repair activities, (3) software maintenance workloads funded by program executive offices, and (4) funding for contract administration. OSD officials plan to issue clarifying guidance for these and other workload categories prior to the next reporting cycle.

Implications of Changes Being Considered for Future Reporting

Based on preliminary data developed by the military departments and defense agencies, total DOD-wide depot-level maintenance funding will increase from \$13.4 billion in fiscal year 1998 to \$15.4 billion in fiscal year 2003. While not yet resolved, the Air Force and the Army are considering changes in future reporting criteria for several workload

categories that could reduce the amount of reported depot-level funding in future years.

Even though the military departments and defense agencies are not required by statute to provide estimates of future public and private sector workload allocations, OSD requested the information as part of its oversight responsibility to monitor compliance with 10 U.S.C. 2466. In prior years, DOD has furnished this information to Congress in its report on the allocation of depot maintenance workload between the public and private sectors. While we obtained the outyear information, DOD did not provide it to Congress as a part of its annual report on the public private mix. Table 2 shows the workload forecasts reported to OSD by the defense agencies and the Army and the Navy for fiscal years 1998 through 2003. The table also includes preliminary estimates of future data developed by the Air Force Materiel Command.

Table 2: DOD's Estimate of Public and Private Depot Maintenance Workload Distribution for Fiscal Years 1998 Through 2003

Dollars in millions

Agency/ service	Workload distribution	1998	1999	2000	2001	2002	2003
DIA	Public work	0.1	0.1	0.1	0.1	0.1	0.1
	Private work	0	0	0	0	0	0
	Public/private split	100/0	100/0	100/0	100/0	100/0	100/0
SOCOM	Public work	22.6	29.2	30.8	31.6	38.7	39.6
	Private work	112.2	129.0	125.4	114.8	99.6	101.3
	Public/private split	17/83	18/82	20/80	21/79	28/72	28/72
Navy	Public work	4,074.2	3,987.9	4,223.3	4,104.1	4,234.9	4,659.9
	Private work	2,097.4	2,401.7	2,319.7	2,377.5	2,245.0	2,337.5
	Public/private split	66/34	62/38	64/36	63/37	65/35	67/33
Army	Public work	914.1	940.3	941.5	927.6	1,052.9	1,111.5
	Private work	611.3	606.2	639.2	643.0	654.1	622.6
	Public/private split	60/40	61/39	60/40	59/41	62/38	64/36
Air Force	Public work	3,112.3	3,259.7	3,379.2	3,447.6	3,482.6	3,600.7
	Private work	2,503.8	2,675.2	2,752.5	2,737.8	2,840.7	2,947.5
	Public/private split	55/45	55/45	55/45	55/45	55/45	55/45

Note: DIA (Defense Intelligence Agency); SOCOM (Special Operations Command).

Source: DOD and military departments

Changes in Reporting Criteria Proposed by the Air Force

The Air Force has not yet finalized its report to OSD of planned public and private sector depot maintenance funding for fiscal years 1998 through 2003. Tentative numbers, as shown above, include estimates of future year

funding for several workload categories for which the Air Force has proposed changes in reporting criteria. Included are proposals to eliminate funds provided for depot-level maintenance workloads involving (1) classified and intelligence programs and (2) medical support aircraft, that the Air Force manages for other agencies. If adopted, these changes would reduce the amount of contract maintenance reported in future years.

The Air Force's preliminary estimates of future year depot-level maintenance funding reflects other decisions that decrease the amount of reported private sector depot-level maintenance funding. For example, the Air Force estimate of future funding (1) includes a 1.5-percent reduction in the amount of contracted depot-level maintenance funding to provide for the government's contract administration costs, (2) reports as public sector workload funding for material and overhead expenses incurred by contractor personnel working at government-owned and -operated depots, and (3) excludes funding for space systems software support as previously discussed.

Changes in Reporting Criteria Proposed by the Army

The Army's report of planned future year public sector depot-level maintenance workload includes funding for work to be conducted in public depots in support of various modification and upgrade projects.¹⁵ As directed by an OSD program budget decision, funding for this work will be transferred from the operations and maintenance appropriation to the procurement appropriation. Although depot-level maintenance tasks will continue to be conducted in support of the major upgrade programs, the Army will classify funding for such purposes as acquisition expenses, not depot maintenance. Consequently, Army acquisition officials plan to delete these type funds from future public-private sector workload distribution reports based on their interpretation of 10 U.S.C. 2460, which excludes funding for procurement of major modifications of weapon systems that are designed to improve program performance. If implemented, this change will reduce the amount of public sector depot maintenance reported in future years.

Conclusions

In February 1998, DOD reported that the military departments and defense agencies allocated a total of \$10.3 billion in depot maintenance funds for fiscal year 1997—\$6.5 billion, or 63 percent, to public sector facilities and

¹⁵These annual amounts range between \$156 million in fiscal year 1999 and \$187 million in fiscal year 2003.

\$3.8 billion, or 37 percent, to private sector contractors. Our work shows that the military departments did not develop complete and consistent workload distribution information. For example, for fiscal year 1997, we identified depot-level maintenance workloads valued at about \$1.9 billion—about \$300 million for public sector workloads and \$1.6 billion for private sector workloads—that were not included in DOD's report. While recognizing the lack of clarity in the reporting requirements, if included, the public sector share of depot maintenance funding would have been \$6.8 billion, or about 56 percent, and the private sector share about \$5.4 billion, or about 44 percent.

This condition exists for three reasons. First, OSD guidance—while substantially improved over prior years—leaves room for varying interpretations of reporting requirements for several workload categories. Second, the military departments and defense agencies have not developed internal procedures and systems to facilitate timely and accurate reporting. Third, the military departments, defense agencies, and OSD have not resolved questions concerning whether or not funding for some depot-level workloads should be included in computing the public-private mix as required by 10 U.S.C. 2466. Without accurate data and consistent reporting between the two sectors, the data provides only a broad indication of the relative mix of funding provided to the public and private sectors. Thus, until the problems are corrected, future reports of public and private sector workload distribution will continue to be inaccurate.

Although DOD is not required by statute to report estimates of future workload mix, it is essential that DOD maintain this data to support the overall management of depot maintenance activities and to monitor compliance with 10 U.S.C. 2466. Based on preliminary data developed by the military departments and defense agencies, total DOD-wide depot-level maintenance funding will increase from \$13.4 billion in fiscal year 1998 to \$15.4 billion in fiscal year 2003. While not yet resolved, the Air Force and the Army are considering changes in future reporting criteria for several workload categories that could reduce the amount of reported depot-level funding in future years.

Recommendations

To improve the accuracy of future mandated public and private sector workload distribution reports, we recommend that the Secretary of Defense

- direct that the Secretaries of the military departments and commanders of the defense agencies establish and document internal operating procedures for collecting data and reporting public and private sector depot-level workload distribution. The procedures should clearly identify the specific commands and activities responsible for submitting data and describe the records and systems from which documentation will be pulled and the minimum documentation to be retained for follow-up. Procedures should also require monitoring of the implementation, to assure consistency of reporting between the services, and facilitate timely and accurate collection of data for the next annual report.
- establish milestones for issuing clarifying instructions stating whether or not installation of modification and upgrade hardware financed with procurement appropriation funding should be included in future public and private workload distribution reports and assure consistency in reporting among the public and private sectors. The milestones should be established to allow for timely collection and reporting of data for the next congressional reporting cycle.
- establish milestones and issue guidance to resolve questions concerning responsibilities for reporting depot-level maintenance funding for (1) classified and intelligence programs, (2) medical support equipment, (3) space systems software, and (4) contract administration. The milestones should be established to allow for timely collection and reporting of data for the next congressional reporting cycle.
- direct the Secretaries of the military departments to develop methodologies for aggregating and reporting the amount of funding—regardless of the source of funding—for depot-level work accomplished at non-working capital funded repair sites, including Navy Trident Refit Facilities, Army Integrated Sustainment Maintenance Activities, and other similar repair sites prior to the next congressional reporting period.

Agency Comments

We requested comments on a draft of this report from the Secretary of Defense. On May 20, 1998, the Acting Principal Assistant Deputy Under Secretary of Defense (Logistics) and representatives from the military departments provided the following comments on the draft report. DOD generally concurred with the intent of our recommendations and stated that appropriate actions will be taken to (1) establish and document data collection systems and procedures for each military department and defense agency and (2) further clarify reporting guidance. If effective implementation plans and milestones are adopted along the lines we recommended, DOD's planned actions should improve the accuracy,

consistency, and completeness of future public and private sector workload distribution reports. DOD officials also commented that extending the congressionally imposed reporting date from February 1 to March 1 would increase the completeness and accuracy of future workload distribution reporting.

DOD did not agree that its report to Congress on fiscal year 1997 workload allocations understated the amount of depot-level funding made available to the military departments and defense agencies for certain workload categories. As discussed below, we continue to believe that various workload categories were not reported.

- Most of DOD's concerns related to whether \$1.3 billion in funding for ICS, CLS and similar contracted workloads was to be reported. DOD stated that the statute did not specifically require it to report these workloads until fiscal year 1998. However, in most of its previous reports of public and private sector workload mix, DOD provided ICS and CLS data to Congress separately, to enable the decisionmakers to assess the overall impact on public and private sector workload distribution. We have supported the inclusion of ICS and CLS funding in the assessment of public and private sector workload distribution to the extent it represents depot-level maintenance workload. Further, the fiscal year 1998 Defense Authorization Act requires that the next annual report include these workload categories.
- DOD acknowledged that Trident Refit Facilities accomplish limited depot-level maintenance tasks. However, it stated that actual depot-level work accomplished at these facilities was less than the 50 percent on which our estimate is based, but could not provide an alternative estimate. Lacking additional information, we did not change our estimate of funding for this workload category that was not reported. Based on DOD's comments, we added a recommendation concerning the future reporting of funding for this workload category.
- DOD stated that \$198 million in funding provided for support of Air National Guard and Air Force Reserve aircraft was included in DOD's congressional report of public and private sector workload distribution. However, Air Force officials acknowledged weaknesses in the Air Force procedures for adequately documenting its quantification and reporting of this information. Our follow-on review and analysis indicates that \$117 million of the \$198 million was included in the workload distribution report that was sent to Congress in February 1998. However, an additional \$81 million in funding was not reported. Therefore, we lowered our estimate of depot-level funding that was not reported to reflect \$81 million

for Air National Guard and Air Force Reserve aircraft, rather than the \$198 million reflected in our earlier draft report.

Scope and Methodology

We reviewed DOD's process for collecting and analyzing depot-level maintenance funding information. We discussed and analyzed detailed reporting instructions issued by OSD, and supplemental guidance issued by the military departments. To evaluate the accuracy and consistency of reported depot-level maintenance funding, we judgmentally selected, reviewed, and analyzed back-up materials developed by the Army, Navy, Marine Corps, Air Force, and related defense agencies. Back-up documentation included budget exhibits, computerized worksheets, electronic mail messages and summary reports. We did not independently assess the accuracy of the data contained in the back-up documentation. We drew extensively from our prior work concerning the public and private sector depot workload mix and reviewed the results of ongoing audit work being conducted by the Air Force and the Army Audit Agencies. Because DOD did not have procedures in place to identify and collect information on the full range of potential depot-level maintenance funding made available to the military departments and defense agencies, our estimate of funds not reported addresses only the areas identified during our work. Once better procedures are in place, other areas may be identified.

We interviewed officials and examined documents at OSD and Army, Navy, Air Force, and Marine Corps headquarters, Washington, D.C.; Army Materiel Command, Alexandria, Virginia; Air Force Materiel Command, Dayton, Ohio; Naval Sea Systems Command, Arlington, Virginia; Naval Air Systems Command, Patuxent River, Maryland; Space and Naval Warfare Systems Command, San Diego, California; Space Systems Support Group, Peterson Air Force Base, Colorado; Air Force Audit Agency, Dayton, Ohio; Army Audit Agency, Alexandria, Virginia; Army Tank Automotive Command and the Program Executive Office for Ground Combat and Support Systems, Warren, Michigan; and the Army Aviation Missile Command and the Program Executive Office for Aviation, Huntsville, Alabama. For fiscal years 1998 through 2003, we obtained and reviewed preliminary reports of public and private sector workload distributions from Navy and Army headquarters, Washington, D.C.; Air Force Materiel Command, Dayton, Ohio; and pertinent defense agencies.

We conducted our review from February to May 1998, and, except where noted, in accordance with generally accepted government audit standards.

We are sending copies of this report to the Secretaries of Defense, the Army, the Navy, and the Air Force; and to the Directors of the Defense Intelligence Agency and the Special Operations Command. Copies will be made available to others on request.

Please contact me at (202) 512-8412 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix I.

A handwritten signature in black ink that reads "David R. Warren". The signature is written in a cursive style with a long horizontal line extending from the end of the name.

David R. Warren, Director
Defense Management Issues

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Abbreviations

CLS	Contractor Logistics Support
DOD	Department of Defense
ICS	Interim Contractor Support
OSD	Office of the Secretary of Defense

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Related GAO Products

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