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Report to Agency Officials

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FINANCIAL MANAGEMENT

Issues to Be Considered by DOD in Developing Guidance for Disclosing Deferred Maintenance on Ships

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Accounting and Information
Management Division

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The Honorable William J. Lynn III
The Under Secretary of Defense (Comptroller)

The Honorable Deborah P. Christie
The Assistant Secretary of the Navy
(Financial Management and Comptroller)

Recent laws have enhanced the legislative requirements to provide policymakers and agency program managers with more reliable financial information to formulate budgets, manage government programs, and help make difficult policy choices.[1] Recognizing the extent of incomplete and unreliable information on the cost and consequences of government programs and activities, these laws have made implementing new accounting standards and audited federal financial statements a priority. New federal financial accounting standards have been adopted to enhance federal financial statements by requiring that government agencies show the financial results of all their operations and provide relevant information on their financial status.

This report discusses one such requirement for valuable information related to deferred maintenance on mission assets.[2] The third in a series of reports[3] on the Department of Defense's (DOD) implementation of this requirement, this letter focuses on Navy ships, including submarines. We are not making recommendations in this report. Rather, we are identifying issues that need to be considered in carrying out the basic recommendation in our September 30, 1997, letter to expedite plans to implement the deferred maintenance standard. We continue to be concerned that while DOD agreed that such action was necessary, it has not established milestones for key tasks, as intended by our recommendation, to ensure that it has time to incorporate into the implementing policy the

[1]The Chief Financial Officers Act (CFO) of 1990, the Government Performance and Results Act (GPRA) of 1993, the Government Management Reform Act (GMRA) of 1994, and the Federal Financial Management Improvement Act of 1996.

[2]Statement of Federal Financial Accounting Standard (SFFAS) No. 6, Accounting for Property, Plant, and Equipment, dated November 30, 1995, defines federal mission property, plant, and equipment as possessing certain characteristics related to (1) their use, such as having no expected nongovernmental uses, and (2) their useful lives, such as a very high risk of being destroyed in use or premature obsolescence.

[3]See our previous reports, Financial Management: DOD Needs to Expedite Plans to Implement Deferred Maintenance Accounting Standard (GAO/AIMD-97-159R, September 30, 1997) and Financial Management: Issues To Be Considered by DOD in Developing Guidance for Disclosing Deferred Maintenance on Aircraft (GAO/AIMD-98-25, December 30, 1997).

results of a study being conducted,[4] and to publish that policy no later than March 1998.

Accurate reporting of deferred maintenance is important for key decisionmakers such as the Congress, DOD, and Navy managers. Further, deferred maintenance applicable to mission assets, if reliably quantified and reported, can be an important performance indicator of mission asset condition which is a key readiness factor. While the existence of deferred maintenance may indicate a need for additional resources for maintenance, such resources may already be available within the current funding of the military services.

Background

In October 1990, the Federal Accounting Standards Advisory Board (FASAB) was established by the Secretary of the Treasury, the Director of the Office of Management and Budget (OMB), and the Comptroller General of the United States to consider and recommend accounting standards to address the financial and budgetary information needs of the Congress, executive agencies, and other users of federal financial information. Using a due process and consensus building approach, the nine-member Board, which has since its formation included a member of DOD, recommends accounting standards for the federal government. Once FASAB recommends accounting standards, the Secretary of the Treasury, the Director of OMB, and the Comptroller General decide whether to adopt the recommended standards. If they are adopted, the standards are published as Statements of Federal Financial Accounting Standards (SFFAS) by OMB and GAO. In addition, the Federal Financial Management Improvement Act of 1996 requires federal agencies to implement and maintain financial management systems that will permit the preparation of financial statements that substantially comply with applicable federal accounting standards. Also, the Federal Managers' Financial Integrity Act of 1982 requires agency heads to evaluate and report annually whether their financial management systems conform to federal accounting standards.

Issued on November 30, 1995, and effective for the fiscal years beginning after September 30, 1997, SFFAS No. 6, Accounting for Property, Plant, and Equipment, requires the disclosure of deferred maintenance in agencies' financial statements. SFFAS No. 6 defines deferred maintenance as

[4]In October 1997, Office of the Under Secretary of Defense (Acquisition and Technology) maintenance policy officials engaged a nonprofit organization, the Logistics Management Institute (LMI), to identify and evaluate alternative reporting approaches for deferred maintenance, recommend the best solution from the Chief Financial Officer (CFO) and maintenance community perspective, and recommend the necessary policy and reporting protocols.

"maintenance that was not performed when it should have been or was scheduled to be and which, therefore, is put off or delayed for a future period." It includes preventive maintenance and normal repairs, but excludes modifications or upgrades that are intended to expand the capacity of an asset. The deferred maintenance standard applies to all property, plant, and equipment, including mission assets—which will be disclosed on the supplementary stewardship report.[5] For the Department of Defense (DOD), mission assets, such as submarines, ships, aircraft, and combat vehicles, is a major category of property, plant, and equipment. In fiscal year 1996, DOD reported over $590 billion in this asset category, of which over $297 billion belonged to the Navy, including 338 active battle force ships such as aircraft carriers, submarines, surface combatants, amphibious ships, combat logistics ships, and support/mine warfare ships. The Navy spent a little over $2 billion on ship depot maintenance for its active fleet in fiscal year 1996.

SFFAS No. 6 recognizes that there are many variables in estimating deferred maintenance amounts. For example, the standard acknowledges that determining the condition of the asset is a management function because different conditions might be considered acceptable by different entities or for different items of property, plant, and equipment held by the same entity. Amounts disclosed for deferred maintenance may be measured using condition assessment surveys[6] or life-cycle cost forecasts.[7] Therefore, SFFAS No. 6 provides flexibility for agencies' management to (1) determine the level of service and condition of the asset that are acceptable, (2) disclose deferred maintenance by major classes of assets, and (3) establish methods to estimate and disclose any material amounts of deferred maintenance.

SFFAS No. 6 also has an optional disclosure for distinguishing between critical and noncritical amounts of maintenance needed to return each major class of asset to its acceptable operating condition. If management elects to disclose critical and noncritical amounts, the disclosure must include management's definition of these categories.

[5]Statement of Federal Financial Accounting Standards No. 8, Supplementary Stewardship Reporting, requires the reporting of federal mission property, plant, and equipment on the supplementary stewardship report for fiscal years beginning after September 30, 1997. Prior to this standard, these assets were reported on the statement of financial position.

[6]Condition assessment surveys are periodic inspections of property, plant, and equipment to determine their current condition and estimated cost to correct any deficiencies.

[7]Life-cycle costing is an acquisition or procurement technique that considers operating, maintenance, and other costs in addition to the acquisition cost of assets. Since it results in a forecast of maintenance expense, these forecasts may serve as a basis against which to compare actual maintenance expense and estimate deferred maintenance.

Results in Brief

The development of DOD and Navy policy and implementing guidance for deferred maintenance is essential to ensure consistent reporting among the military services and to facilitate the preparation of accurate DOD-wide financial statements, particularly since the new accounting standard provides extensive management flexibility in implementing the disclosure requirement. Navy officials stated that they were reluctant to develop procedures to implement the required accounting standard until DOD issues overall policy guidance. Our September 30, 1997, letter points out the need for DOD to issue this overall guidance to the military services by March 1998.

DOD and Navy officials have expressed numerous views as to how to apply the deferred maintenance standard to ships. We believe this makes it even more important for clear guidance to be developed. The opinions ranged from including only unfunded ship overhauls to including cost estimates of repairing all problems identified in each ship's maintenance log. In formulating the DOD and Navy guidance, we believe key issues need to be resolved to allow for meaningful and consistent reporting within the Navy and from year to year including (1) what maintenance is required to keep the ships in an acceptable operating condition and (2) when to recognize as deferred needed maintenance which has not been done on a ship. In addition, DOD needs to address in its implementing guidance (1) whether the deferred maintenance standard should be applied to all or only certain groups of assets, such as ships being deactivated in the near future and (2) whether the reported deferred maintenance should differentiate between critical and noncritical and, if so, what constitutes critical.

Objective, Scope, and Methodology

The objective of our work was to identify information on specific issues to be considered in developing implementing guidance for disclosing deferred maintenance on ships. We reviewed financial and operational regulations and documentation related to managing and reporting on the ship maintenance process. The documentation we reviewed included fleet spreadsheets used to track depot-level maintenance requirements and execution by specific ship. We also reviewed Navy Comptroller budget documents. We discussed this information with officials at DOD and Navy headquarters and at various organizational levels within the Department of the Navy. While the deferred maintenance standard applies to all levels of maintenance, this report addresses ship depot-level maintenance because it is the most complicated and expensive. (See the following section for a discussion of the Navy ship maintenance process, including the levels of maintenance.) The amounts for deferred depot level maintenance

presented in this report were developed using information provided by Navy managers. We did not independently verify the accuracy and completeness of the data.

We conducted our review from July 1996 through November 1997 in accordance with generally accepted government auditing standards. We requested written comments on a draft of this report from the Secretary of Defense or his designee. The Under Secretary of Defense (Comptroller) provided us with written comments, which are discussed in the "Agency Comments" section and are reprinted in appendix I.

Navy Ship Maintenance Process

The Navy accomplishes maintenance on its ships (including submarines) at three levels: organizational, intermediate, and depot. Organizational-level maintenance includes all maintenance actions which can be accomplished by a ship's crew. For example, the ship's crew may replace or fix a cracked gasket or leaks around a hatch or doorway aboard ship. Intermediate-level maintenance is accomplished by Navy Intermediate Maintenance Activities (IMAs) for work that is beyond the capability or capacity of a ship's crew. For example, an IMA performs calibration or testing of selected ship systems for which the ship's crew may not have the equipment or capability to perform. Depot-level maintenance includes all maintenance actions that require skills or facilities beyond those of the organizational and intermediate levels. As such, depot-level maintenance is performed by shipyards with extensive shop facilities, specialized equipment, and highly skilled personnel to accomplish major repairs, overhauls, and modifications.

The Navy determines what depot-level maintenance is needed for its ships through a requirements process that builds from broad maintenance concepts outlined in Navy policy and culminates with the execution of an approved schedule. There are three types of maintenance requirements that are executed: (1) time-directed requirements, (2) condition-based requirements, or (3) modernization requirements. Time-directed requirements are derived from technical directives and include those that are periodic in nature and are based on elapsed time or recurrent operations. Condition-based requirements are based on the documented physical condition of the ship as found by the ship's crew or an independent inspection team. Lastly, modernization requirements include ship alterations, field changes, and service changes that either add new capability or improve reliability and maintainability of existing systems through design improvements or replacements.

Initial depot-level maintenance requirements are determined and a proposed maintenance schedule is developed and approved based on overall ship maintenance policy, specific maintenance tasks, operational requirements, force structure needs, and fielding schedules. These approved maintenance schedules undergo numerous changes as new requirements are identified, others are completed or canceled, operational priorities change, and budgets fluctuate. Thus, these factors result in many deviations from the plan once actual maintenance is executed and complicate the measurement of exactly what maintenance should be considered deferred. Less flexibility in scheduling is permissible with submarines than surface ships because prescribed maintenance must be done on submarines periodically for them to be certified to dive. If the specified maintenance is not done by the time required, the submarine is not to be operated until the maintenance is accomplished.

Implementing Guidance Needed to Ensure Consistent and Timely Reporting of Deferred Maintenance

Neither DOD nor the Navy has developed implementing guidance for determining and disclosing deferred maintenance on financial statements. Navy officials said that they are reluctant to develop their procedures until DOD issues its guidance. As we reported to DOD in our September 30, 1997, letter, DOD guidance is important to ensure consistency among the military services and to facilitate the preparation of DOD-wide financial statements. We also stated that the guidance needs to be available as close to the beginning of fiscal year 1998 as possible so that the military services have time to develop implementing procedures and accumulate the necessary data to ensure consistent DOD-wide implementation for fiscal year 1998.

We found that operations and comptroller officials from both DOD and the Navy have varying opinions concerning the nature of unperformed maintenance that should be reported as "deferred." The differences in opinions arise from various interpretations of how to apply the standard to the maintenance process. The views on how to apply the deferred maintenance standard to the ship maintenance process ranged from including only unfunded ship overhauls to estimating the cost of repairing all problems identified in each ship's maintenance log. Brief descriptions of various views of how SFFAS No. 6 could be applied to disclosing deferred depot-level maintenance for ships follow. The descriptions explain what would be considered deferred maintenance for ships and the rationale for each option.

Disclosing Only Unfunded Ship Overhauls

In its budget justification documents, the Navy reports deferred depot-level maintenance for unfunded ship overhauls. The Navy

Comptroller officials' rationale for excluding other types of depot-level maintenance not done is that overhauls represent the Navy's top priority for accomplishing ship depot-level maintenance and, therefore, should be highlighted for the Congress when a lack of funds prevents them from occurring when needed. While overhauls consumed most of the depot-level maintenance funding in past years, the Navy is performing fewer overhauls as it moves toward a more incremental approach of doing smaller amounts of depot-level work more frequently. Consequently, overhauls now represent a relatively small part of the Navy's ship depot-level maintenance budget. In fiscal year 1996, over 80 percent of the Navy's ship depot-level maintenance budget was spent on work other than ship overhauls. Specifically, the Navy reported spending almost $1.7 billion for other ship depot-level maintenance and $367.8 million for ship overhauls.

The Navy officials' rationale for disclosing only unfunded overhauls as deferred depot-level maintenance in financial statements is that the data are readily available and are consistent with what is being reported in budget justification documents. However, this view omits all other types of scheduled depot-level maintenance not done and clearly does not meet the intent of SFFAS No. 6. FASAB addressed the deferred maintenance issue because of widespread concern over the deteriorating condition of government-owned equipment. FASAB reported that the consequences of underfunding maintenance (increased safety hazards, poor service to the public, higher costs in the future, and inefficient operations) are often not immediately reported and that the cost of the deferred maintenance is important to users of financial statements and key decisionmakers. Using this option, the amount disclosed for fiscal year 1996 (the most recent fiscal year data available) would have been $0.

Disclosing Amounts in Fleet Backlog Reports

Both Atlantic and Pacific fleet officials monitor deferred ship depot-level maintenance and report these backlog amounts to the Navy Comptroller although these amounts are not reported in the Navy's budget justification documents. These fleet backlog reports quantify the ship depot-level maintenance work that should have been performed by the end of the fiscal year according to the Chief of Naval Operations (CNO)[8] but was not done and was not rescheduled. The rationale for using the amounts on the fleet backlog reports for financial statement reporting is that the data are

[8]The Chief of Naval Operations (CNO) Notice (OPNAVNOTE 4700) establishes the Navy's planned maintenance cycles for depot-level maintenance for all Navy ships, except those assigned to the Military Sealift Command. Each maintenance cycle consists of a standard operating interval with an allowable deviation and a standard duration for accomplishing the scheduled depot maintenance.

readily available, and it is a more realistic representation of deferred maintenance than just the unfunded ship overhauls. Using this option, the amount disclosed in the Navy's financial statements for fiscal year 1996 would have been about $117.5 million.

However, the fleet backlog reports do not include any depot-level work rescheduled to future years. Under one approach, the estimated value of work rescheduled beyond the ship's approved maintenance schedule time frames, as established by the CNO, would also be disclosed. The rationale for adding the estimated value of work rescheduled beyond these time frames is that the CNO Notice provides the Navy's established requirements for accomplishing ship depot-level maintenance; therefore, any work rescheduled beyond the specified time frames should be considered deferred. For example, maintenance work on two Pacific Fleet destroyers was rescheduled beyond the CNO-specified time frames of June and July 1996, respectively, to October 1996. On the other hand, maintenance on two Atlantic Fleet submarines was rescheduled from the end of one fiscal year to early the next fiscal year but still within CNO-specified time frames. Under this option, the estimated value of the maintenance work rescheduled to the next fiscal year on the destroyers would be recognized as deferred maintenance at the end of the fiscal year. However, the value of the rescheduled work on the submarines would not be recognized because it was still to be performed within the CNO-specified time frames. Under this option, using Navy data, the amount disclosed for fiscal year 1996 would have been about $15.1 million greater or $132.6 million.

Another option discussed with Navy officials would be to modify the fleet backlog reports to include the estimated value of any scheduled maintenance work not accomplished during the fiscal year, regardless of the CNO-specified time frames. Under this approach, the estimated value of work on the two submarines discussed above would also be recognized as deferred maintenance. The rationale for this option is that any scheduled work moved to the next fiscal year should be disclosed as deferred maintenance at the end of the fiscal year when the scheduled maintenance was to be performed. Under this option, using Navy data, the amount disclosed for fiscal year 1996 would have been about $188.5 million.

Disclosing the Cost of Repairing All Problems Identified in Each Ship's Maintenance Log

Another view discussed with Navy officials for disclosing deferred ship maintenance is to report the costs to perform the needed work on all items listed on each ship's maintenance log at the end of the fiscal year. The rationale for using this source is that the log may more completely capture

all levels of maintenance needed on each ship. Depending on the size and condition of the ship, the maintenance log could contain only a few items or many thousands. However, the Navy does not routinely determine the cost of items that appear on a ship's maintenance log. Further, although these logs are supposed to be up-to-date and routinely checked for accuracy and completeness, Navy fleet officials stated that estimating the cost to repair the items on each ship's log would be very time-consuming and costly because maintenance tasks that are accomplished are not routinely deleted from the log, and the time estimates contained in the logs may be inaccurate. Nevertheless, officials said that using the estimated value of all items listed on each ship's maintenance log would exceed any of the above estimates due to the sheer volume of items included.

Key Issues to Be Resolved

As discussed in our earlier report, implementing guidance is needed so that all military services consistently apply the deferred maintenance standard. As a result of the variations in the way the deferred maintenance standard can be applied to ships (including submarines), DOD and the Navy need to consider a number of issues, including the following.

- Acceptable asset condition - SFFAS No. 6 allows agencies to decide what "acceptable condition" means and what maintenance needs to be done to keep assets in that condition. Determining acceptable operating condition could be in terms of whether (1) the ship can perform all or only part of its mission, (2) the most important components of the ship function as intended, (3) the ship meets specified readiness indicators, or (4) the ship and/or its major components meets some other relevant criteria determined by management. The determination may also be influenced by whether the ship is currently deployed or scheduled to be deployed in the near future.

  An example of the acceptable operating condition issue is as follows. Each ship is composed of many systems, and those systems critical to the ship's ability to meet its operational commitments and achieve high readiness scores (such as the weapons systems) rarely have maintenance deferred. On the other hand, maintenance on the ship's distributive systems (such as the ship's pipes and hulls) are more likely to be deferred since this has little direct impact on the ship's readiness indicators. Therefore, the question is whether needed maintenance not performed on the distributive systems, should be disclosed as deferred maintenance since it has little impact on the ship's readiness scores but could affect the ship's long-term viability.

- Timing of deferred maintenance recognition - Each ship class has standard operating intervals between visits to the depot; however, changes to this plan may take place as the scheduled maintenance approaches (except for certain maintenance requirements for the submarines and aircraft carriers which have mandated maintenance intervals to meet safety requirements) due to operational considerations, funds available, and condition-based inspections. To ensure that meaningful, consistent data are provided, DOD and the military services will need to decide which one of the many possible alternatives will be used to determine when maintenance needed but not performed is considered deferred. The timing issue involves what needed maintenance should be recognized as deferred as of the end of the fiscal year—the date specified in the CNO Notice, the date the maintenance needs were identified, or the date the maintenance was scheduled.
- Applicability of the reporting requirements - DOD and the military services will need to determine whether deferred maintenance should be reported for assets that are not needed for current requirements. For example, should maintenance deferred on ships being considered for decommissioning or not scheduled for deployment for a significant period be recognized on DOD's and the Navy's financial statements? Reporting the maintenance not done as deferred would more accurately reflect how much it would cost to have all reported assets in an acceptable operating condition; however, it would also be reporting maintenance which is not really needed at this time and which may never be needed or done.
- Critical and noncritical deferred maintenance - If critical versus noncritical deferred maintenance is to be disclosed, such a disclosure must be consistent among the services, and critical must be defined. For example, different kinds of maintenance needed—from preventive to urgent for continued operation—may be used to differentiate between critical and noncritical. Also, if DOD chooses to disclose deferred maintenance for all reported assets, including maintenance on assets not needed for current requirements, identifying the types of assets included in the deferred maintenance disclosure may be another way to differentiate between critical and noncritical.

Although our work focused on the depot level, the deferred maintenance standard applies to all maintenance that should have been done, regardless of where the maintenance should have taken place. Therefore, in addressing the issues in this report and others regarding deferred maintenance, all levels of maintenance must be considered.

Agency Comments

In comments on a draft of this report (see appendix I), the Department of Defense agreed that it must consider the key issues identified in this report as it implements deferred maintenance reporting requirements.

We are sending copies of this letter to the Chairmen and Ranking Minority Members of the Senate Committee on Appropriations, the House Committee on Appropriations, the Senate Committee on Armed Services, the House Committee on National Security, the Senate Committee on Governmental Affairs, and the House Committee on Government Reform and Oversight. We are also sending copies to the Director of the Office of Management and Budget, the Secretary of Defense, the Assistant Secretaries for Financial Management of the Air Force and Army, and the Acting Director of the Defense Finance and Accounting Service. Copies will be made available to others upon request.

Please contact me at (202) 512-9095 if you or your staffs have any questions concerning this letter. Cleggett Funkhouser, Merle Courtney, Chris Rice, Rebecca Beale, and John Wren were major contributors to this report.

Lisa G. Jacobson
Director, Defense Audits

Comments From the Department of Defense

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COMPTROLLER

JAN 9 1998

Mr. Gene L. Dodaro
Assistant Comptroller General
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Washington, DC 20548

Dear Mr. Dodaro:

This is the Department of Defense response to the General Accounting Office (GAO) draft report "FINANCIAL MANAGEMENT: Issues to be Considered by DoD in Developing Guidance for Disclosing Deferred Maintenance on Ships," dated December 17, 1997 (GAO Code 918924/OSD Case 1508).

The Department agrees that the issues identified in the draft report are key issues that must be considered by the Department as it implements deferred maintenance reporting requirements in accordance with the Statement of Federal Financial Accounting Standards No. 6, "Accounting for Property, Plant and Equipment."

The Department appreciates the opportunity to comment on the draft report.

Sincerely,

William J. Lynn

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