

GAO

Report to the Chairman, Subcommittee  
on Defense, Committee on  
Appropriations, House of  
Representatives

June 2003

# DEFENSE INVENTORY

## The Department Needs a Focused Effort to Overcome Critical Spare Parts Shortages





Highlights of [GAO-03-707](#), a report to the Subcommittee on Defense, Committee on Appropriations, House of Representatives

## Why GAO Did This Study

The Department of Defense's (DOD) annual appropriation totals billions of dollars for spare parts. In addition, it has received supplemental funding totaling \$1.5 billion since fiscal year 1999 to increase the availability of spare parts. However, DOD continues to experience critical spare parts shortages that impact military readiness. GAO examined whether (1) DOD's logistics strategic plan addresses the mitigation of critical spare parts shortages that adversely affect readiness, (2) DOD's logistics initiatives are likely to mitigate spare parts shortages that affect readiness, and (3) DOD has the ability to identify the effect of increased investments for spare parts on readiness.

## What GAO Recommends

GAO recommends that the Secretary of Defense:

- Incorporate clear goals, objectives, and performance measures pertaining to mitigating spare parts shortages in the Future Logistics Enterprise or appropriate agencywide initiatives to include efforts recommended by the Under Secretary of Defense Comptroller in his August 2002 study report.
- Establish milestones and define how it will measure progress in implementing the August 2002 Inventory Management Study recommendations.

In written comments, DOD generally concurred with the intent of our recommendations, but not with the approach recommended.

[www.gao.gov/cgi-bin/getrpt?GAO-03-707](http://www.gao.gov/cgi-bin/getrpt?GAO-03-707).

To view the full report, including the scope and methodology, click on the link above. For more information, contact William M. Solis at (202) 512-8365 or [solisw@gao.gov](mailto:solisw@gao.gov).

# DEFENSE INVENTORY

## The Department Needs a Focused Effort to Overcome Critical Spare Parts Shortages

### What GAO Found

The Office of the Secretary of Defense's (OSD) logistics strategic plan focuses on transforming the department's logistics operations by emphasizing weapon system support, customer service, and enterprise integration, but does not specifically address mitigating spare parts shortages. In addition, while it contains some key attributes of a strategic plan, such as broad goals and implementation strategies, it lacks other key attributes. In June 2002, the department published the Future Logistics Enterprise, which serves as the strategic plan behind efforts to transform logistics operations within the department to ensure consistent, reliable support that meets the warfighters' requirements. This plan presents its vision for accelerating logistics improvement, enhancing support to the warfighter and aligning logistics processes with the operational demands of the 21<sup>st</sup> Century.

While the Future Logistics Enterprise plan identifies six departmentwide initiatives under three broad topical areas to improve weapon system availability, none of the initiatives specifically address mitigating critical spare parts shortages. However, DOD has directed a separate Defense Logistics Agency effort to improve the availability of critical aviation spare parts. Under the three topics of weapon system support, customer service, and enterprise integration, OSD's six agencywide initiatives aim to improve supply operations and readiness. In fact, two—Condition Based Maintenance Plus and Total Life Cycle System Management—specifically identify improving readiness as an objective. For example, the Condition Based Maintenance Plus initiative is designed to improve maintenance capabilities and business processes that could increase operational availability and readiness throughout the life cycle of the department's weapon systems. If successfully implemented, this initiative would improve maintenance operations and might affect spare parts shortages, but it does not have goals and performance measures related to mitigating spare parts shortages. As a result, DOD may not know whether it is investing its resources in the most efficient and effective manner.

Recent OSD efforts to link funding to readiness could enhance its ability to identify the affect of funding for critical spare parts on readiness. In an August 2002 study report, the DOD Comptroller identified the value of investing in critical parts that adversely affect readiness and recommended the Defense Logistics Agency and the services link budget requests to weapon system readiness rates. The Comptroller's recommendations stemmed from concern that the Defense Logistics Agency and the services' inventory systems tend to purchase low-cost/high-demand items and not those that would most improve readiness rates. While citing some improvement, the Comptroller made eight recommendations, four of which were specifically aimed at improving efforts to increase investment in critical spare parts and link funding requests to readiness rates. In addition, the Comptroller changed the budget justification document (budget exhibit) to provide such information to Congress.

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G A O

Accountability \* Integrity \* Reliability

United States General Accounting Office  
Washington, DC 20548

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June 27, 2003

The Honorable Jerry Lewis  
Chairman, Subcommittee on Defense  
Committee on Appropriations  
House of Representatives

Dear Mr. Chairman:

The Department of Defense's (DOD) fiscal year 2002 parts related annual operations and maintenance funding totaled approximately \$11.2 billion and working capital fund obligation authority totaled approximately \$22.9 billion. Since fiscal year 1999, it has also received supplemental funding totaling \$1.5 billion to increase the availability of spare parts. While the Army and Defense Logistics Agency are reporting that they are meeting the overall supply performance goal of having parts available to meet customer demands 85 percent of the time, the department still reports shortages of critical spare parts<sup>1</sup> that affect readiness. Recognizing that spare parts shortages will never be eliminated, it is reasonable to expect the department to place a priority on efforts to mitigate (reduce) those shortages that adversely affect readiness. This priority should be inherent in the overall planning and stewardship of funds requested from Congress and the accountability for making spare parts investment decisions that provide a good readiness return. In our January 2003 High Risk Series Report, we again identified DOD's management of inventory as high-risk because of long standing management weaknesses that could result in unnecessary expenditures and that DOD was experiencing equipment readiness problems because of the lack of spare parts.<sup>2</sup>

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<sup>1</sup> Critical spare parts shortages refer to supply items that cause a degradation of the readiness status of the associated weapon system or equipment.

<sup>2</sup> U.S. General Accounting Office, *Major Management Challenges and Program Risks: Department of Defense*, [GAO-03-98](#) (Washington, D.C.: January 2003).

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This is one in a series of reports responding to your request that we identify ways to improve the availability of spare parts.<sup>3</sup> As agreed, this report addresses the strategic planning efforts of the Office of the Secretary of Defense (OSD) to transform the way DOD conducts its logistics business operations in order to mitigate critical spare parts shortages. More specifically, we are reporting on the following:

1. Does OSD's logistics strategic plan address the mitigation of critical spare parts shortages—those that adversely affect readiness?
2. Will OSD logistics initiatives likely mitigate spare parts shortages that affect readiness?
3. Does OSD have the ability to identify the effect on readiness of increased investments for spare parts?

We reviewed the OSD's current logistics strategic planning document to determine whether it contained a focus on mitigating spare parts shortages. We also assessed the extent to which the strategy and initiatives provided a basis for guiding the defense agencies' and military services' efforts and were consistent with Government Performance and Results Act of 1993 (GPRA) guidelines for preparing a strategic plan.<sup>4</sup> We interviewed OSD and Joint Staff officials about the strategic planning document to identify their views on mitigating spare part shortages and readiness. We also compared OSD's current initiatives to issues identified in GAO's High Risk Series to determine if they contained specific goals and objectives linked to mitigating spare parts and measures relating to readiness. To assess DOD's ability to link funding for spare parts to improved readiness, we reviewed DOD documents and reports relevant to linking additional funding for spare parts to readiness.

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<sup>3</sup> U.S. General Accounting Office, *Defense Inventory: Air Force Item Manager View of Repair Parts Issues Consistent With Issues Reported in the Past*, [GAO-03-684R](#) (Washington, D.C.: May 21, 2003); *Defense Inventory: The Army Needs a Plan to Overcome Critical Spare Parts Shortages*, [GAO-03-705](#) (Washington, D.C.: June 27, 2003); *Defense Inventory: Air Force Plans and Initiatives to Mitigate Spare Parts Shortages Need Better Implementation*, [GAO-03-706](#) (Washington, D.C.: June 27, 2003); *Defense Inventory: Navy Logistics Strategy and Initiatives Need to Address Spare Parts Shortages*, [GAO-03-708](#) (Washington, D.C.: June 27, 2003); and *Defense Inventory: Several Actions Are Needed to Further DLA's Efforts to Mitigate Shortages of Critical Parts*, [GAO-03-709](#) (forthcoming).

<sup>4</sup>Pub.L. 103-62, Aug. 3, 1993.

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## Results in Brief

The Office of the Secretary of Defense's logistics strategic plan is focused on transforming the department's logistics operations through an emphasis on improving weapon system support, customer service, and enterprise integration. While this could improve weapon system readiness over time, it does not specifically focus on mitigating spare parts shortages. In addition, although it contains some key attributes of a strategic plan, such as broad goals and implementation strategies, it lacks other key attributes. In June 2002, the department published the Future Logistics Enterprise, which serves as the strategic plan behind efforts to transform logistics operations within the department to ensure consistent, reliable support that meets the warfighters' requirements. This plan presents its vision for accelerating logistics improvement, enhancing support to the warfighter and aligning logistics processes with the operational demands of the 21st Century. However, according to OSD officials, because the plan is focused on the high-level goal of transforming operations, it does not focus on specific issues such as the need to mitigate spare parts shortages. Even though DOD considers the Future Logistics Enterprise plan to be in its infancy, the plan includes some key elements of a good plan. For example, it cites general goals such as meeting warfighter requirements and implementation strategies such as adopting Total Life Cycle Systems Management, and recognizes the need to develop broad performance measures such as weapons system availability. However, the plan lacks other key elements, which are considered important. It does not contain specific goals, objectives, or performance measures; does not require subordinate organizations such as the Defense Logistics Agency and the services to develop supporting plans or submit annual progress reports; and does not provide the comprehensive overarching guidance needed to integrate the multitude of ongoing initiatives. By not focusing on mitigating spare parts shortages as part of a well developed overall strategy to improve logistics operations, DOD increases the likelihood there will be ineffective or duplicate efforts within the Defense Logistics Agency and the services to address this important problem that affects readiness. As a result, OSD will lack assurance that it is investing in those highest priority items, which would yield the greatest return on investment and effect on readiness.

The Future Logistics Enterprise plan identifies six departmentwide initiatives under three broad topical areas to improve weapon system availability, but none of the initiatives specifically address mitigating critical spare parts shortages. However, in a separate initiative, DOD directed the Defense Logistics Agency to improve the availability of critical aviation spare parts. Under the three topics of weapon system support, customer service, and enterprise integration, OSD's six

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agencywide initiatives focus on improving supply operations and readiness. In fact, two—Condition Based Maintenance Plus and Total Life Cycle System Management—specifically identify improving readiness as an objective. For example, the Condition Based Maintenance Plus initiative focuses on improving maintenance capabilities and business processes that could increase operational availability and readiness throughout the life cycle of the department’s weapon systems. If successfully implemented, this initiative would improve maintenance operations and might affect spare parts shortages, but it does not have goals and performance measures related to mitigating spare parts shortages. As a result, DOD may not know if it is investing in those items that would give the greatest return on investment or effect on readiness, or may achieve readiness at a higher than necessary cost by simply buying more parts rather than addressing the cause of shortages. While not an agencywide initiative, DOD has directed the Defense Logistics Agency to implement a focused effort called the Aviation Investment Strategy to reduce specific critical spare parts shortages. Under this initiative, the Defense Logistics Agency has spent \$500 million to buy more of these parts, thereby increasing their availability.

Recent OSD efforts to link funding to readiness could enhance its ability to identify the effect of funding for critical spare parts on readiness. In an August 2002 study report, the DOD Comptroller identified the value of investing in critical parts that adversely affect readiness and recommended the Defense Logistics Agency and the services link budget requests to weapon system readiness rates. The Comptroller’s recommendations stemmed from concern that the Defense Logistics Agency and the services’ inventory systems tend to purchase low-cost/high-demand items and not those that would most improve readiness rates. Although he cited some improvement efforts, the Comptroller made eight recommendations, four of which specifically focused on improving efforts to increase investment in critical spare parts and link funding requests to individual weapon system readiness rates. In addition, the Comptroller changed the budget justification document (budget exhibit) to provide such information to Congress. However, his recommendations did not cite reporting deadlines or how OSD would measure Defense Logistics Agency and service progress in implementing the four recommendations.

Given the adverse effect of critical spare parts shortages on readiness, we are recommending that the Secretary of Defense incorporate clear goals, objectives, and performance measures pertaining to mitigating spare parts shortages in either the Future Logistics Enterprise or appropriate

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agencywide initiatives to include efforts recommended by the Under Secretary of Defense Comptroller in his August 2002 study report. In addition, we are recommending that OSD identify milestones and define how it will measure progress in implementing the August 2002 Inventory Management Study recommendations. DOD concurred with the intent of our first recommendation, but not all of the suggested actions. DOD stated that spare parts shortages are a symptom of imperfect supply chain processes and that components of the Future Logistics Enterprise would transform these processes. Furthermore, the August 2002 recommendation has been incorporated in the Financial Management Regulation and their implementation would be reviewed in annual budget conferences. Therefore, DOD does not need to incorporate additional goals, objectives and performance measures into the strategy or agencywide initiatives to address this issue. We recognize OSD's focus on transforming logistics processes and endorse the actions taken to monitor implementation of the August 2002 study report recommendations. However, we believe that process improvements alone do not meet the intent of our recommendation. Further, we continue to believe that including a focus on mitigating spare parts with clear goals, objectives and performance measures included in its logistics strategy or agencywide initiatives is needed to provide the framework for ensuring this issue is addressed as part of DOD's overall logistics effort. DOD partially concurred with the second recommendation in that it believes separate reporting milestones to measure the progress in implementing the Under Secretary of Defense, Comptroller's August 2002 recommendations are not needed because progress would be measured as an integral part of the resource allocation process in its annual budget conferences. When implemented, these actions meet the intent of our recommendation provided goals, objectives, and performance measures pertaining to mitigating spare parts shortages are included in the scorecard. The department's comments and our evaluation are on page 14 of this report.

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## Background

To support the warfighter, DOD maintains an extensive supply system to provide the spare parts necessary to keep weapons systems operational. The department currently maintains an inventory in excess of \$60 billion, with annual sales to operating forces of approximately \$30 billion. The operating forces rely on operations and maintenance appropriations to procure spare parts from this supply infrastructure. In recent years, Congress has fully funded the operation and maintenance budget request of the department and has provided supplemental funding targeted for spare parts. Traditionally, the department has measured the effectiveness of supply operations in terms of supply availability rate—the frequency



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with which a part is available for delivery upon a customer's first request. The current supply availability goal is 85 percent and the Army and Defense Logistics Agency report they are achieving this goal. Nevertheless, the Defense Logistics Agency and the services continue to experience critical spare parts shortages that affect the operational readiness of the warfighter.

The department, Congress, and GAO have long recognized the importance of a supply system that operates efficiently and effectively. The department has taken a number of actions to improve the logistics system. First, beginning in fiscal year 1994, the Under Secretary of Defense for Acquisition and Technology developed the department's initial strategic plan for guiding improvements to the logistics support systems. This planning effort continued with the development of the fiscal year 2000 Logistics Strategic Plan to direct the transformation of the logistics system. This plan required the services and defense commands to develop implementation plans that reflected the vision, objectives, and metrics of the departmentwide plan. Although GAO identified shortcomings in the departmentwide and subordinate plans, we acknowledge that this planning effort was a positive step toward improving the economy and efficiency of logistics support systems.<sup>5</sup> In fiscal year 2002, this strategic plan was replaced with the current Future Logistics Enterprise, which focused on three key areas with the overall goal of operating DOD logistics as a single end-to-end enterprise. In achieving this end, the Future Logistics Enterprise is designed to support the national defense strategy, meet the requirements of the warfighter, support the ongoing initiatives within the services, and focus the objectives of corrective actions.

In section 362 of the National Defense Authorization Act for fiscal year 2000,<sup>6</sup> Congress directed an independent study of DOD's secondary inventory and parts shortages to focus on any items that adversely affect readiness. This study, performed by the Logistics Management Institute and the Center for Naval Analysis, found that while overall supply availability met department goals, declining inventory levels had resulted in reduced aircraft readiness. DOD also recognized the need to improve supply performance in its August 2001 Defense Planning Guidance which

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<sup>5</sup> U.S. General Accounting Office, *Defense Logistics: Strategic Planning Weaknesses Leave Economy, Efficiency and Effectiveness of Future Support Systems at Risk*, [GAO-02-106](#) (Washington, D.C.: October 11, 2001).

<sup>6</sup> Pub.L. 106-65, Oct. 5, 1999.

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directed a review of inventory management practices and stockage levels during the fiscal year 2003 program/budget review. The initial results of this study were included in the fiscal year 2002 Program Budget Decision 422, which recommended the department further study inventory management including developing a plan to streamline inventory management practices and improve supply chain management. More specifically, it suggested the department address the effect of inventory levels on weapons systems readiness. In August 2002, the DOD Comptroller published the results of these further efforts in the Inventory Management Study report, which outlined eight recommendations for improving inventory and supply readiness, four of which are directly aimed at improving efforts to increase investments in readiness related spares and link funding requests to readiness rates. In addition to these departmentwide plans and policies, according to Deputy Under Secretary of Defense for Logistics and Material Readiness, there are about 500 logistics improvement initiatives underway at various DOD activities.

Beginning in 1990, GAO identified the department's management of secondary inventories as a high-risk area because inventory levels were too high and management systems and procedures were ineffective and wasteful. In the most recent high-risk report,<sup>7</sup> GAO identified the need to address seven key weaknesses, one of which is overcoming key spare parts shortages. More importantly, the report focused on the need for an overarching strategic plan to guide the department's logistics transformation efforts. GPRA provides guidance to executive agencies for establishing and monitoring strategic plans. GPRA specifies that virtually every agency is required to prepare multiyear strategic plans, annual performance plans, and annual performance reports. These strategic plans are to include an agency's mission statement, long-term general goals, and the strategies that the agency will use to achieve these goals. GPRA also requires executive agencies to prepare an annual performance plan including among other things, (1) the performance goals for agencies' major programs and activities; (2) the performance indicators or measures that will be used to gauge performance; (3) the processes, skills, technology and resources required to achieve the performance goals; and (4) the procedures that will be used to verify and validate performance information. Finally, GPRA requires each agency to prepare annual reports on program performance for the previous fiscal year.

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<sup>7</sup> [GAO-03-98](#).

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## DOD's Strategic Plan Is Aimed at Logistics Transformation, Not Specifically Spare Parts Shortages

The Office of the Secretary of Defense's strategic logistics plan is focused on transforming the department's logistics operations through an emphasis on improving weapon system support, customer service, and enterprise integration. While this could improve weapon system readiness over time, it does not specifically focus on mitigating spare parts shortages. According to OSD officials, the plan's focus on the higher-level goal of improving weapon systems availability subsumes the issue of critical spare parts shortages. In addition, while that planning document—the Future Logistics Enterprise—includes some key elements of an effective strategic plan, others are not included.

The department's Future Logistics Enterprise published in June 2002 replaced the 2000 strategic plan and is intended to accelerate the department's implementation of its integrated logistics systems and its commercial information system to meet warfighter needs. The ultimate objective of this plan is to ensure that the logistics system provides consistent, reliable support that meets the warfighters requirements. To accomplish this, the Future Logistics Enterprise concentrated on changing policy, processes, and systems within the logistics environment that could improve weapon system support, customer service, and enterprise integration.

The Future Logistics Enterprise contains some key elements necessary for a good strategic plan, but other key elements are missing. Because DOD considers this plan to be in its infancy, it has focused on initiating these efforts, setting policy for the new initiatives, and exploring potential approaches for evaluating progress toward achieving the objectives. The plan contains general goals such as meeting warfighter requirements and strategies to be employed such as implementing the agencywide initiatives. In addition, DOD is currently developing the performance measures to measure the effect of the plan. However, other essential elements are missing. For example, although, specific initiatives may require the Defense Logistics Agency and the services to develop an implementation plan for that initiative, there is no requirement for the development of Defense Logistics Agency and service plans or annual progress reports in support of the Future Logistics Enterprise. In addition, the plan is not all-inclusive and does not provide the overarching guidance necessary to integrate some 500 ongoing initiatives at the service and defense agencies or recommendations from DOD studies such as those cited in the August 2002 Inventory Management Study. For example, the 2002 study identified weaknesses in the models used by the Defense Logistics Agency and the services to determine which items they should buy to meet the 85 percent supply availability goal. Specifically the study

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concluded that the models do not routinely account for factors such as intended use, cost, or criticality in terms of readiness when establishing inventory requirements. Consequently, the models favor procurement of low-cost/high-demand items and do not provide sufficient weight to high-cost/low-demand items that were found to be a problem for aviation platforms. In addition to recommending that the Defense Logistics Agency and the services apply higher supply targets for these items in the short-term, the study recommended that all new supply systems be capable of supporting readiness based sparing models. However, there is no apparent linkage of the study results and recommended actions to the Future Logistics Enterprise. Other key elements missing from the strategic plan include (1) how the department should be organized in the future to fulfill evolving logistics requirements and (2) the facilities and personnel needed to fulfill its future logistics requirements. GAO identified these same weaknesses in the department's fiscal year 2000 Logistics Strategic Plan.<sup>8</sup> Without these elements of a good plan, the department can not ensure that efforts undertaken by the Defense Logistics Agency and the services will support and achieve the department's logistics transformation goals.

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## Initiatives Focus on Weapons System Availability, Not Critical Spare Parts Shortages

The department's Future Logistics Enterprise concentrates on three key areas—weapon systems support, customer service and enterprise integration—to focus the six agencywide initiatives that have the potential to affect readiness, but none specifically address mitigating critical spare parts shortages. Under a separate initiative, however, DOD has directed the Defense Logistics Agency to increase inventories of critical aviation spare parts. The six initiatives aligned with these areas include (1) Depot Maintenance Partnerships, (2) Conditioned Based Maintenance Plus, (3) Total Life Cycle Systems Management, (4) End-to-End Distribution, (5) Executive Agents, and (6) Enterprise Integration (see app. I). Of these, the Conditioned Based Maintenance Plus and the Total Life Cycle Systems Management initiatives specifically address improving readiness. While not specifically focused on, each of the departmentwide initiative has the potential to help reduce spare parts shortages. Although not agencywide, DOD has directed specific efforts such as the Aviation Investment Strategy to address specific critical spare parts problems.

The Conditioned Based Maintenance Plus initiative is designed to increase operational availability and readiness throughout the weapon system life

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<sup>8</sup> [GAO-02-106](#).

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cycle using real time diagnostic and prognostic techniques to determine the current operating status and predict the future condition of equipment. Data from these techniques will be utilized to better anticipate the maintenance requirements of the weapon system and its components. Currently, four Condition Based Maintenance Plus programs are being piloted within the military services: (1) the Army Diagnostic Improvement Program, (2) the Integrated Condition Assessment System, (3) the Joint Strike Fighter Prognostic Health Management, and (4) the Integrated Mechanical Diagnostics-Health Usage Monitoring System. These pilots demonstrate the use of diagnostic and prognostic tools on both existing weapon systems and systems in the acquisition pipeline. For example, the Integrated Mechanical Diagnostics-Health Usage Monitoring System provides in-flight monitoring and collects engine and mechanical drive systems information on the H-53 and H-60 helicopters, as well as accurate flight hour recording. Among the cited benefits of this program is a 10 percent reduction in total aviation depot level repairable/consumable costs due to vibration related maintenance actions. If successfully implemented, this initiative would improve maintenance operations and might affect spare parts shortages, but it does not have goals and performance measures related to mitigating spare parts shortages.

The Total Life Cycle Systems Management initiative makes the program manager responsible for all activities associated with the acquisition, development, production, fielding, sustainment, and disposal of a weapon system across its life cycle. The goal is to create a procurement action where the sustainability and maintainability, as well as the operational needs of the warfighter, are incorporated into the acquisition decision. Performance Based Logistics is the preferred strategy to support Total Life Cycle System Management activities and enhance weapon system product support within the department. Under this concept, the program manager enters into contractual relationships for support of the weapon system or components that are based on the vendor meeting specific performance requirements for weapon system availability. In essence, the management risk for the spare parts support of the weapon system or component is transferred to the vendor through the performance requirements included in the contracts. By focusing on weapon system or component availability, OSD claims the effect of spare parts shortages on readiness could be mitigated to a level deemed acceptable to the warfighter.

Although not an agencywide initiative, in 1999 DOD directed the Defense Logistics Agency to focus on particular shortages of aircraft parts. The Aviation Investment Strategy specifically targeted critical aviation spare parts. In 1999-2000 the Office of the Secretary of Defense, Program

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Analysis and Evaluation, with support from the Logistics Management Institute, completed a study that concluded low stockage levels of high-cost/low-demand items were the predominant cause of supply related Not Mission Capable rates. As a result, the Office of the Secretary of Defense added \$500 million in the 1999 Program Review to increase inventory levels for high-cost/low-demand aviation parts managed by the Defense Logistics Agency. Since then, the Defense Logistics Agency has been buying more of these parts and increasing the amount of inventory on hand, but as discussed in our report on Defense Logistics Agency initiatives,<sup>9</sup> over half of these parts still remain below the 85 percent supply availability goal.

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## Recent Efforts Could Strengthen Link between Funding and Readiness

Although DOD has long been monitoring readiness, it has recently undertaken efforts to link funding to readiness by weapons system. The department's ability to link funding for critical spare parts to readiness should improve when the Defense Logistics Agency and the services implement four recent recommendations by the DOD comptroller. The Comptroller's recommendations stemmed from concern that the Defense Logistics Agency and the services' inventory systems tend to purchase low cost/high demand items and not those that would most improve readiness rates. Although the Comptroller cited some improvement efforts, he made four recommendations specifically aimed at improving their efforts to increase investment in critical spare parts and link funding requests to readiness rates. In addition, the Comptroller changed the budget justification material (budget exhibit) to provide such information to Congress. However, the report conveying these recommendations did not cite deadlines or how DOD would measure the Defense Logistics Agency and the services' progress in implementing the four recommendations.

In the August 2002 report, the DOD Comptroller issued the Inventory Management Study report in response to Program Budget Decision 422, in which the Comptroller cited problems with the supply models currently being used by the Defense Logistics Agency and the services. Foremost, the models tended to purchase low-cost/high demand items—not necessarily those that would most improve readiness rates. This occurred because the model forecasted inventory purchases based on historical demand for an item and aimed, as a goal, to have that part available for the customer 85 percent of the time. Although the report noted numerous

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<sup>9</sup> [GAO-03-709](#).

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commercial practices and supply management initiatives under way that need to be continued, it also stated that additional efforts are required to make better parts investment decisions based on readiness. For example, the report cited OSD's continuing efforts to help supply managers identify where to focus their resources for optimal readiness gains. He also modified the budget justification material (budget exhibit) to show the rates at which each major weapon system is not available due to supply problems so that funding requests submitted to the Congress could be evaluated based on their ability to improve readiness. More specifically, the Comptroller made eight recommendations for improving inventory and supply readiness, four of which are directly aimed at improving efforts to increase investments in readiness related spares and link funding requests to readiness rates. The four recommendations are as follows:

- The Under Secretary of Defense, Acquisition, Technology, and Logistics should ensure that the logistics systems are capable of supporting readiness based sparing models and readiness drivers. The systems should also support life-cycle cost and trade-off analyses. All requests for systems initiatives or Enterprise Resource Planning must have Office of the Under Secretary of Defense, Comptroller approval through the Financial Management Modernization Plan before investment of milestone decisions.
- The Defense Logistics Agency and the military services should continue efforts to ensure that high-cost/low-demand weapon system items are available when needed.
- Requests for funds to increase inventory investments should be justified by corresponding increases in weapon system readiness rates.
- OSD for Program Analysis and Evaluation should continue to investigate links between inventory funding levels and readiness to establish a readiness outcome metric for use in resource allocation and performance measurement processes.

Although these recommendations are aimed at significantly improving inventory management and the spare parts investment decision process, the Comptroller did not establish milestones for their implementation or their performance measures. Without deadlines and performance measures, it is uncertain when these recommendations will be implemented and what results should be expected. For example, while the DOD Comptroller specified how the Defense Logistics Agency and the services should report data linking funding to readiness in the Financial

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Management Regulation, the services ability to report this information is linked to the status of their efforts to develop logistics data systems capable of collecting and performing the necessary trade off analyses. As a result, in the February 2003 budget submission, the Air Force was able to fully implement this reporting recommendation while the Army and Navy did not provide all of the desired information (see app. II).

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## Conclusions

Due to the significant funding DOD receives annually to provide spare parts, the long-standing problems concerning critical spare parts, and accountability issues pertaining to the effective tracking of investment of these funds, it is important that the department's strategic goals and objectives guide its effort to transform the logistics system and mitigate spare parts shortages that reduce readiness. Although the department has taken several significant steps to improve the economy and efficiency of the logistics support system and possibly provide valuable information for making future investment decisions that may result in better logistics support to the warfighter, its Future Logistics Enterprise lacks a specific focus on spare parts shortages and some of the elements needed for a strategic plan. Without a comprehensive strategic plan linked to subordinate plans, the results will likely be less effective or potentially duplicative efforts within the Defense Logistics Agency and the services. In addition, the lack of a departmentwide goal to address the issue of critical spare parts shortages could result in continued spare parts shortages that negatively affect readiness. Furthermore, without specific initiatives to address critical spare parts shortages that links to the strategic plan's goals, objectives, and performance measures, the department may be unable to significantly reduce the effect of spare parts shortages on readiness and there is no assurance that investments in spare parts will be based on the greatest return on investment or effect on readiness. Finally, because OSD did not establish deadlines or how it would measure progress in implementing its August 2002 recommendations to provide Congress with information linking increased investments in spare parts inventories to include weapon system readiness rates, there is no assurance when this information will be available to Congress for use in making future funding decisions.

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## Recommendations for Executive Action

In order to improve the department's logistics strategic plan to achieve results for overcoming spare parts shortages, improving readiness, and address the long-standing weaknesses that are limiting the overall economy and efficiency of logistics operations, we recommend that the



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Secretary of Defense direct the Under Secretary for Acquisition, Technology and Logistics to

- incorporate clear goals, objectives, and performance measures pertaining to mitigating spare parts shortages in the Future Logistics Enterprise or appropriate agencywide initiatives to include efforts recommended by the Under Secretary of Defense, Comptroller in his August 2002 study report;

We also recommend that the Secretary of Defense direct the Under Secretary of Defense, Comptroller to

- establish reporting milestones and define how it will measure progress in implementing the August 2002 Inventory Management Study recommendations related to mitigating critical spare parts shortages.

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## Agency Comments and Our Evaluation

In written comments on this report, DOD generally concurred with the intent of the recommendations, but not all of the specified actions we recommended. DOD's written comments are reprinted in their entirety in appendix III.

In concurring with the intent of our first recommendation, DOD expressed concern that because spare parts shortages are a symptom of imperfect supply management processes, its plans must focus on improving those processes, not the symptoms. According to DOD, the Future Logistics Enterprise focuses on achieving improvement through three threads: Weapon System Support, End-to-End Warfighter Support, and Enterprise Integration. Specifically, End-to-End Warfighter Support implements performance based agreements that include goals, objectives, and performance measures between the source of supply and the customer to eliminate potential gaps in support to ensure the readiness of weapons systems. Weapon system support focuses on a fully integrated life-cycle development process where weapon system managers procure performance of the weapon system including sustainment. According to DOD, this represents a major shift in the approach to weapon system support by emphasizing purchasing a predetermined level of availability to meet the warfighter's objectives rather than buying set levels of spares, repairs and data. In addition, DOD said that Enterprise Integration enables these transformed supply processes by allowing collaboration across the logistics domain and will enhance the ability to forecast supply and demand to ensure weapon system readiness. Furthermore, efforts recommended by the Under Secretary of Defense, Comptroller in his

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August 2002 study report have already been incorporated into the Financial Management Regulation. The implementation of the efforts by the Defense Logistic Agency and military services will be reviewed within the annual budget conferences. Therefore, DOD does not agree that additional goals, objectives, and performance measures or additional initiatives are needed to mitigate spare parts shortages.

We disagree that the actions taken are sufficient to address our recommendation. We believe that modification of the Financial Management Regulation reporting requirements along with actions taken in response to our second recommendation are sufficient to address the recommendations made by the Under Secretary of Defense, Comptroller. Furthermore, our report recognizes that the Future Logistics Enterprise focuses on transforming DOD's logistics operations and that improving logistics processes is part of the solution to mitigating spare parts shortages. However, we believe that process improvements alone do not meet our recommendation. The intent of our recommendation was for OSD to include a focus on mitigating spare parts shortages in either the Future Logistics Enterprise or agencywide initiatives. Without a focus on mitigating spare parts shortages that includes clear goals, objectives, and milestones included in the strategic plan or departmentwide initiatives, we believe DOD efforts will not establish the framework necessary to assess the department's progress in addressing this issue. In addition, without this framework, DOD's progress in mitigating spare parts shortages will be limited because its efforts may be ineffective or duplicative in mitigating spare parts shortages that are critical to equipment readiness. Therefore, we continue to believe implementation of our recommended actions is necessary for improving readiness of legacy and future weapon systems.

In partially concurring with our second recommendation, DOD stated that progress in implementing the Under Secretary of Defense, Comptroller recommendations would be measured as an integral component of its resource allocation process and that separate reporting milestones are not needed. DOD also stated that budget guidance for fiscal year 2005 will include additional performance metrics that will be further refined as the logistics balanced scorecard<sup>10</sup> is implemented under the Future Logistics Enterprise and Business Management and Modernization Program initiatives. Successful implementation of these actions and DOD's ongoing

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<sup>10</sup> The balanced scorecard links strategic goals, strategies, objectives and performance measures to an organization's strategic plan.

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development of a balanced scorecard as a mechanism for measuring progress in implementing these recommendations will meet the intent of our recommendation provided goals, objectives, and performance measures pertaining to mitigating spare parts shortages are included in the scorecard.

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## Scope and Methodology

To determine the adequacy of DOD's current strategic plans to address spare parts shortages, we obtained current DOD logistics and strategic planning documents that identified guidance on improving spare parts support for military readiness.

To determine how adequately the strategic plan addressed spare parts shortages, we reviewed the Future Logistics Enterprise and supporting documents to ascertain whether the plan addressed mitigating spare parts shortages as one of its objectives or goals. We also reviewed the Future Logistics Enterprise to determine whether it contained the elements necessary for a strategic plan as outlined in the Government Performance and Results Act of 1993 (GPRA).<sup>11</sup> In addition, we interviewed key officials responsible for logistics and strategic planning efforts in the Office of the Secretary of Defense and the Joint Chiefs of Staff.

To determine how likely the initiatives in the Future Logistics Enterprise were to achieve the intended results and contribute to mitigating spare parts shortages to improve readiness, we reviewed the six initiatives to determine if any had goals and objectives related to readiness or mitigating spare parts shortages. We focused our analysis on whether the initiatives addressed spare parts shortages and the need for quantifiable and measurable performance targets as identified in GPRA. In addition, we interviewed officials responsible for each of the initiatives within the Office of the Secretary of Defense.

To determine the extent to which the department can identify the effect of increased funding for spare parts on readiness, we reviewed the Inventory Management Study completed in August 2002. In addition, we interviewed officials at the Office of the Secretary of Defense to determine the status of efforts to establish a link between funding for spare parts and readiness.

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<sup>11</sup> Pub.L. 103-62, Aug. 3, 1993.

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Further, we compared the Future Logistics Enterprise initiatives to GAO's High Risk Series and GPRA to determine if the initiatives contained (1) a clear mission and vision, (2) specific objectives and attributes linked to spare parts and readiness, (3) milestones, and (4) performance metrics and reporting requirements. We also coordinated our efforts with the four other GAO engagements evaluating strategic planning documents and initiatives for mitigating spare parts shortages within the Defense Logistics Agency, Army, Navy, and Air Force.

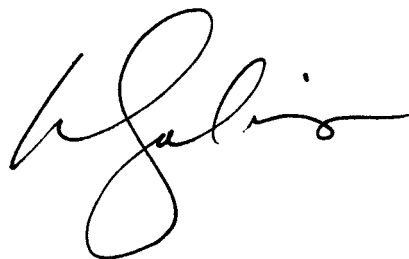
We performed our review from July 2002 through May 2003 in accordance with generally accepted government auditing standards.

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We are sending copies of this report to the Secretary of Defense and other interested congressional committees and parties. We will also make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

Please contact me on (202) 512-8365 if you or your staff have any questions concerning this report. Major contributors to this report are included in appendix III.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'W. Solis', with a large, stylized flourish at the end.

William M. Solis, Director  
Defense Capabilities and Management

# Appendix I: Initiatives Included in the Future Logistics Enterprise

The following six initiatives represent the department's integrated approach to accelerate logistics improvement, enhance support to the warfighter, and align logistics processes with the operational demands of the 21st century.

Initiative	Objective/goals	Accomplishments/additional actions
<b>Weapon System Support</b>		
Depot Maintenance Partnership	Increase the level of public-private partnerships resulting in <ul style="list-style-type: none"> <li>• greater private sector investment,</li> <li>• better facility utilization,</li> <li>• reduced ownership cost,</li> <li>• workforce integration,</li> <li>• more efficient business processes,</li> <li>• greater credibility, and</li> <li>• more collegial working relationship with Congress.</li> </ul>	Accomplishments: <ul style="list-style-type: none"> <li>• Legislative changes included in the National Defense Act for fiscal year 2002</li> <li>• Policy memorandum promulgated</li> <li>• Three Legislative Proposals under consideration</li> <li>• Service implementation plans</li> </ul> Additional Actions: <ul style="list-style-type: none"> <li>• Develop reports and measures</li> </ul>
Condition Based Maintenance Plus	Increase operational availability and readiness throughout the weapon system life cycle at a reduced cost.	Additional Actions: <ul style="list-style-type: none"> <li>• Draft policy completed</li> <li>• Incorporated in DOD 5000 series</li> <li>• Service implementation plans</li> </ul>
Total Life Cycle System Management	Improve weapon system sustainment through <ul style="list-style-type: none"> <li>• timely acquisition of weapon systems,</li> <li>• meeting warfighter performance requirements,</li> <li>• integration of sustainment and maintainability during the acquisition process, and</li> <li>• weapon system sustainment to meet warfighter performance requirements at a best corporate value.</li> </ul>	Accomplishments: <ul style="list-style-type: none"> <li>• Improved Defense Acquisition University curriculum</li> <li>• Service Performance Based Logistics implementation schedules</li> <li>• Revised DOD publications 5000.1.5000.2</li> </ul> Additional Actions: <ul style="list-style-type: none"> <li>• Develop financial mechanisms with Under Secretary of Defense</li> </ul>
<b>Customer Service</b>		
End-to-End Distribution	Streamlining warfighter support by providing material from the source of supply or point of origin to the point of use or disposal on a worldwide basis. The intent is to influence acquisition, sourcing, positioning, and transportation to facilitate the flow of material and ensure that deployment and sustainment are synchronized.	Accomplishments: <ul style="list-style-type: none"> <li>• Identify additional improvements in the management of end-to-end distribution</li> </ul> Additional Actions: <ul style="list-style-type: none"> <li>• Synchronize policies and initiatives for end-to-end distribution</li> <li>• Advocate greater consideration of distribution in acquisition decisions</li> </ul>
Executive Agents	Assess and align Executive Agent designations with warfighter requirements arising from the National Defense Strategy.	Additional Actions: <ul style="list-style-type: none"> <li>• Prepare a schedule for assessing potential EA assignments for construction and medical material</li> <li>• Prepare Concept of Operations and draft DOD directives for bulk petroleum and subsistence</li> <li>• Complete initial analyses of emerging Executive Agents</li> </ul>

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**Appendix I: Initiatives Included in the Future  
Logistics Enterprise**

<b>Initiative</b>	<b>Objective/goals</b>	<b>Accomplishments/additional actions</b>
<b>Enterprise Integration</b>		
Enterprise Integration	Create highly trained and skilled people within DOD logistics enterprise to have access to near real time, actionable information from modern, commercially based software produces that will enable reengineered logistics processes and business rules.	Additional Actions: <ul style="list-style-type: none"><li>• Incorporate Triangle Working Groups plans of action and milestones</li><li>• Implement phase two of fact finding review of Enterprise Initiatives</li><li>• Draft Policy Recommendations</li></ul>

Source: GAO.

# Appendix II: Inventory Investment Budget Submission Material

February 2003 Working Capital Fund Budget submissions for the Air Force, Army, and Navy provide an example of the information reported by each service pertaining to inventory investment.

SM-3B (Dollars in Millions)	Weapon System Funding Air Force Working Capital Fund AF Supply Management Activity Group					Fiscal Year (FY) 2004/FY 2005 Biennial Budget Estimates February 2003	
	2005	Rep Buy	Con Buy	Total Buy	Initial Spares	Repair	Total
A-10	22.683	8.821	31.504	4.403	173.183	209.090	14.9%
B-1B	39.035	15.180	54.215	4.156	196.106	254.477	23.2%
B-2	44.829	17.433	62.262	2.000	63.652	127.914	6.9%
B-52	43.759	17.018	60.777	2.958	94.890	158.625	12.3%
C-5	106.068	41.248	147.316	0.000	283.715	431.031	19.4%
C-130	62.182	24.182	86.364	1.953	254.596	342.913	14.9%
C-135	78.594	30.565	109.159	10.937	308.370	428.466	11.5%
C-141	0.663	0.258	0.921	0.000	10.255	11.176	16.1%
E-3	27.122	10.548	37.670	9.567	52.574	99.811	10.8%
E-4	0.000	0.000	0.000	0.000	0.148	0.148	7.9%
E-8	0.000	0.000	0.000	0.000	0.000	0.000	6.9%
F-4	0.629	0.244	0.873	0.000	6.060	6.933	0.0%
F-15	132.142	51.388	183.530	6.521	414.366	604.417	11.2%
F-16	53.080	20.642	73.722	16.749	317.689	408.160	13.7%
F100 ENGINES	310.520	120.758	431.278	0.000	721.942	1,153.220	
F110 ENGINES	140.085	54.477	194.562	0.000	184.971	379.533	
F-22	0.000	0.000	0.000	0.000	0.000	0.000	
F-111	0.000	0.000	0.000	0.000	0.305	0.305	0.0%
F-117	0.000	0.000	0.000	0.000	0.045	0.045	4.9%
H-1	2.744	1.067	3.811	0.000	6.146	9.957	0.0%
H-53	8.693	3.380	12.073	0.000	32.222	44.295	3.1%
H-60	0.600	0.233	0.833	0.000	3.673	4.506	4.6%
TRAINERS	23.875	9.285	33.160	0.000	33.330	66.490	5.0%
OTHER A/C	1.902	0.739	2.641	0.987	6.837	10.465	6.3%
SOF	4.805	1.869	6.674	0.000	22.814	29.488	11.9%
COMMON	78.853	30.665	109.518	0.000	362.623	472.141	
COMMON EW	11.511	4.476	15.987	0.000	83.975	99.962	
MISSILES	22.144	8.611	30.755	5.573	26.781	63.109	
OTHER	41.380	16.092	57.472	2.328	189.872	249.672	
NIMSC5	0.000	0.000	0.000	0.000	138.917	138.917	
TOTAL	1,257.895	489.182	1,747.077	68.132	3,990.057	5,805.266	

Source: U.S. Air Force.

<sup>1</sup> NMCSR – Not Mission Capable Supply Rate is the percentage of time a weapon system is down for parts. Assuming no other factors impact aircraft availability, then the aircraft availability is computed 1 minus NMCSR. NMCSR is computed only for weapon systems. NMCSR is not computed for weapon system parts such as engines.

#### Legend

SOF – Special Operating Forces

Common EW – Common Electronic Warfare1

NIMSC5 – Nonconsumable Item Material Support Code 5

Appendix II: Inventory Investment Budget  
Submission Material

**Army Working Capital Fund**  
**Fiscal Year (FY) 2004/2005 Biennial Budget Estimates**  
**Supply Management**  
**OPERATING REQUIREMENT BY WEAPON SYSTEM CATEGORY**  
**(Dollars in Millions)**

WEAPON SYSTEM/CATEGORY	<u>FY 2004</u>	<u>Material Readiness Indicator</u>	<u>FY 2005</u>	<u>Material Readiness Indicator</u>
Chemical Defense Equipment	111.9	n/a	121.3	n/a
Other Armament, Munitions and Chemicals	106.2	n/a	105.1	n/a
AH-64	501.3	75%	481.0	75%
UH-60	662.2	80%	615.1	80%
OH-58D	133.3	75%	147.2	75%
CH-47D	481.2	75%	517.9	75%
T701C Engines	119.4	n/a	125.9	n/a
Air Delivery/Aviation/Troop Equipment	120.5	n/a	90.3	n/a
MSE	44.8	n/a	27.2	n/a
Night Vision Equipment	66.7	n/a	60.5	n/a
Batteries	34.4	n/a	31.2	n/a
Other Communications/Electronics	366.2	n/a	379.0	n/a
MLRS	51.1	90%	50.9	90%
PATRIOT	132.6	90%	127.3	90%
Other Missile Systems	82.3	90%	93.4	90%
M1 Series Tank	770.6	90%	816.1	90%
M88 Recovery Vehicle	136.8	90%	131.4	90%
M109 Howitzer	37.2	90%	35.0	90%
M198 Howitzer	11.2	90%	10.9	90%
M113 FOV	66.5	90%	70.4	90%
Bradley Fighting Vehicle	208.6	90%	229.7	90%
HMMWV	83.2	90%	85.9	90%
Tires	69.1	n/a	71.8	n/a
Other Tank & Automotive	308.8	n/a	301.4	n/a
<b>TOTAL</b>	<b>4,706.0</b>		<b>4,726.0</b>	

Source: U.S. Army.

Legend

MSE – Mobile Subscriber Equipment

MLRS – Multiple Launch Rocket System

HMMWV – High Mobility Multipurpose Wheeled Vehicle



SM-3b

DEPARTMENT OF NAVY, SUPPLY MANAGEMENT  
OPERATING REQUIREMENT BY WEAPON SYSTEM  
BUDGET PROJECT 85  
FY 2004/2005 BIENNIAL BUDGET ESTIMATES - FEBRUARY 2003

(DOLLARS IN MILLIONS)

FY 2005

Weapon System	Buy In Outfitting	Special Programs	Basic Replen	Repair	Total
F/A-18	37.8	100.0	39.5	176.5	353.8
F/A-18 E/ F	51.7		0.1	16.6	68.4
AV-8B/T-45	4.3		6.3	20.4	31.0
EA-6B	5.2		8.4	30.4	44.0
F-14			21.8	74.9	96.7
V-22			0.0	0.0	0.0
S-3/C-130	7.7		12.5	45.8	66.0
P-3	0.5		17.1	78.9	96.5
E-2/C-2	17.2		7.9	34.5	59.6
Common	15.9	0.5	20.8	71.3	108.5
Engines	17.0		58.9	209.0	284.9
Aviation Support	9.2		7.0	31.6	47.8
H-46/H-1			25.7	92.9	118.6
H-53			17.9	93.1	111.0
H-60	51.5	0.4	16.7	83.9	152.5
Multi-application			140.4	570.6	711.0
Terminations	-0.6		-4.2		-4.8
Anticipated Special Programs		60.0			60.0
CP3-3				6.6	6.6
Reductions for Efficiencies	-49.9				-49.9
Contracting Efficiencies			-1.8		-1.8
SNT			13.5		13.5
NIS PBL			213.4	94.1	307.5
PBL Savings				-9.7	-9.7
LECP Investment/Savings			32.9	-28.3	4.6
<b>Total</b>	<b>167.5</b>	<b>160.9</b>	<b>654.8</b>	<b>1,693.1</b>	<b>2,676.3</b>
System Stock: Initial/Follow-on					27.2
Operating Requirement					2,703.5

Source: U.S. Navy.

Legend

SNT – Serial Number Tracking

NIS PBL – Not In Stratification Performance Based Logistics

PBL Savings – Performance Based Logistics Savings

LECP – Logistics Engineering Change Proposal

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**Appendix II: Inventory Investment Budget  
Submission Material**

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INSTRUCTIONS FOR PREPARATION OF  
OPERATING REQUIREMENT BY WEAPON SYSTEM (EXHIBIT SM-3B)

The purpose of the SM-3B, Operating Requirement by Weapon System is to provide a breakout of the operating obligation request by type of supply system action (procurement versus repair) and by weapon system or category.

1. For the OSD/OMB budget review, prepare SM-3B for each Service stock fund wholesale division that provides military spare parts. (This excludes fuel, medical/dental, subsistence, etc.). For each division, one Exhibit SM-3B should be prepared for each fiscal year (CY, BY1, and BY2).

2. Definitions.

a. Basic Replenishment consist of the sales replacement spares.

b. Outfits are initial outfittings to support a new weapon system or modification to an existing weapon system. This material is anticipated to be sold to an appropriated outfitting (buy-out) account that finances the lay-in of authorized allowances at the outfitting site.

c. Special Programs are instances where special management action is required, such as a Service initiative responding to abnormally high wear-out rates.

d. Basic Rework is repair obligations for sales replacement.

3. Dollars in millions and tenths of a million. Weapon systems, as defined by the applicable Service, may be aggregated into categories when individual systems are less than \$25 million. The Director for Revolving Funds will approve appropriate levels of aggregation. Common parts may be grouped by category such as radios or may be allocated to specific systems such as F-16 aircraft. Obligation authority requests for non-weapon system-related requirements such as reverse engineering and forging & casting must be separately identified.

4. Estimated data may be used and noted as such until accurate systems can be developed to provide accurate data.

5. This form will be prepared at latest acquisition cost or repair cost as appropriate.

6. The MCRS (Mission Capable Rate Supply) column will contain the percentage rate for supply readiness for the weapons system listed. You will report this rate target for each budgeted fiscal year.

Source: DOD.

# Appendix III: Comments from the Department of Defense



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

JUN 23 2003

Mr. William Solis, Director  
Defense Capabilities and Management  
U.S. General Accounting Office  
441 G Street, N.W.  
Washington, DC 20548

Dear Mr. Solis:

This is the Department of Defense (DoD) response to the GAO draft GAO-03-707, "DEFENSE INVENTORY: The Department Needs a Focused Effort to Overcome Critical Spare Parts Shortages," dated May 15, 2003 (GAO Code 350252). The DoD generally concurs with the intent of the recommendations but does not concur with the approach recommended by the GAO.

Detailed comments on the draft report recommendations are included in the enclosure. The DoD appreciates the opportunity to comment on the draft report.

Sincerely,

A handwritten signature in black ink, appearing to read "Allen W. Beckett".

Allen W. Beckett  
Principal Assistant

Enclosure



GAO DRAFT REPORT – DATED MAY 15, 2003  
GAO CODE 350252/GAO-03-707

“DEFENSE INVENTORY: The Department Needs a Focused Effort to Overcome  
Critical Spare Parts Shortages”

DEPARTMENT OF DEFENSE COMMENTS  
TO THE RECOMMENDATIONS

**RECOMMENDATION 1:** In order to improve the Department’s logistics strategic plan to achieve results for overcoming spare parts shortages, improving readiness, and address the long-standing weaknesses that are limiting the overall economy and efficiency of logistics operations, GAO recommended that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology and Logistics incorporate clear goals, objectives, and performance measures pertaining to mitigating spare parts shortages in the Future Logistics Enterprise or appropriate agency wide initiatives to include efforts recommended by the Under Secretary of Defense (Comptroller) in his August 2002 study report. (p. 16/GAO Draft Report)

**DoD RESPONSE:** Concur with intent. Spare parts shortages are a symptom of imperfect supply chain processes. In order to eliminate the problem causing the symptom, improvement plans must focus on improving the processes rather than on the symptoms. The Future Logistics Enterprise correctly focuses on three threads: Weapon Systems Support; End-to-End Warfighter Support; Enterprise Integration. The Future Logistics Enterprise transforms the overall logistics processes. End-to-End Warfighter Support is implementing performance based agreements between the source of supply and the customer to eliminate potential gaps in support to ensure the readiness of weapon systems. Goals, objectives, and performance measures are included in performance based agreements as they are established. Weapon system support focuses on a fully integrated life-cycle development process where weapon system managers procure performance of the weapon system including sustainment. This major shift from the traditional approach to performance based logistics and weapon system support emphasizes purchasing a predetermined level of weapon system availability to meet the warfighter’s objectives rather than buying set levels of spares, repair, and data. Enterprise Integration enables these transformed supply chain processes through the use of modern Commercial Off-The-Shelf systems now being implemented across the DoD logistics domain. These collaboration tools enhance the capability to forecast supply and demand to ensure weapon system readiness. The recommendation by the OUSD(C) in his August 2002 study report has already been incorporated into the Financial Management Regulation (FMR) and Military Service and Defense Logistics Agency implementation of that recommendation will be reviewed within the annual budget conferences. Therefore, we do not agree that additional goals, objectives, and performance measures or additional initiatives are needed to mitigate spare parts shortages. No further direction is required and action consistent with this recommendation is complete.

**RECOMMENDATION 2:** The GAO recommended the Under Secretary of Defense, Comptroller, establish reporting milestones and define how it will measure progress in

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**Appendix III: Comments from the Department  
of Defense**

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implementing the August 2002 Inventory Management Study recommendations related to mitigating critical spare parts shortages. (p. 16/GAO Draft Report)

**DoD RESPONSE:** Partially concur. Progress will be measured as an integral component of the Department's resource allocation process. The budget guidance for the FY 2005 updated estimates will include additional performance metrics that will be further refined as the Under Secretary of Defense (Acquisition, Technology and Logistics) implements the logistics balanced scorecard under the Future Logistics Enterprise and Business Management and Modernization Program initiatives. Given the ongoing initiatives for performance metrics across the Department, separate reporting milestones are not necessary for this initiative and action consistent with this recommendation is complete.

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# Appendix IV: GAO Contacts and Staff Acknowledgments

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## GAO Contacts

Richard G. Payne (757) 552-8119  
John Wren (757) 552-8235

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## Acknowledgments

In addition to those named above, Latrealle Lee, Margaret Giammarco, Marjorie Jane Hunt, and Barry L. Shillito also made significant contributions to this report.

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