

November 1999

# DEFENSE INVENTORY

## Improved Management Framework Needed to Guide Air Force Best Practice Initiatives



**DISTRIBUTION STATEMENT A**  
Approved for Public Release  
Distribution Unlimited



GAO/NSIAD-00-2

DTIC QUALITY INSPECTED 4

19991129 076

---

# Contents

---

---

Letter		3
Appendixes	Appendix I: Summary of Air Force Initiatives	14
	Appendix II: Comments From the Department of Defense	20
	Appendix III: GAO Contacts and Staff Acknowledgments	22
Related GAO Products		24
Tables	Table 1: Air Force Initiatives and Projected Completion Dates	7

---

---

## Abbreviations

CREP	Contract Repair Enhancement Program
DOD	Department of Defense
DREP	Depot Repair Enhancement Program

---

---



G A O

Accountability \* Integrity \* Reliability

United States General Accounting Office  
Washington, D.C. 20548

National Security and  
International Affairs Division

B-281460

November 18, 1999

Congressional Committees

Section 347 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 requires the secretary of each military department to submit to the Congress a schedule for implementing best commercial inventory practices for the acquisition and distribution of secondary inventory items.<sup>1</sup> Best commercial practices are defined as practices that enable the Department to reduce inventory levels while improving the responsiveness of the supply system to user needs. Section 347 further requires that the schedule provide for implementation of such best practices to be completed within 5 years of its enactment, or by October 17, 2003. The act also requires us to evaluate the extent to which the secretary of each military department has complied with the act's requirements.

In this report, we discuss our evaluation of the Air Force's best practices implementation schedule for the acquisition and distribution of secondary inventory items, which the Secretary of the Air Force submitted to the Congress on July 19, 1999.<sup>2</sup> Specifically, we (1) determined the extent to which the schedule responds to the provisions of the act and (2) identified specific elements of a management framework needed for effective implementation and oversight of the Air Force's best practice initiatives.

---

## Results in Brief

The Air Force's schedule is generally responsive to the act. It describes 17 initiatives that address the acquisition and distribution of secondary items that the Air Force manages, and with one exception, provides for implementation of these initiatives to be completed within 5 years.<sup>3</sup> The initiatives are aimed at reducing the Air Force's infrastructure and

---

<sup>1</sup>Secondary inventory includes spare parts, clothing, and medical supplies to support Department of Defense (DOD) forces worldwide.

<sup>2</sup>We are providing separate reports on the Army, Air Force, and Navy best practice implementation schedule.

<sup>3</sup>The Pipeline Tracking Analysis and Metrics initiative is planned to be completed between 2004 and 2006.

improving the maintenance, information management, and acquisition processes.

Though generally responsive to the act's requirements, the Air Force's schedule provides a management framework that lacks an overall strategy and specific elements needed to assess implementation progress, measure success, and identify needed changes. While the schedule's initiatives are linked to higher level Air Force logistics goals and objectives, there is no strategy that ensures the efforts are coordinated, nor are specific performance goals and baselines established to measure the overall results of the initiatives. In prior work,<sup>4</sup> we noted that the lack of a detailed management framework contributed to DOD's difficulty in implementing new initiatives. The Government Performance and Results Act offers a model for developing an effective management framework through the use of strategic plans and establishment of performance measures to assess the results of the initiatives and improve the likelihood of successful implementation.

So that progress and results information is available to the Congress and DOD managers, we are recommending that the Secretary of the Air Force develop a management framework for implementing these initiatives that would include a comprehensive strategy and performance plans.

---

## Background

To provide reparable parts to support its operations, the Air Force uses an extensive logistics system that is based on procedures and concepts that have evolved over time. Reparable parts are expensive items, such as hydraulic pumps, navigational computers, wing sections, and landing gear, that can be fixed and used again. The Air Force's logistics system, often referred to as a logistics pipeline or supply chain, consists of a number of interrelated activities that provide parts where and when they are needed.<sup>5</sup> These activities include the purchase, storage, repair, and distribution of parts, which together require billions of dollars of investments in

---

<sup>4</sup>*Defense Inventory: DOD Could Improve Total Asset Visibility Initiative With Results Act Framework* (GAO/NSIAD-99-40, Apr. 12, 1999).

<sup>5</sup>The Air Force also relies on this pipeline for consumable parts that are not intended for repair, such as screws, fuses, clothing, and food. Some of these are used extensively to fix reparable parts and aircraft. The Defense Logistics Agency provides most of the consumable parts that Air Force repair activities use and handles a large portion of the warehousing and distribution of reparable parts.

---

personnel, equipment, facilities, and inventory. In 1998, DOD reported that the Air Force's secondary inventory was valued at \$25.9 billion, or 42 percent of DOD's total secondary inventory.<sup>6</sup>

Since 1990, we have identified DOD's management of secondary inventories as a high-risk area because levels of inventory were too high and management systems and procedures were ineffective.<sup>7</sup> In addition, our financial statement audits have identified continuing significant problems with the integrity of DOD's inventory data. For example, we reported that inaccurate inventory data resulted from weaknesses in DOD's procedures relied on to maintain visibility over, and conduct physical counts of, on-hand inventories. Until these problems are effectively resolved, DOD's ability to reliably measure and assess performance will continue to be impaired.<sup>8</sup> While DOD has made some improvements, these general conditions still exist, and this area remains on our high-risk list.<sup>9</sup> We have reported that adopting best business practices in inventory management and improving the reliability of financial management information are key steps toward solving these problems.

The Congress has recently taken specific actions to encourage DOD to adopt best commercial practices to improve its inventory management. The National Defense Authorization Act for Fiscal Year 1998 required the Director of the Defense Logistics Agency to develop and submit to the Congress a schedule for implementing best commercial practices for the acquisition and distribution of nine categories of consumable-type

---

<sup>6</sup>Inventory value reported in the *Department of Defense Supply System Inventory Report*, Sept. 30, 1998. The Air Force Working Capitol Fund financial statements report this inventory value at \$19.8 billion.

<sup>7</sup>In 1990, we began a special effort to review and report on the federal program areas that we identified as high risk because of vulnerabilities to waste, fraud, abuse, and mismanagement. This effort, which was supported by the Senate Committee on Government Affairs and the House Committee on Government Reform, brought a much-needed focus to problems that were costing the government billions of dollars.

<sup>8</sup>*Results Act: DOD's Annual Performance Plan for Fiscal Year 1999* (GAO/NSIAD-98-188R, June 5, 1998), *DOD Financial Management: More Reliable Information Key to Assuring Accountability and Managing Defense Operations More Efficiently* (GAO/T-AIMD/NSIAD-99-145, Apr. 14, 1999), and *Department of Defense: Status of Financial Management Weaknesses and Actions Needed to Correct Continuing Challenges* (GAO/T-AIMD/NSIAD-99-171, May 4, 1999).

<sup>9</sup>*Major Management Challenges and Program Risks: Department of Defense* (GAO/OCG-99-4, January 1999).

supplies. The Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 placed a similar requirement on the secretary of each military department, with implementation to be completed by October 17, 2003.

DOD is working to adopt best practices in its operations. In November 1997, the Secretary of Defense issued the Defense Reform Initiative report, which identified a number of reengineering initiatives aimed at adopting modern business practices to achieve world-class standards of performance. In addition, the DOD performance plan for fiscal year 2000 noted that the inventory supply system is larger than required to support today's smaller force structure and outlined goals to reduce inventory levels and streamline infrastructure. In March 1999, the Under Secretary of Defense (Acquisition Reform) stated that DOD needed "a revolution in business affairs . . . that embodies the best of modern business practices, the ability to access the full range and scope of technologies to meet the speed and agility demanded by the new battlespace, and an absolute commitment to finding the best, most efficient means of delivering goods and services to our warfighters."

---

## Air Force's Schedule Generally Responds to the Act's Requirements

The Air Force's schedule is generally responsive to the requirements of the act. It contains 17 initiatives that address the acquisition and distribution of secondary inventory items the Air Force manages and provides for implementation of these initiatives to be completed within 5 years, with one exception.<sup>10</sup> The initiatives are aimed at improving the maintenance, information management, and acquisition processes and reducing infrastructure. For example, the Contract Repair Enhancement Program initiative is designed to reduce not only the time it takes to provide a customer with a needed item (called logistics response time) but also the number of days it takes to repair items. Another initiative is intended to track items removed from aircraft through the repair pipeline until they are ready for reissue, as well as track items ordered until they are received by the customer.

For most of the initiatives, the schedule provided a description; specific goals and objectives; linkage to higher level Air Force goals and objectives;

---

<sup>10</sup>The final phase of the Pipeline Tracking Analysis and Metrics System is dependent on receiving 2 to 3 years of data from other information management initiatives. Therefore, implementation is expected to be completed between 2004 and 2006.

an estimate of the portion of inventory to be affected by the initiative; and general outcome measures, such as increased readiness. For a few initiatives, the schedule provided the accountable organization and interim milestones to measure progress. The schedule also contained a description of the inventory management functions the initiatives would affect and projected dates for completion. Table 1 lists the initiatives and the projected dates for implementation to be completed. (See app. I for a description of each initiative.)

**Table 1: Air Force Initiatives and Projected Completion Dates**

<b>Initiative category</b>	<b>Initiative</b>	<b>Projected completion date</b>
<b>Maintenance</b>	Depot Repair Enhancement Program	Mar. 1998 <sup>a</sup>
	Contract Repair Enhancement Program	Sept. 2001
	Aircraft Repair Enhancement Program	Dec. 2000
<b>Information Management</b>	Integrated Maintenance Data System	Sept. 2003
	Integrated Logistics System-Supply	Sept. 2001
	Pipeline Tracking Analysis and Metrics System	2004–2006
	Execution and Prioritization of Repair Support System	July 2001
	Merger of D041 and D062 Systems	Sept. 1999
	Requirements Management System	Jan. 2000
	<b>Outsourcing or Otherwise Reducing Infrastructure</b>	Virtual Prime Vendor
Reengineering Supply Support Process		June 2002
Express Transportation		Dec. 1999
Depot Maintenance Consolidation		Sept. 2000
Regional Supply Squadron		July 2002
Supply and Transportation Unit Reengineering		Sept. 2001
<b>Acquisition</b>	Corporate Contracts	June 1999
<b>Other</b>	Logistics Transformation and Functional Integration	Mar. 2000

<sup>a</sup>Although formally completed in March 1998, the Air Force continues to examine potential improvements.



---

## Management Framework Is Key to Implementing Initiatives

The Air Force's schedule for implementing its initiatives provides a management framework that lacks an overall strategy and specific elements needed to assess implementation progress, measure success, and identify needed changes. The Government Performance and Results Act can provide a model for developing an effective management framework to guide the implementation of the initiatives and to provide the Congress and DOD managers with information on progress and results.

---

## Schedule Provides a Limited Management Framework

In our past work, we reported that the lack of a management framework containing an overall strategy and outcome-oriented goals and performance measures contributed to DOD's difficulty in implementing new initiatives. For example, we reported that DOD did not have an adequate management framework to clearly determine the progress being made in achieving the Total Asset Visibility initiative goals and that the initiative's strategic and implementation plans were inadequate.<sup>11</sup> As a result, DOD managers did not have a clear picture of the initiative's implementation status or know how various initiatives within each service contributed to achieving overall DOD goals and objectives. In addition, we reported that there was confusion over who would use the system and how it would be used.

The schedule represents a collection of best practice initiatives the Air Force plans to complete within the next 5 years to improve the acquisition and distribution of secondary supply items managed by the Air Force. While the schedule included goals and objectives for each initiative, most were stated in very general terms. For example, the Express Transportation initiative is designed to replace the current way items are delivered with faster commercial or in-house air delivery, which could reduce inventories and increase unit readiness ratings. However, the schedule included no specific performance measures or baselines for these goals. Without this information, it is difficult to determine the impact these initiatives may have on overall Air Force operations. Also, objective information on implementation progress and achievement of desired outcomes may not be available to the Congress and defense managers.

---

<sup>11</sup>Total Asset Visibility is a DOD-wide initiative to provide users with timely and accurate information on the location, status, and identity of units, personnel, equipment, and supplies. For additional information, see *Defense Inventory: DOD Could Improve Total Asset Visibility Initiative With Results Act Framework* (GAO/NSIAD-99-40, Apr. 12, 1999).

---

In some cases, the schedule did provide some elements of a management framework. Each initiative was linked to Air Force logistics improvement goals, which the Air Force has aligned with the DOD Logistics Strategic Plan. The schedule also provided a general estimate of what portions of the existing inventory may be affected by each initiative. Also, five initiatives contained interim actions and milestones that could be used to measure progress toward full implementation, and four initiatives had specific results and outcome measures that could be used to assess whether the initiatives were achieving the desired results.

---

## Results Act Management Framework

The Results Act framework generally consists of establishing strategic plans, performance plans, and mechanisms for measuring program progress and results. Such a framework for the Air Force's initiatives would include (1) establishing broad general initiative goals and objectives, (2) linking the goals to overall DOD goals and objectives, (3) establishing quantifiable performance measures and baselines to assess whether the initiatives are achieving desired results, (4) defining levels of accountability and responsibility for implementing the initiatives and identifying the resources that will be required to achieve goals, (5) establishing milestones necessary to measure progress toward full implementation, and (6) defining an evaluation plan for periodically comparing actual results to established goals and objectives. This information would allow the Congress and other decisionmakers to measure initiative implementation progress and to determine whether the initiatives are achieving their desired results.

In addition to these potential benefits, considering the initiatives as interrelated efforts maximizes their systemwide improvement potential. Our prior work on best inventory management practices has shown that efforts to reengineer a logistics system are more successful when various logistics activities are viewed as a series of interrelated processes rather than isolated functional areas.<sup>12</sup> For example, when one airline began changing the way it purchased parts from suppliers, it considered how the changes would affect mechanics in repair workshops. Additionally, airline officials described how a combination of supply chain improvements could lead to continuous improvements. They also described how culture changes, improved data accuracy, and more efficient processes lead to

---

<sup>12</sup>*Inventory Management: DOD Can Build on Progress by Using Best Practices for Repairable Parts* (GAO/NSIAD-98-97, Feb. 27, 1998).

---

reductions in inventories and complexity of operations. These reductions can lead to further efficiencies and process improvements.

---

### One Initiative Can Assist in Developing Needed Management Framework

The Logistics Transformation and Functional Integration initiative, which began in March 1999, is a 1-year study designed to identify the steps needed to reengineer the Air Force logistics system and identify opportunities for value-added changes. According to the schedule, this initiative will use integrated supply chain management techniques to identify "... the means to accurately predict requirements, acquire the right amount of inventory, rapidly move serviceable and repairable items, and select the optimum path for each item as it moves through the supply chain." If successful, this initiative might produce many of the management framework components discussed earlier, such as an overarching improvement strategy and integrated implementation plans. It is also expected to identify outcome measures that focus on customer support and optimize operating costs.

---

### Conclusions

The Air Force's schedule generally meets the requirements of the act by providing information on 17 initiatives that, with one exception, are expected to have implementation completed within 5 years. Achieving the Air Force's goal of improved management of secondary items will depend on the successful implementation of these initiatives. Implementation of the initiatives is generally linked to and guided by the Air Force Logistics Support Plan. However, the strategy set forth in that document is general in nature, and implementation and assessment of the Air Force's initiatives would benefit from more specific guidance. The Results Act provides a model for developing a more effective management framework that could provide this information and allow for more meaningful evaluations of progress and results.

---

### Recommendations

To provide a mechanism to improve the potential for successful implementation of Air Force initiatives and measure results, we recommend that the Secretary of the Air Force develop a management framework for implementing best practice initiatives based on the principles embodied in the Results Act. Specifically, the management framework should include

- a strategy that is directly linked to top-level DOD goals and objectives and that recognizes the interrelationship of the initiatives and the

overall impact the initiatives will have on the Air Force's logistics pipeline, such as reduced pipeline time, improved customer service, and reductions in total inventory and

- a performance plan that includes clearly defined goals and objectives, defined levels of accountability, quantifiable performance measures and baselines, interim schedule milestones, and plans to periodically assess the overall impact the initiatives have achieved in reducing inventory levels while improving the responsiveness of the supply system to user needs.

---

## Agency Comments and Our Evaluation

In commenting on a draft of this report, DOD concurred with our recommendation and stated that the Air Force is revising its Logistics Support Plan to more clearly articulate the relationships, goals, objectives, and metrics of logistics initiatives. It will also provide regularly scheduled review and analysis to the Air Force Deputy Chief of Staff (Installations and Logistics). DOD further stated that approval of the expanded Air Force Logistics Support Plan structure by the Air Force Deputy Chief of Staff (Installations and Logistics) is anticipated during the second quarter of fiscal year 2000. DOD's comments are included in their entirety as appendix II.

DOD did express concern that the draft report implied that the current management framework for implementing the initiatives included in the schedule was inadequate. DOD stated that the initiatives are linked to Air Force improvement goals, which, in turn, are aligned with the DOD Logistics Strategic Plan. Further, DOD cited results that have been achieved and asserted that such results would not have been possible without adequate management oversight. Our report states that the schedule links each initiative to Air Force improvement goals, and those goals are aligned with higher level DOD goals and objectives. However, the goals and objectives for most initiatives were stated in broad terms and related performance measures were not included in the schedule to assess progress and results. Without this information, it will be difficult to determine whether the initiatives are improving overall Air Force operations.

---

## Scope and Methodology

Our analysis of the Air Force's schedule was based on the information contained in the schedule, discussions with Air Force officials, and our prior work comparing DOD and private sector logistics practices.

---

We also identified areas in which the schedule could be improved to guide initiative implementation and improve management of secondary inventory items. Specifically, we examined the schedule in terms of outcome-oriented Results Act principles to determine whether the schedule provided an overall strategy for adopting best practices and contained key elements to guide implementation. We did not assess the merits of the Air Force's initiatives or the initiatives' likelihood for success.

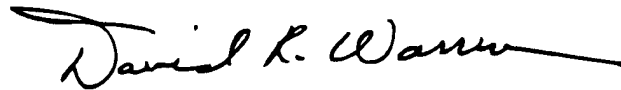
We interviewed officials and obtained information about ongoing and planned initiatives at Air Force Headquarters in Washington, D.C.; the Air Force Materiel Command at Wright-Patterson Air Force Base in Ohio; Warner Robins Air Logistics Center at Robins Air Force Base in Georgia; and the Air Combat Command at Langley Air Force Base in Virginia. In addition, we used information from our related reports that have been issued since 1993 and are listed in GAO related products at the end of the report.

We conducted our review from November 1998 to August 1999 in accordance with generally accepted government auditing standards.

---

We are sending copies of this report to the appropriate congressional committees; the Honorable William S. Cohen, Secretary of Defense; the Honorable F. Whitten Peters, Secretary of the Air Force; Lieutenant General Henry T. Glisson, Director, Defense Logistics Agency; and Jacob Lew, Director, Office of Management and Budget. We will also make copies available to others upon request.

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



David R. Warren, Director  
Defense Management Issues

---

List of Congressional Committees

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

The Honorable Ted Stevens  
Chairman  
The Honorable Daniel K. Inouye  
Ranking Minority Member  
Subcommittee on Defense  
Committee on Appropriations  
United States Senate

The Honorable Floyd Spence  
Chairman  
The Honorable Ike Skelton  
Ranking Minority Member  
Committee on Armed Services  
House of Representatives

The Honorable Jerry Lewis  
Chairman  
The Honorable John P. Murtha  
Ranking Minority Member  
Subcommittee on Defense  
Committee on Appropriations  
House of Representatives

---

# Summary of Air Force Initiatives

---

The Air Force's best practices implementation schedule lists 17 initiatives. The initiatives are aimed at improving the Air Force's maintenance, information management, and acquisition processes; transferring logistics activities to the private sector; or otherwise reducing infrastructure. The schedule describes each initiative and identifies goals and objectives, plans, areas of improvement, the portion of inventory affected, and projected dates for implementation to be completed.

---

## Maintenance

Three initiatives in the Air Force's schedule are designed to improve Air Force and contractor depot maintenance processes. Each initiative is focused on a different aspect of depot-level maintenance: Air Force organic component repair, aircraft maintenance, and contractor repair operations. We recently issued a report discussing the status of these three initiatives.<sup>1</sup>

---

## Depot Repair Enhancement Program

The Air Force considers the Depot Repair Enhancement Program (DREP) initiative its standard repair process for organic depot repair of aircraft component parts. The key principles of the program are a standardized repair process, focus on the movement of an asset through the repair process, daily repair based on greatest Air Force need, supply support on the shop floor, standardized functions with defined roles and responsibilities, alignment of responsibility and authority of key players, standardized data systems, and customer performance measures. The program is intended to reduce the time it takes a customer to receive an order, as well as increase unit readiness. This initiative began in June 1996 and in March 1998 was considered completed, although improvements are ongoing.

---

## Contract Repair Enhancement Program

The Contract Repair Enhancement Program (CREP) initiative is for depot repair of aircraft component parts by contractors. Its purpose is to improve processes and thus improve customer support while reducing repair times and inventory costs. The Air Force has established specific CREP goals for fiscal years 1999 and 2000, such as to reduce the time it takes for a requisitioning activity to receive an order. The program was started in February 1996, and implementation is to be completed by September 2001.

---

<sup>1</sup>*Air Force Depot Maintenance: Management Changes Would Improve Implementation of Reform Initiatives* (GAO/NSIAD-99-63, June 25, 1999).

---

**Aircraft Repair  
Enhancement Program**

The Aircraft Repair Enhancement Program initiative is designed to be the Air Force's program to improve depot maintenance of aircraft by such steps as streamlining the process for aircraft repair, improving requirement visibility and planning, and standardizing a programmed depot maintenance scheduling system. The program's goals are to reduce the time an aircraft is in depot repair, the number of aircraft at the depot, and material to support aircraft, while delivering aircraft on schedule. This initiative was started in October 1998, and implementation is to be completed by December 2000.

---

**Information  
Management**

Six initiatives in the Air Force's schedule involve improvements to data systems and forecasting capability. Two of these initiatives are for new data systems, one initiative is designed to support the repair-on-demand philosophy in the DREP and CREP initiatives, and three initiatives are to combine systems. For example, over 30 data systems, which provide data for 2 systems, were analyzed to determine where changes were needed and which interfaces could be eliminated.

---

**Integrated Maintenance  
Data System**

The Integrated Maintenance Data System initiative is designed to be the Air Force's system for collecting and processing maintenance data for production support of assets such as aircraft, engines, and support equipment. It is intended to combine historical and legacy data contained in other databases to enhance maintenance production, thus improving the flow, accuracy, and availability of essential logistics information. This initiative is designed to reduce the time it takes for a customer to receive an order. This initiative was started in May 1995, and implementation is to be completed by September 2003.

---

**Integrated Logistics  
System-Supply**

The Integrated Logistics System-Supply initiative is a new system for base-level supply operations that is to replace the Standard Base Supply System. The new system is designed to use commercial off-the-shelf products to provide a wider range of processing options to ensure an integrated logistics system. This initiative started in February 1997, and implementation is to be completed by September 2001.



---

**Pipeline Tracking Analysis  
and Metrics System**

The Pipeline Tracking Analysis and Metrics System initiative is designed to be a new single integrated information management and decision support system. The system is to provide more timely information on the performance of the various segments of the logistics pipeline (supply, distribution, transportation, and maintenance), produce decision support metrics, and track individual assets throughout the pipeline (from removal to return of an asset to serviceable condition and issuance of the asset). It is intended to reduce the time it takes for a customer to receive an order and to be completed in three phases. Implementation of the first phase is to be completed by June 2000; the second phase by June 2001; and the third phase, which depends on other data systems to provide 2 to 3 years of data, between 2004 and 2006. According to an Air Force official, this third phase is an ongoing improvement phase to use and validate data generated from new systems coming on-line.

---

**Execution and Prioritization  
of Repair Support System**

The Execution and Prioritization of Repair Support System initiative is designed as an automated system to prioritize repair and distribution of repairable aircraft parts based on weapon system availability. It is to identify and prioritize customer needs, determine the ability of existing resources to support the repair, and provide the data and mechanism that are needed to move an item into repair. This initiative is intended to maximize aircraft availability and reduce the time it takes for a customer to receive an order. It is designed to support the repair-on-demand philosophy of DREP and CREP. This initiative started in June 1996, and implementation is to be completed by July 2001.

---

**Merger of D041 and D062  
Systems**

Upon completion of the merger of the D041 repairable item computation system and the D062 financial system, all secondary item requirements (repairable and consumable) and budgeting processes should be integrated into a single process. This merger is designed to provide more accurate planning for repairable items by accurately forecasting requirements for the consumable items that are used to repair the repairable parts. This initiative is intended to improve requirement forecasting and unit readiness ratings and reduce the time it takes for a requisitioning activity to receive an order. This initiative started in November 1996, and implementation is to be completed by September 1999.

---

**Requirements Management System**

The Requirements Management System initiative is designed to combine the systems for secondary item requirements computation and for item stratification into a single system. For example, items that make up a weapon system could be stratified by cost, level of repair, or time to repair. It is designed to provide more timely updates on items, as well as item and summary level projected expenditures for depot level repair and buy decisions. It is also to automate as many manual tasks as possible while enhancing requirement accuracy. This initiative is intended to replace the D041 system and provide a more responsive requirements determination process that better serves customer needs by implementing a modern, near real-time, user friendly system. It started in July 1997 and is projected to be complete by January 2000.

---

**Outsourcing or Otherwise Reducing Infrastructure**

Six initiatives involve moving work to the private sector or otherwise reducing inventory holdings and/or infrastructure. Three initiatives call for private industry support to government. The other three are intended to reduce existing government infrastructure. For example, the Depot Maintenance Consolidation initiative is the transfer of two Air Force depots' workload to the remaining three depots.

---

**Virtual Prime Vendor**

The Virtual Prime Vendor initiative is designed to allow the use of a single contractor to supply parts to repair shops and depot maintenance facilities for Air Force aircraft. It is to allow the contractor to use preexisting distribution networks and state-of-the-art information technology systems. This initiative is intended to increase the effectiveness of the supply system and reduce the time it takes to fill customers' orders. This initiative started in October 1998 and is still under development, but a contract is to be awarded by July 2000.

---

**Reengineering Supply Support Process**

The Reengineering Supply Support Process initiative is designed to support the management of spare parts by certifying contractors rather than the government to manage parts for certain Air Force weapon systems. Weapon systems being considered are the C-17, C-130J, F-22, and AWACS. This initiative is intended to reduce order and ship time and the time it takes for a requisitioning activity to receive an order and increase unit readiness ratings. This initiative started in July 1998, and implementation is to be completed by June 2002.

---

**Express Transportation**

Express Transportation is an initiative designed to use commercial and in-house air transportation to deliver parts faster to Air Force customers in the continental United States and overseas. This initiative is designed to increase unit readiness ratings and reduce the time it takes for a requisitioning activity to receive an order. The U.S. and overseas systems are on separate implementation timetables. The continental United States delivery system was implemented on October 1998, with improvements ongoing. The overseas contract was awarded in July 1998, with a performance start of October 1998. A test of the overseas concept is scheduled for the first quarter of fiscal year 2000.

---

**Depot Maintenance Consolidation**

The Depot Maintenance Consolidation initiative is transferring the workload from two air logistics centers, which are being closed, to the three remaining centers and the Army. This initiative is intended to generate a 10-percent savings by identifying new processes, lowering general and administrative costs, improving efficiency, and increasing output. Ultimate goals are to reduce operating costs, depot repair cycle time, and the time it takes for a requisitioning activity to receive an order. The initiative started in October 1997, and implementation is to be completed by September 2000.

---

**Regional Supply Squadron**

The Regional Supply Squadron initiative is designed to consolidate requisitioning, funding, computer support, equipment management, and record maintenance into four regional squadrons. These squadrons are to provide peacetime, contingency, and major regional conflict support for units within or deployed to each area. The regions are under the Air Combat Command, the Air Material Command, the Pacific Air Force, and the U.S. Air Force Europe. The goals of regionalization are to eliminate redundancy, save manpower, streamline processes, improve core tasks, leverage technology, and improve customer support. This initiative started in August 1997, and implementation is to be completed by July 2002.

---

**Supply and Transportation Unit Reengineering**

The Supply and Transportation Unit Reengineering initiative is designed to eliminate duplicate efforts in base level cargo shipping, delivery, pickup, and receiving, thus reducing time, manpower, and vehicles. The initiative is being done in two phases. Phase one is examining pickup, delivery, cargo in-check, and receiving processes. Phase two is verifying the merits of express carrier direct delivery to flightline organizations and the value of

---

integrating outbound shipping processes. This initiative started in July 1998 at the Air Combat Command, with testing in other major commands ongoing. The projected completion date for this initiative is under evaluation; however, if adopted Air Force-wide, it is intended to be implemented within the time period set by section 347.

---

## Acquisition

---

### Corporate Contracts

The Corporate Contracts initiative is designed to consolidate government requirements for spares or repair work from a single contractor into one long-term contract with preestablished pricing. A corporate contract would replace multiple contracts, combining requirements for several Department of Defense customers. This would allow multiple customers to order from a single contract. This initiative is intended to reduce cost and acquisition time for the three remaining air logistics centers. This initiative started in November 1998, and implementation is to be completed by June 1999.

---

## Other

---

### Logistics Transformation and Functional Integration

The Logistics Transformation and Functional Integration initiative is a study designed to identify improvements needed in logistics processes and develop an overall strategy for implementing these improvements. The current processes and improvements needed are to be evaluated by a team of contractor and Air Force members. The team is to use integrated logistics chain management techniques to develop processes that accurately predict requirements, acquire the right amount of inventory, rapidly move serviceable and repairable items, and select the optimum path for each item as it moves through the logistics chain. This initiative is intended to optimize performance and cost while delivering support to customers at the right time, cost, and condition. The study started in March 1999 and is to be completed in March 2000.

# Comments From the Department of Defense



OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON  
WASHINGTON DC 20301-3000

OCT 21 1999

Mr. David R. Warren  
Director, Defense Management Issues  
National Security and International  
Affairs Division  
U.S. General Accounting Office  
Washington, D.C. 20548

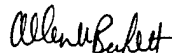
Dear Mr. Warren:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) Draft Report, "DEFENSE INVENTORY: Improved Management Framework Needed to Guide Air Force Best Practices Initiatives," dated September 17, 1999 (GAO Code 709383/OSD Case 1898). The DoD generally concurs with the draft report.

The DoD agrees with the draft report's conclusion that the Air Force's schedule is generally responsive to Section 347 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999. However, the DoD is concerned with the draft report's implication that the current management framework is inadequate.

As cited in the draft report, each initiative was linked to Air Force logistics improvement goals, which the Air Force has aligned with the DOD Logistics Strategic Plan. In recent years, the Air Force has reduced its order ship times, achieved increased asset visibility, and reduced inventory levels. These successes would not have been achieved without adequate management oversight. The DoD does agree with the thrust of the draft report recommendations that Air Force's existing management framework for implementing the initiatives outlined in the schedule could be institutionalized in a more formal process. Detailed comments on the recommendations are included in the attachment. The DoD appreciates the opportunity to comment on the draft report.

Sincerely,

  
for Roger W. Kallock  
Deputy Under Secretary  
of Defense (Logistics)

Attachment



GAO DRAFT REPORT - DATED SEPTEMBER 17, 1999  
GAO CODE 709383/OSD CASE 1898

"DEFENSE INVENTORY: IMPROVED MANAGEMENT FRAMEWORK  
NEEDED TO GUIDE AIR FORCE BEST PRACTICE INITIATIVES"

DEPARTMENT OF DEFENSE COMMENTS TO THE RECOMMENDATIONS

**RECOMMENDATION:** The GAO recommended that the Secretary of the Air Force develop a management framework for implementing best practice initiatives based on the principles embodied in the Results Act. Specifically, the management framework should include:

(1) a strategy that is directly linked to top-level DoD goals and objectives and that recognizes the interrelationship of the initiatives and the overall impact the initiatives will have on the Air Force's logistics pipeline, such as reducing pipeline time, improved customer service, and reductions in total inventory; and

(2) a performance plan that includes clearly defined goals and objectives, defined levels of accountability, quantifiable performance measures and baselines, interim schedule milestones, and plans to periodically assess the overall impact the initiatives have achieved in reducing inventory levels while improving the responsiveness of the supply system to user needs.

**DOD RESPONSE:** Concur. The Air Force is revising the Air Force Logistics Support Plan, which is the tool to implement greater strategic direction. The Air Force Logistics Support Plan is being expanded to more clearly articulate the relationships, goals, objectives, and metrics of logistics initiatives and to provide regularly scheduled review and analysis to the United States Air Force Deputy Chief of Staff (Installations and Logistics). Approval of the expanded Air Force Logistics Support Plan structure by the United States Air Force Deputy Chief of Staff (Installations and Logistics) is anticipated during the second quarter of Fiscal Year 2000.

Now on p. 10

---

# GAO Contacts and Staff Acknowledgments

---

---

## GAO Contacts

Charles Patton, (202) 512-4412  
Robert Repasky, (202) 512-9868

---

## Acknowledgments

In addition to those named above, Leslie Gregor, Willie Cheely, and William Woods made key contributions to this report.

---

---



---

# Related GAO Products

---

*Financial Management: Better Controls Essential to Improve the Reliability of DOD's Depot Inventory Records (GAO/AIMD-99-132, June 28, 1999).*

*Department of Defense: Status of Financial Management Weaknesses and Actions Needed to Correct Continuing Challenges (GAO/T-AIMD/NSIAD-99-171, May 4, 1999).*

*DOD Financial Management: More Reliable Information Key to Assuring Accountability and Managing Defense Operations More Efficiently (GAO/T-AIMD/NSIAD-99-145, Apr. 14, 1999).*

*Defense Inventory: DOD Could Improve Total Asset Visibility Initiative With Results Act Framework (GAO/NSIAD-99-40, Apr. 12, 1999).*

*Major Management Challenges and Program Risks: Department of Defense (GAO/OCG-99-4, Jan. 1999).*

*Inventory Management: More Information Needed to Assess DLA's Best Practice Initiatives (GAO/NSIAD-98-218, Sept. 2, 1998).*

*Results Act: DOD's Annual Performance Plan for Fiscal Year 1999 (GAO/NSIAD-98-188R, June 5, 1998).*

*Inventory Management: DOD Can Build on Progress by Using Best Practices for Repairable Parts (GAO/NSIAD-98-97, Feb. 27, 1998).*

*Defense Inventory Management: Expanding Use of Best Practices for Hardware Items Can Reduce Logistics Costs (GAO/NSIAD-98-47, Jan. 20, 1998).*

*Inventory Management: Greater Use of Best Practices Could Reduce DOD's Logistics Costs (GAO/T-NSIAD-97-214, July 24, 1997).*

*Inventory Management: The Army Could Reduce Logistics Costs for Aviation Parts by Adopting Best Practices (GAO/NSIAD-97-82, Apr. 15, 1997).*

*Defense Inventory Management: Problems, Progress, and Additional Actions Needed (GAO/T-NSIAD-97-109, Mar. 20, 1997).*

---

**Related GAO Products**

---

*Inventory Management: Adopting Best Practices Could Enhance Navy Efforts to Achieve Efficiencies and Savings (GAO/NSIAD-96-156, July 12, 1996).*

*Best Management Practices: Reengineering the Air Force's Logistics System Can Yield Substantial Savings (GAO/NSIAD-96-5, Feb. 21, 1996).*

*Inventory Management: DOD Can Build on Progress in Using Best Practices to Achieve Substantial Savings (GAO/NSIAD-95-142, Aug. 4, 1995).*