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DEFENSE LOGISTICS

Improved Oversight and Increased Coordination Needed to Ensure Viability of the Army's Prepositioning Strategy



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Why GAO Did This Study

Prepositioned military equipment and supplies on ships and overseas on land have become an integral part of the U.S. defense strategy. However, the Army's program has faced long-standing management challenges, including equipment excesses and shortfalls, invalid or poorly defined requirements, and maintenance problems. In Public Law 109-163, Congress required the Army to conduct an assessment of its prepositioning programs and required GAO to assess (1) whether the Army's report addressed the areas required by Congress, and (2) the major challenges the Army continues to face in its prepositioning program. GAO analyzed the Army's report and other information it obtained from the Joint Staff, the Army, and its subordinate commands to identify the issues affecting the Army's prepositioning program. GAO also visited prepositioned equipment sites in South Carolina, Europe, South Korea, and Kuwait.

What GAO Recommends

GAO is making recommendations to synchronize the Army's prepositioning strategy with overall department efforts and address issues including requirements determination, readiness reporting, need for a comprehensive facilities plan, and maintenance oversight. The Department of Defense (DOD) generally concurred with our recommendations but felt that further actions are unneeded. GAO disagrees and continues to believe that its recommended actions are warranted.

www.gao.gov/cgi-bin/getrpt?GAO-07-144.

To view the full product, 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.

DEFENSE LOGISTICS

Improved Oversight and Increased Coordination Needed to Ensure Viability of the Army's Prepositioning Strategy

What GAO Found

The Army's April 2006 report on the status of its prepositioning program addressed the areas required by Congress; for example, it included descriptions of operational capabilities, as well as inventory shortfalls expressed in terms of procurement costs. However, the Army significantly shifted its prepositioning strategy in the latter part of 2006, since that report was issued. According to the Army, this shift was based on insights gained from the 2006 Quadrennial Defense Review, but Army officials told us that budget reprogramming decisions and worsening Army-wide equipment shortfalls also influenced the expedited strategy revision. The Army's revised strategy proposes less reliance on heavy combat equipment afloat and the expansion of heavy equipment in Kuwait and Italy. As a result, the Army's April 2006 report to Congress is outdated, and neither Congress nor DOD should base funding decisions on it.

The Army faces several major strategic and management challenges as it revises and implements its prepositioning program. From a strategic perspective, the Army cannot gauge how well its emerging strategy will align with DOD plans currently under development. The Army plans to begin implementing its revised strategy by the end of 2006. DOD has a departmentwide prepositioning study underway intended to set strategy and joint doctrine, but this will not be completed for several months and it anticipates that the Army will have to modify its prepositioning strategy when the DOD-wide strategy is issued. As a result, the Army is at risk of resourcing requirements that may be superseded by the DOD strategy. Moreover, because prepositioning is linked to airlift, sealift, and basing, the Army's decisions will have an as-yet undetermined effect on these areas. In addition to these strategic concerns, the Army faces three key management challenges. First, the Army has yet to determine sound secondary item and operational project stock requirements, and to systematically measure and report readiness. While the Army has been taking steps to address long-standing requirements-determination problems in certain parts of its program, the effort was not finished when GAO completed its work. Without accurate requirements and systematic readiness reporting, Army managers are not able to determine the extent to which the existing inventory reflects what the Army needs. Second, the Army lacks a comprehensive plan for maintenance and storage facilities for prepositioned stocks, resulting in uncertain future facility requirements. In the interim, prepositioned stocks are being stored outside, resulting in higher maintenance costs. Finally, inadequate maintenance oversight of the Army's prepositioning program has raised concerns about the true condition of the equipment at some locations. Until these strategic and management challenges are addressed, the Army will face uncertain risks should new conflicts occur.

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United States Government Accountability Office
Washington, DC 20548

February 15, 2007

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

The Honorable Ike Skelton
Chairman
The Honorable Duncan L. Hunter
Ranking Minority Member
Committee on Armed Services
House of Representatives

With fewer troops permanently stationed overseas, the repositioning of stocks of equipment and supplies has become integral to the ability of the Department of Defense (DOD) to project forces into conflict areas faster. DOD has acknowledged the need to reorient its capabilities to respond to a wider range of challenges. In the 2005 National Defense Strategy, the department indicated that repositioning will continue to be an important aspect of DOD's force posture in the future.¹ Additionally, a DOD analysis undertaken to support the achievement of operational timelines during major combat operations reaffirmed the relevance of repositioned stocks.² As a result of this mobility analysis as well as recommendations arising from a September 2005 GAO report on repositioning, DOD determined that it would reassess its existing repositioning program to identify the optimal mix of capabilities needed to support the defense strategy in the future.³

¹ DOD, *The National Defense Strategy of the United States of America* (March 2005).

² This analysis was performed in the Mobility Capabilities Study, released in December 2005.

³ GAO, *Defense Logistics: Better Management and Oversight of Repositioning Programs Needed to Reduce Risk and Improve Future Programs*, [GAO-05-427](#) (Washington, D.C.: Sept. 6, 2005).

The Army, the Marine Corps, and the Air Force have drawn heavily from their prepositioned stocks to support Operations Iraqi Freedom and Enduring Freedom. As we testified in March 2006, these sustained military operations are taking a toll on the condition and readiness of military equipment, and the Army and Marine Corps face a number of ongoing and long-term challenges that will affect the timing and cost of equipment repair and replacement.⁴ A number of reports in recent years by GAO and other audit agencies (see app. II) have highlighted numerous long-standing problems facing DOD's prepositioning programs, including a lack of centralized operational direction; unreliable reporting of the readiness of prepositioned equipment sets; inaccurate reporting of the maintenance condition of equipment; equipment excesses at some prepositioned locations; systemic problems with the requirements determination and inventory management; and some Army prepositioned stocks having a maintenance condition that was considerably below the goal of 90 percent mission capability. In our September 2005 report, we recommended that DOD develop a DOD-wide strategy and that the Army repair equipment in poor maintenance condition.⁵

The National Defense Authorization Act for Fiscal Year 2006 directed the Army to conduct an assessment of its prepositioning programs, and the Army did so. The Army's report, submitted in April 2006, focused on specific items required by the law including how such programs were configured to support the evolving goals of the Army, including key operational capabilities; whether there were any shortfalls, and if so, how the Army planned to mitigate them; the maintenance condition of prepositioned equipment and supplies, including the procedures used to ensure that maintenance was performed; the adequacy of storage and maintenance facilities; and the adequacy of oversight mechanisms and internal management reports. The Army's report was based on the Army Prepositioned Stocks Strategy 2012, the Army's underlying strategy at that time, which laid out a strategic roadmap for the Army's prepositioning program through 2012. Strategy 2012 called for the prepositioning of five heavy brigade combat team sets, multiple support units, and associated sustainment stocks to provide the strategic responsiveness required to attain the DOD joint swiftness objectives. These stocks are prepositioned around the world, primarily at land sites in Europe, Northeast Asia, and

⁴ GAO, *Defense Logistics: Preliminary Observations on Equipment Reset Challenges and Issues for the Army and Marine Corps*, [GAO-06-604T](#) (Washington, D.C.: Mar. 30, 2006).

⁵ [GAO-05-427](#).

Southwest Asia, and aboard prepositioning ships afloat near Guam and Diego Garcia. During the course of our review and subsequent to the Army's issuance of its April 2006 report to Congress, however, the Army began revising its prepositioning program and drafting a revised strategy, the Army Prepositioned Stocks Strategy 2013. These changes were still under way as we completed our work.

The 2006 Authorization Act also required GAO to assess the Army's report and identify any issues facing the program for the future.⁶ We provided a briefing to your staff on our preliminary assessment of the Army's report and issues facing the program. The present report expands and updates that information by assessing (1) whether the Army's report addressed the areas required by Congress, and (2) major challenges the Army continues to face in its prepositioning program.

Our work is based on our analysis of the Army's report and other key documents identifying equipment shortfalls and maintenance condition, facility shortfalls, and contractor oversight; discussions with senior Army officials and commanders; and site visits to Army prepositioning sites in Charleston, South Carolina; Europe; South Korea; and Kuwait. We determined that the data we used were sufficiently reliable for the purpose of this report. We performed our work from February 2006 through October 2006 in accordance with generally accepted government auditing standards. A more detailed discussion of our scope and methodology is contained in appendix I.

Results in Brief

While the Army's April 2006 report to Congress on the status of its prepositioned program addressed the areas required by Congress, the report is now outdated because the Army has shifted its prepositioning strategy. As required by the National Defense Authorization Act for Fiscal Year 2006, the April 2006 report included descriptions of operational capabilities as outlined in the Army Prepositioned Stocks Strategy 2012, as well as inventory shortfalls expressed in terms of procurement costs. The report estimated that the Army would need well over \$4 billion to procure new equipment and replenish spare parts and other items, as well as

⁶ The Act (Pub.L. No. 109-163, § 351 (2006)) specifically required the Comptroller General to (1) determine whether the Army's report comprehensively addressed the required reporting items, and (2) determine the extent to which any shortfall or other issues reported by the Secretary of the Army or identified by the Comptroller General had been addressed including an assessment of any related plans to address shortfalls in the future.

provide new facilities in Kuwait, South Korea, and Charleston, South Carolina. The report also addressed the maintenance condition of prepositioned equipment, which had been a concern based on GAO's past work. The Army reported that stocks in South Korea had been repaired since GAO's previous review was performed. The Army's report also noted recent efforts to improve management and maintenance oversight of the program, including forming an independent team to inspect equipment and maintenance operations. However, since the report was submitted to Congress, the Army has been reexamining its overall prepositioning strategy. Based on recent reprogramming decisions as part of a DOD program review, its identification of servicewide equipment shortfalls, and insights gained from the 2006 Quadrennial Defense Review, the Army concluded in the summer of 2006 that its Prepositioned Stocks Strategy 2012 was no longer viable. It began work on a revised strategy in late August 2006.⁷ According to Army officials, the proposed strategy includes significant changes to the program, including less reliance on heavy combat equipment afloat, and the expansion of heavy combat equipment in Kuwait and Italy, along with continued reliance on stocks in South Korea. The Army is seeking to have an implementation plan for its new strategy in place by the end of 2006.

The Army faces major strategic and management challenges as it revises and implements its prepositioning program, including:

- **Inability to gauge its alignment with DOD-wide prepositioning strategy:** The Army's plan to implement its prepositioning strategy by the end of 2006 could result in investments for the prepositioning program that do not align with the anticipated DOD-wide prepositioning strategy because it will be several months ahead of overarching DOD-wide efforts. Strategy should be shaped from the top down. One of the key recommendations from our September 2005 report was that the department needed joint doctrine and an overarching strategy to lay a foundation for the programs of the services to ensure jointness and avoid duplication across the services. Consistent with our recommendation, DOD began a study with a broad charter in mid-2006 to evaluate a range of future prepositioning options, but that study was still underway when we completed our work. The John Warner National Defense Authorization Act for fiscal year 2007 required DOD to establish the strategic policy on the programs of DOD for the prepositioning of materiel and equipment mid-

⁷ The new strategy will be the *Army Prepositioned Stock Strategy 2013*.

April 2007.⁸ At the time we finished our work the Army was planning to implement its strategy by the end of 2006—months ahead of the DOD-wide effort. The most significant problem resulting from this timing is that the Army cannot be assured that its efforts will be aligned with DOD-wide efforts still ongoing. Even though DOD and Army officials told us they have coordinated their repositioning plans, the timing of the two strategies is not synchronized. As a result, DOD could be restricted in developing an optimal DOD-wide strategy because the Army strategy already exists or the Army could be at risk of filling requirements that will be superseded when the DOD-wide strategy is issued. Moreover, repositioning is interconnected with airlift, sealift, and basing, so the Army's decisions will have an as-yet undetermined effect on lift requirements and basing. Such potential problems are avoidable if the strategies are synchronized.

- **Need to determine sound secondary item and operational project stock requirements and systematically measure and report readiness:** Despite recent efforts to improve requirement setting, the Army has not yet determined reliable secondary item and operational project stock requirements. In its efforts to reassess secondary item requirements, the Army ran its requirements-determination model, called the Army War Reserve Automated Process, in 2005. It had not previously run the model since 1999, even though Army guidance at that time called for requirements to be updated every 2 years. Further, operational project stock requirements must be revalidated every 5 years, but the most recent revalidation for many of the projects was last conducted in 1998. However, in response to our recommendation in 2005 that this long-standing problem be addressed, the Army initiated a revalidation of its Operational Project Stocks in April 2006. The revalidation was still ongoing when we completed our work in October 2006. Also, while the Army measures readiness of prepositioned equipment programs by assessing inventory levels against requirements and the maintenance condition of on-hand equipment, the Army does not systematically measure or report readiness for the secondary item and operational project programs. This situation is largely unchanged since 1998, when we recommended that the Army develop readiness-reporting mechanisms for these programs.⁹ Without sound requirements or reporting mechanisms, the Army cannot reliably assess the impact of any shortfalls, the readiness of its programs, or make informed investment decisions about them.

⁸ Pub. L. No. 109-364, § 351 (2006).

⁹ GAO, *Military Prepositioning: Army and Air Force Programs Need To Be Reassessed*, GAO/NSIAD-99-6 (Washington, D.C.: Nov. 16, 1998).

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- **Need to identify maintenance and storage facility requirements:** The Army currently lacks a comprehensive repositioning storage and maintenance facilities plan. The maintenance and storage facility shortages it reported to Congress were based on the now obsolete Army Repositioning Strategy 2012. Army policy calls for the long-term storage of prepositioned equipment in controlled-humidity facilities, because outdoor storage results in substantially increased maintenance costs.¹⁰ Yet currently in Kuwait, storage facilities are being used to house command staff personnel while equipment is being stored outside, in harsh environmental conditions. The Army estimates that maintenance costs an extra \$24 million per year for the heavy brigade set in Kuwait because equipment is stored outside. In South Korea, despite an intensive effort to repair prepositioned assets and correct long-standing problems, almost one-third of the equipment continues to be stored outside, resulting in increased maintenance and costly corrosion. In contrast, part of the Army's new strategy includes a plan to store heavy equipment at a newly constructed site in Italy, to make use of a facility that had previously been left without a mission. Before these existing facilities problems can be addressed, however, the Army must determine how prepositioned equipment will be utilized and where it needs to be located. Army officials are considering using prepositioned equipment in Kuwait, South Korea, and Italy to support a rotational presence and training in these regions even as they continue to develop a repositioning implementation plan based on existing space and storage. According to Army officials, utilizing prepositioned equipment to support a rotational presence or for training increases the maintenance requirement and, therefore, the maintenance facilities needed. Depending on how the rotation is scheduled, however, it may concurrently reduce the requirement for humidity-controlled storage space. Furthermore, since an alternate South Korean repositioning site is being considered, the Army may be constructing facilities at its existing repositioning site at Camp Carroll that it does not need. Without a comprehensive facilities plan, the Army will not know the types and quantities of facilities it will need to store and maintain equipment at each location.
 - **Lack of maintenance oversight:** The Army reported to Congress that oversight of the program is provided by the Army Materiel Command and external agencies tasked with evaluating the program, and that readiness is accurately reported. In our 2005 report, we found that a lack of oversight in South Korea resulted in a deterioration of the maintenance

¹⁰ Army Regulation 740-1, Storage and Supply Activity Operations (Sept. 9, 2002).

condition of prepositioned equipment. In response to our report, the Army established oversight of the maintenance process in South Korea and repaired the equipment. However, in Kuwait, our review of recent inspections by Army inspectors of contractor-maintained equipment raised significant concerns about its true maintenance condition. These concerns are the result of inadequate management of contractor performance. Specifically, over one-quarter of the prepositioned equipment presented by the contractor failed the government quality assurance inspection between June 2005 and June 2006.

We are recommending that the Army take steps to synchronize its prepositioning strategy with the DOD-wide strategy in order to ensure that future investments made for the Army's prepositioning program align with the DOD prepositioning strategy. Once the Army's strategic direction is aligned, we are recommending that the Army develop an implementation plan that maintains ongoing reevaluation of the secondary item and operational project stock requirements; establishes systematic readiness measurement and reporting of these requirements; identifies the optimal mix of storage and maintenance facilities at each location; and prescribes oversight requirements for the maintenance of prepositioned equipment.

In written comments on a draft of this report, DOD generally concurred with our recommendations but stated that it had already taken steps to address the recommendations and that further actions are not needed. We acknowledge that the Army and the department have taken some initial steps; however, we continue to believe that our recommendations have merit and that additional actions and sustained management attention will be needed to ensure the viability of the Army's prepositioning program as part of the overall departmentwide effort to meet mobility needs.

Background

Prepositioning is an important part of DOD's overall strategic mobility framework. It allows DOD to field combat-ready forces in days rather than the weeks it would take if the forces and all necessary equipment and supplies had to be brought from the United States to the location of the conflict. The U.S. military can deliver equipment and supplies in three ways: by air, by sea, or by prepositioning. While airlift is fast, it is expensive to use and impractical for moving all of the material needed for a large-scale deployment. Although ships can carry large loads, they are slower than airlift. Prepositioning lessens the strain of using expensive airlift and reduces the reliance on slower sealift deliveries. The value of prepositioned stocks was demonstrated during operations in Iraq. The military used equipment and supplies stored at land sites in the region and

offloaded much of the stocks from its prepositioning ships. Having the equipment prepositioned allowed troops to fly in, deploy rapidly, and train with prepositioned equipment before beginning combat operations in Iraq. As the ongoing war has depleted those items, the Army is in the process of reconstituting its prepositioned equipment and supplies.

The Department of the Army provides strategic-level guidance for the Army's prepositioned stock program and allocates funding for prepositioned stock requirements. The Army Materiel Command provides the overall management of the Army's prepositioned stocks program. Within Army Materiel Command, the Army Sustainment Command manages the operations and maintenance of the program, and issues the stocks in theater in support of contingency operations or exercises. At each prepositioned stock location, the Army Sustainment Command also provides an Army Field Support brigade and battalion for day-to-day maintenance and operational management of the program.

The Army's prepositioning program involves three primary categories of stocks stored at land sites and aboard prepositioning ships: combat brigade sets, war reserve sustainment stocks, and operational projects as described below.

- Army Combat brigade sets
 - Are designed to support 3,000 to 5,000 soldiers.
 - Include heavy weaponry such as tanks and Bradley fighting vehicles.
 - Include support equipment such as trucks and High Mobility Multi-purpose Wheeled Vehicles.
 - Include spare parts and other sustainment stocks to support the early stages of a conflict.
- War reserve sustainment stocks include
 - Items to sustain the battle unit until resupply can be ramped up to wartime levels and arrive in theater.
 - War Reserve Secondary Items include rations, clothing and textiles, construction and barrier materiel, medical supplies, repair parts, and major assemblies (reparables and consumables).
- Operational project stocks include
 - Authorized material above unit authorizations designed to support Army operations or contingencies.
 - Equipment and supplies for special operations forces, bare base sets, petroleum and water distribution, mortuary operations, and prisoner-of-war operations, among others.

The Army's April 2006 Report to Congress Addressed the Areas Required, But the Army's Strategy is Evolving

The Army's April 2006 report to Congress on the status of its prepositioned program addressed the areas required by Congress, but the Army has significantly shifted its prepositioning strategy since then. The Army's report included descriptions of operational capabilities as outlined in the Army Prepositioned Stocks Strategy 2012; addressed the maintenance condition of prepositioned equipment; and noted recent efforts to improve management and maintenance oversight of the program, including forming an independent inspection team. However, since the report's publication, the Army has begun a reexamination of its overall prepositioning strategy. According to the Army, this shift was based on insights gained from the 2006 Quadrennial Defense Review, but Army officials told us that recent budget reprogramming decisions and worsening Army-wide equipment shortfalls also influenced the reexamination. The Army concluded that its Prepositioned Stocks Strategy 2012 was no longer viable and began work on a revised strategy that was approved by Army leaders in late August 2006 and is expected to be completed by the end of 2006.

Army Report Addresses Areas Required by Congress

The Army's report to Congress addressed the required areas included in the National Defense Authorization Act for Fiscal Year 2006. The Army determined that over \$4 billion would be needed to fill equipment, secondary item, and facility shortfalls. The Army reported that additional covered storage and maintenance space was needed at prepositioning sites in Southeast and Northeast Asia as well as at the Charleston, South Carolina, facilities used to maintain afloat stocks envisioned under the 2012 strategy. Further, it indicated that the facilities in Europe would be sufficient to meet the prepositioned requirements once the construction project in Italy was completed. The equipment sets at each location were at a high percentage of mission capability, it reported, with the exception of Kuwait. The equipment sets in Kuwait had been issued in support of Operation Iraqi Freedom and Operation Enduring Freedom, and by 2006 had a low mission-capability rate. It did stipulate, however, that the equipment set was undergoing repair, recapitalization, and replacement.

Regarding the program's management and maintenance oversight, the report acknowledged that weaknesses in the quality control program had been revealed by both internal and external audits, including GAO's September 2005 report. The Army Sustainment Command created the Logistics Support and Evaluation Team to address identified quality control problems. According to the Army report, the team provides an additional layer of review to ensure that the Army Prepositioned Stock readiness levels reported are accurate and that sufficient quality assurance measures are in place.

Army Prepositioning Stocks Strategy 2012 Is No Longer Viable

Since the release of its report to Congress in April 2006, several decisions led the Army to conclude that its existing strategy was no longer viable. In particular, an internal DOD reprogramming action required the Army to offload a Heavy Brigade Combat Team equipment set stored on a prepositioned ship and redistribute it to meet existing equipment shortfalls and reduce costs. The Army had two equipment sets already aboard prepositioned ships and planned to upload a third set in 2013. The reprogramming action directed the Army to offload the third equipment set. However, because the third equipment set had not yet been created, the Army decided to offload one of the existing equipment sets instead to meet the reprogramming guidance. This decision effectively reduced the Army's program in the near term from two to one heavy brigade combat team afloat, with implications for the operational plans of the regional combatant commanders.

Several factors combined to create a ripple effect that impacted the viability of the Army Prepositioned Stocks 2012 Strategy. First, the department told us the Army changed its strategy based on insights gained from the 2006 Quadrennial Defense Review. Also, Army officials told us that equipment shortfalls made it difficult for the Army to meet the requirements in the strategy at least partly because Army prepositioned stock equipment was continuing to be drawn to support ongoing operations. Also, the Army transformation to modularity exacerbated shortfalls in certain types of equipment and created excesses in others. In addition, the Army eliminated most of the remaining facilities and prepositioned stocks from Western Europe but was completing a new maintenance and storage facility in Italy which needed a mission. As a result, the Army's 2006 report was outdated soon after its publication and should not be used by Congress or DOD for funding decisions.

The Army Faces Major Strategic and Management Challenges As It Revises and Implements Its Prepositioning Program

The future success of the Army's prepositioning program depends not only on how well the Army aligns its efforts with those of the department as a whole, but also on how well long-standing management issues are addressed as the new strategic plan is implemented. The Army expects to finalize its implementation plan for the revised Prepositioned Stocks Strategy 2013 by December 31, 2006, but DOD will not complete its departmentwide strategy before mid-April 2007. Further, problems persist with the Army's management of its secondary item and operational project stocks programs, including lingering questions about the overall requirements and the lack of reliable readiness measures for these programs. In addition, the lack of a comprehensive prepositioning storage and maintenance facilities plan contributes to increased maintenance costs and uncertain future facility requirements. Finally, the Army has not demonstrated adequate oversight to ensure the proper maintenance condition of prepositioned stocks.

Alignment between Army's Prepositioning Strategy and Anticipated DOD Strategy Remains Uncertain

The Army is developing a new prepositioning strategy to address recent decisions that have affected the viability of its existing plan. According to Army officials, the new strategy is intended to promote greater flexibility in the use of prepositioned stocks while concurrently increasing the Army's access to unstable areas. While continuing to rely on stocks in South Korea, the proposed strategy includes significant changes to the program—among them, less reliance on heavy combat equipment afloat and expanded reliance on heavy equipment in Kuwait, Qatar, and Italy. The Army's draft revisions to its prepositioning strategy were approved by the Army Vice-Chief of Staff in late August 2006. The Army established an Integrated Process Team to develop a comprehensive implementation plan for the new strategy and to provide direction to working groups that would assess the areas of strategy, capabilities, equipping, facilities, and funding. The Army plans to have this task completed by late December 2006. However, since the Army's Integrated Process Teams were still performing their work, we could not evaluate progress at the time we completed our review.

DOD has efforts underway that will address gaps identified in GAO's September 2005 report but have implications for the Army's efforts. First, to address gaps in departmentwide oversight, DOD convened a working group that includes representatives from the Office of the Secretary of Defense, Joint Staff, Defense Logistics Agency, the Army, Joint Forces Command, and the other services to develop joint doctrine for the prepositioning programs. This group was also working to update the departmental-level directive that describes responsibilities and provides

broad guidance to the services during our review. While the efforts begun by this group represent progress, DOD had not yet developed joint doctrine for the program at the time we completed our work. Second, DOD also initiated a study in the spring of 2006 to address the need for a departmentwide prepositioning strategy to guide the department's future prepositioning efforts. This study was a follow-on to the 2005 Mobility Capabilities Study that, while identifying the importance of prepositioning in meeting mobility objectives, along with interrelated airlift, sealift, and basing decisions, recognized the need for further analysis of prepositioning. Thus, the DOD-wide prepositioning study will determine how and what prepositioned equipment should be used and whether the prepositioned assets are in the best locations to support the department's priorities and posture plans. According to DOD officials, this DOD-wide prepositioning study was not scheduled to be finished until the spring of 2007 at the earliest. However, on October 17, 2006, Public Law 109-369 was enacted directing the Secretary of Defense to complete its DOD-wide prepositioning strategy by mid-April 2007.

DOD and Army officials told us during the course of our review that they discuss such strategy issues during their joint working group meetings and felt that they have coordinated their prepositioning plans. However, if the two strategies are not synchronized, DOD could be limited in developing an optimal DOD-wide strategy because the Army strategy already exists. Alternatively, the Army could be at risk of filling requirements that will be superseded when the DOD-wide strategy is ultimately issued. In fact, DOD anticipates that when the DOD-wide strategy is issued the Army will have to modify its service-specific prepositioning strategy to align with the new requirements. Finally, since prepositioning is interconnected with airlift, sealift, and overseas basing, the Army's decisions will have an as-yet undetermined effect on lift requirements and basing.

Despite Recent Efforts to Improve Requirements Setting for Secondary Item and Operational Project Programs, the Army Does Not Have Reliable Requirements or Readiness Information

Despite recent efforts to improve requirements setting, the Army has not yet determined reliable secondary item and operational project requirements. In its efforts to reassess secondary item requirements, the Army ran its requirements-determination model, called the Army War Reserve Automated Process, in 2005. It had not previously run the model since 1999, even though Army guidance at that time called for requirements to be updated every 2 years. Because the model yielded questionable outputs, Army officials told us they were conducting a management review to scrub the requirements and help to determine investment priorities. Army officials said they expect requirements to be significantly adjusted as a result of their reviews. For example, the Army

has already lowered the U.S. Army Europe meals-ready-to-eat stockage levels to match the smaller force structure there. This action resulted in over 1 million meals being made available to fill other high-priority requirements. In addition, the Army War Reserve Automated Process that is used for computing secondary item requirements will now be updated annually instead of biennially.

Addressing these problems is critical for ensuring Army readiness in future conflicts. Experiences in Iraq showed that prepositioned secondary item stocks did not adequately support the troops in combat operations. Secondary items encompass a wide range of inventory, including critical readiness-enabling spare parts. In 2005, we reported that inaccurate requirements and insufficient funding led to shortages in critical items during Operation Iraqi Freedom.¹¹ For example, demand for nonrechargeable lithium batteries and track shoes for armored vehicles were more than three times greater than the stated requirements for those items. We concluded that these shortfalls were directly traceable to problems in requirements computation.

In addition to critical shortfalls, lessons learned also show considerable mismatches between what was available in prepositioned stocks and what units actually needed. In retrospect, the Army did a poor job in forecasting what it would need. As a result, it had to use scarce and expensive airlift to get needed stocks to the troops in the field, essentially defeating the purpose of prepositioning such items in the first place. Subsequent analyses have detailed the extent of the mismatches between stock levels, requirements, and actual usage. For example, most of the 16,000 different spare parts that were actually positioned in Kuwait were ultimately shipped back from the theater because they were not needed by the forces there, according to a RAND study commissioned by the Army.¹² Most spare parts had to be airlifted to the theater, according to RAND. In addition, RAND compared the Army's requirements for prepositioned spare parts to the actual demands during 2003 in Kuwait and found considerable mismatches. Only about half of the spare parts the Army thought would be required for prepositioned stocks were actually demanded in theater by Army units during 2003.

¹¹ GAO-05-275.

¹² The RAND Corporation, *Sustainment of Army Forces in Operation Iraqi Freedom: Major Findings and Recommendations* (Santa Monica, Calif.: 2005).

According to Army officials, secondary items have historically not been fully funded at least partially because of concerns over the accuracy of the requirements. As shown in Operation Iraqi Freedom, inaccurate requirements resulted in limited demand for some items and excessive demand for others, greatly surpassing the on-hand inventory. The Army had to employ high-cost air transportation to bring needed items to the warfighter.

As with secondary item requirements, long-standing issues exist within the operational project program—which includes important items like chemical defense equipment, pipeline systems, mortuary units, and bare base sets for housing soldiers in austere environments, among other items not typically part of unit equipment. These sets are typically kept to meet the specific needs of regional combatant commanders, and Army regulations require that they be revalidated every 5 years to ensure that the sets are still needed for an operational plan. Despite this requirement, the most recent revalidation for many of the projects was conducted in 1998. However, in response to our recommendation in 2005 that this long-standing problem be addressed, the Army initiated a revalidation of its Operational Project Stocks in April 2006.

By October 2006, when we completed our work, the Army had queried Army commands worldwide to revalidate the needs for the various sets and had obtained validations for most of the sets. However, Army officials told us that they have already taken actions to eliminate projects that are no longer needed and are planning to conduct a management review of this program to further refine the requirements. To date, the Army has consolidated some projects and has cancelled other projects that were no longer needed. For example, three projects to support aerial delivery operations were cancelled because they were no longer required to support current operational plans. In addition, United States Army, Europe has cancelled two projects for bridging and aircraft matting because they no longer meet current operational requirements.

One of the most significant consequences of having questionable requirements underpinning the programs is that it makes it difficult to assess their overall readiness, and the risk associated with shortfalls. Typically, the Army measures readiness of prepositioned equipment programs by assessing the inventory levels against requirements as well as the maintenance condition of on-hand equipment. However, the Army does not routinely measure or report readiness for the secondary item and operational project programs. According to Army and DOD officials, shortfalls in secondary items and some operational projects are identified

in combatant command priority lists and through joint quarterly readiness reports to the Joint Staff, but not as part of the Army's readiness reporting system. This situation is largely unchanged since 1998, when we recommended that the Army fix requirements problems and develop readiness-reporting mechanisms for these programs.¹³

Despite their lower priority relative to combat equipment programs, secondary item and operational project programs can be critical during a war. They contain items such as spare parts that are essential to keep the combat equipment operational, as well as chemical defense equipment and other items likely to be needed during the early stages of a conflict. The budgetary stakes are high: according to the April 2006 report to Congress, the Army estimated that it had a shortfall of about \$1.7 billion in secondary items alone. Without sound requirements, the Army cannot reliably assess the readiness of its programs. Once sound requirements are set, the Army will need reporting mechanisms to assess their readiness and the impact of any shortfalls. In the absence of such mechanisms, the Army cannot make sound risk-based decisions about what investments it should make in the programs in the future.

Army Lacks a Comprehensive Prepositioning Storage and Maintenance Facilities Plan

Although the Army reported maintenance and storage facility shortages to Congress, it lacks a comprehensive plan for maintenance and storage facilities for prepositioned stocks. According to Army officials, facility shortfalls are a concern in Kuwait and Korea, while facility excesses were an issue in Italy. Army policy recommends storing prepositioned equipment in controlled-humidity storage facilities, since outdoor storage results in increased maintenance costs. However, requirements for these facilities are currently uncertain. Until the Army develops a comprehensive plan that identifies how prepositioned equipment will be utilized and where it will be located for the long term, the existing facilities problems can not be addressed.

Outdoor Storage of Equipment Results in Millions of Dollars of Increased Maintenance Costs

The Army's lack of adequate storage facilities for prepositioned equipment has led to equipment being stored outdoors, leaving it relatively unprotected from moisture, sand, and other elements and thus contributing to a number of maintenance problems, including corrosion.¹⁴

¹³ GAO, *Military Prepositioning: Army and Air Force Programs Need To Be Reassessed*, GAO/NSIAD-99-6 (Washington, D.C.: Nov.16, 1998).

¹⁴ Corrosion is defined under 10 U.S.C. § 2228 as the deterioration of a material or its properties caused by a reaction of that material with its chemical environment.

Army Regulation 740-1 stipulates that prepositioned equipment should be stored in controlled-humidity storage facilities. If controlled-humidity storage is not available, then covered storage space is preferred. More frequent inspections are required for equipment stored outside.

Inadequate storage facilities in both South Korea and Kuwait have resulted in outdoor storage of prepositioned equipment. Figure 1 shows the storage situation in Kuwait, with prepositioned equipment stored at outside locations.

Figure 1: Existing Outdoor Storage in Kuwait



Source: U.S. Army.

Outdoor storage accelerates equipment deterioration and increases costs due to additional maintenance requirements. For example, if tanks are stored outside, preventive maintenance inspections must be performed every 30 days. If they are stored in controlled-humidity warehouses, inspections are only performed every 6 months. According to Army officials, maintenance inspections and repairs for equipment stored outdoors cost about four times that of equipment being stored in controlled-humidity warehouses. Army officials estimate that it costs an

Future Facility Requirements
for the Army Prepositioning
Program Remain Uncertain

additional \$24 million per year per heavy brigade combat team to maintain the equipment in outdoor storage.

Facility requirements for the Army's prepositioning program depend on equipment requirements, and as was discussed above, these have not yet been established. Consequently, facility requirements are uncertain. Prepositioned equipment can be used as rotational—that is, equipment provided to units arriving in theater for deployment; training—that is, equipment provided to units for training exercises but then returned to the storage location; or simply as stored prepositioned—equipment that is stored for undetermined future use. According to Army officials, there will be increased maintenance and maintenance facilities requirements if prepositioned equipment is to be used for training or to support a rotational presence in the region. Concurrently, there may be a decreased requirement for humidity-controlled storage space, depending on how the rotation is scheduled. Rotational unit equipment will have more repair requirements than stored units, due to damage and wear. If the prepositioned equipment is maintained solely for future use, more storage facilities and less maintenance capability will be needed. In Kuwait, the Army has not determined whether the prepositioned equipment will be used for units rotating in and out of theater, used as a combat brigade team training set, or stored.

Storage facilities in Kuwait will likely be needed, but until Army officials decide how the equipment in Kuwait will be used, they will not be able to determine the type and amount of facilities needed. Storage facilities intended for prepositioned equipment at Camp Arifjan are currently being used as headquarters buildings for Army Central Command, and it is not clear when these buildings will revert to their storage function. While the Army is exploring numerous options for providing covered storage of the equipment in Kuwait, ranging in cost from \$20 million to \$37 million, none are currently funded.

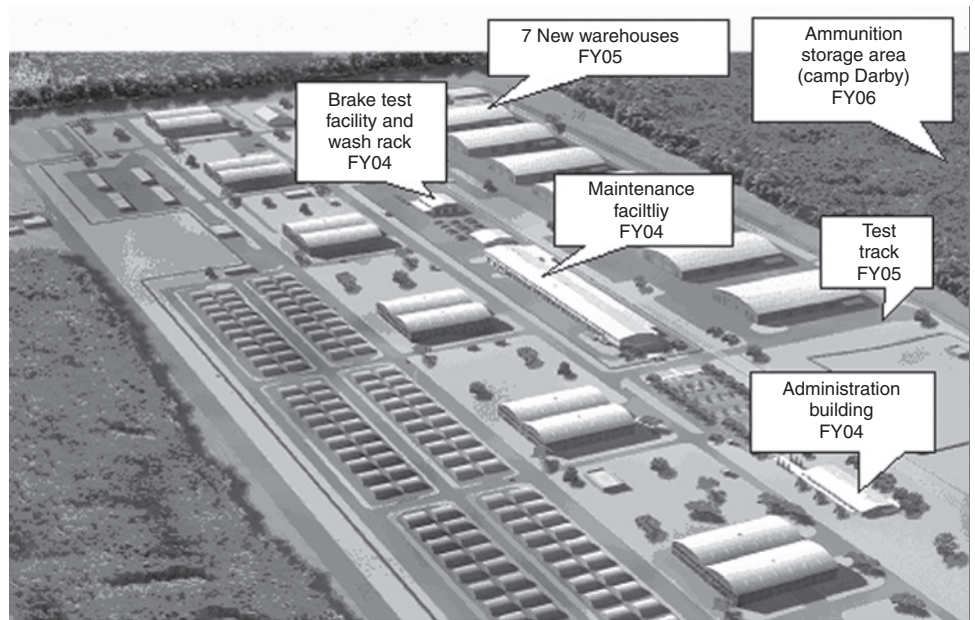
Additional maintenance and storage facilities are needed in South Korea to support the prepositioned equipment at Camp Carroll. The Army has already broken ground on a new maintenance facility that is expected to be operational in November 2007. The Army has plans to build an additional 200,000 square feet of storage space at a cost of \$18.6 million. This project is currently unfunded, yet it has a target completion date of 2012. However, while the Army is addressing the prepositioning facility shortfalls at Camp Carroll, it is considering relocation of the set to another site near a port further south. Army officials believe it would provide for more flexible use of the prepositioned assets. If the Army decides to move

the equipment set, the additional covered storage at Camp Carroll may be unnecessary.

The Army's new strategy also includes a plan to store heavy equipment at a newly constructed Italian site, to make use of a facility that previously had no mission. When initially approved, the construction project was intended to support the storage of a prepositioned combat brigade team equipment set, but this plan was eliminated in the 2012 strategy. However, since the contract for this project had already been awarded and construction was underway, the Army decided to complete the construction. Army officials stated that it would be more costly to cancel the project than to finish it. The cost for the initial phases of the construction project is approximately \$48 million. A \$5 million ammunition maintenance and storage facility is also planned as part of this construction project.

Figure 2 shows the new facility, including seven controlled-humidity warehouses, a maintenance facility, an administration building, and a brake test facility and wash rack.

Figure 2: Overview of Military Construction Project at Camp Livorno, Italy



Source: U.S. Army.

The new Army strategy includes a prepositioned combat brigade team equipment set at Livorno with the intention of using the port to upload the prepositioned equipment onto ships as needed. The Army has also been discussing using the equipment in Livorno for rotational training exercises in Eastern Europe in locations like Bulgaria and Romania. However, specific plans for this had not been developed.

Afloat stocks are reduced in the Army's new 2013 prepositioning strategy, but the Army plans to continue to utilize the Charleston, South Carolina, prepositioning facility to unload, repair, and reload prepositioned equipment from afloat prepositioning ships. The facility was originally used to maintain Polaris missiles and was converted by the Army to provide maintenance support of the prepositioned afloat fleet. According to Army officials, upgraded maintenance and storage facilities will be required to support the facility's prepositioning mission but the implications of the new strategy on facilities have not yet been determined.

Table 1 shows the current status of maintenance and storage facilities at selected Army prepositioning locations.

Table 1: Status of Facilities at Selected Army Prepositioned Stock Locations

Location	Status
Europe	<ul style="list-style-type: none">• Military closed three prepositioned sites in Europe at Bettembourg, Luxembourg; Eyselshoven, Netherlands; and Hythe, United Kingdom• First two phases of a three-phase maintenance and storage facility project are nearing completion in Livorno, Italy at a cost of \$48 million
Charleston, S.C.	<ul style="list-style-type: none">• The Army is proposing several projects for additional storage and improved maintenance capability for the facility
South Korea	<ul style="list-style-type: none">• Construction of a new maintenance facility is currently underway at Camp Carroll with completion due in November 2007• Planning for additional 200,000 sq. ft. storage capability• Exploring potential relocation of set to Kwang Yang
Kuwait	<ul style="list-style-type: none">• Existing storage facility is currently being used to house Army Central Command administrative offices, which leaves prepositioned assets stored outside• Army Materiel Command is considering permanent and temporary maintenance and storage capability alternatives to protect prepositioned equipment from the harsh desert climate
Qatar	<ul style="list-style-type: none">• Seventeen of 26 existing storage facilities have been diverted to Army priority missions; some diverted warehouses may be returned to Army Prepositioning Stocks use at some future date

Source: GAO analysis, developed from Army data.

Maintenance Oversight of Prepositioned Stocks Has Improved in South Korea, but Needs Improvement in Kuwait

Management oversight of the maintenance of equipment in Korea has improved since we published our report in 2005. Previously, significant issues and problems were found with the mission capability of stocks in South Korea. We stated that despite reports of high mission capability, the majority of the stocks in South Korea were not mission capable. During our May 2006 visit to South Korea, we observed that the Army had hired additional personnel to bring the equipment up to full mission capability and ensure that the equipment was properly maintained. A new organizational structure was established that created clear lines of responsibility and standard operational procedures for each aspect of the cyclic maintenance program. A training program for production control was established for both U.S. and South Korean employees, and there was a continued emphasis on the need for oversight.

While the problems we identified in 2005 in South Korea have been corrected, recent inspections of contractor-maintained equipment in Kuwait revealed a high percentage of equipment failure, indicating that maintenance oversight is a continuing problem. Analyzing data available at

the site, we found that 28 percent of the prepositioned equipment in Kuwait submitted for government acceptance had failed quality assurance testing between June 2005 and June 2006. However, the maintenance battalion had not routinely tracked this information or monitored this important performance measure.

Additionally, much of the equipment recently certified by the contractor during preventative maintenance inspections failed random governmental checks. Beginning in May 2006, the quality assurance¹⁵ team began performing random preventative maintenance checks on equipment items inspected and certified by the contractor within the previous 10 to 14 days. Nearly half of the 49 pieces of equipment sampled during May and June 2006 by the quality assurance inspectors had nonmission-capable faults needing repair. We accompanied inspectors on three random inspections. The nonmission-capable faults we observed included inoperable lights, fluid leaks, lack of battery power, and an inoperable rear door on a Bradley Fighting Vehicle. Army officials told us this failure rate was not acceptable and that they had informed the contractor it needed to improve performance. Yet Army officials recently reported successful issuance in August 2006 of some of the prepositioned equipment for units heading to Iraq. This inspection failure rate raises questions about the true mission capability of the prepositioned equipment, and it demonstrates the need for rigorous management oversight of the maintenance contractor in Kuwait. Without improved oversight of maintenance, prepositioned equipment and supplies could be less than mission capable when needed.

Conclusions

While prepositioning is considered critical to DOD's ability to meet its mobility needs, the department does not yet have a clear strategy laid out that identifies the role that prepositioning will play in the 21st century. The Army took steps to revise its prepositioning strategy in the latter part of 2006; however, its efforts are not fully synchronized with the evolving DOD-wide strategy. The Army's decisions today have profound future implications for the entire department and potentially affect our ability to respond to conflict. The primary risk of having the Army develop its strategy in advance of a DOD-wide strategy is that the Army could develop plans without an understanding of how the Army and other services'

¹⁵ Quality assurance inspectors perform a variety of tasks, including initial acceptance of repaired equipment from the maintenance contractor and monitoring of contractor-performed preventative maintenance checks.

programs will fit together or, alternatively, limit the options of the department because it must incorporate the Army's plans into the overall strategy. The importance that prepositioned stocks are envisioned to have in the future underscores the need for DOD-wide consensus on the direction and priority for the programs, and the necessity of strong leadership and direction from the top levels of DOD. The choices may well be difficult. Unlike the period following the end of the Cold War, the Army no longer has an excess of relatively modern combat and support equipment. Depending on the strategy that is eventually chosen, billions of investment dollars could be required to recapitalize prepositioning programs and build an infrastructure to support them. Alternatively, should the Army and DOD decide to focus less on prepositioned stocks, this decision will likely have a ripple effect on airlift and sealift needs. A DOD-wide strategy would become the foundation for an investment plan that balances costs and risks and would guide the department as it chooses where it will invest in an environment that is increasingly becoming resource constrained.

Setting and aligning broad strategies, however, will not be enough to ensure success in the Army's program over the longer term. Once the DOD-wide strategy is set and the Army's efforts are aligned with it, the Army must turn its attention to the fundamentals of program management. Dozens of reports from GAO and other organizations point to pervasive management problems in determining requirements and ensuring program readiness, as well as in providing adequate storage and maintenance for prepositioned equipment. To its credit, the Army recognizes this and has taken critical first steps toward redefining its prepositioning program and building a plan for its implementation. However, focused and sustained attention will be required to overcome these long-standing issues.

Recommendations for Executive Action

We recommend that the Secretary of Defense direct the Secretary of the Army to take steps to synchronize the Army's prepositioning strategy with the DOD-wide strategy to ensure that future investments made for the Army's prepositioning program align with the anticipated DOD-wide prepositioning strategy.

Once the strategic direction is aligned with the DOD strategy, we recommend that the Secretary of the Army develop an implementation plan that

- completes ongoing reevaluation of the secondary item and operational project stock requirements as well as establishes systematic readiness

measurement and reporting of secondary items and operational project stock programs,

- identifies the optimal mix of storage and maintenance facilities at each location to support the emerging strategy, and
- prescribes oversight requirements for the maintenance of prepositioned equipment to ensure that equipment is ready for combat.

Agency Comments and Our Evaluation

In written comments on a draft of this report, DOD generally concurred with our recommendations but stated that it had already taken steps to address the recommendations and that further actions are not needed. We acknowledge that the Army and the department have taken some initial steps; however, we continue to believe that our recommendations have merit and that additional actions and sustained management attention will be needed to ensure the viability of the Army's prepositioning program as part of the overall departmentwide effort to meet mobility needs. DOD also commented that our report contained misleading information and provided technical comments to improve the accuracy and clarity of the report. We disagree that the facts in our report are misleading and have addressed each of the department's technical comments in appendix III.

DOD partially concurred with our first recommendation that the Secretary of Defense take steps to synchronize the Army's prepositioning strategy with the emerging DOD-wide strategy, and stated that the Army had developed a service-specific strategy that is being incorporated into ongoing mobility studies and the emerging DOD-wide effort. The department stated that, since the Army is participating in ongoing studies, further direction is not required. Some of the technical comments DOD provided also addressed the strategy-setting issue, but seemed to contradict the overall response. For example, DOD stated that the timing of the two strategies could cause "disconnects" and that the Army will have to modify its strategy when the DOD-wide strategy is issued. Since DOD's comments lack internal consistency, it is not clear to us what the department intends to do to address the recommendation. As our report points out, successful management practices dictate that strategy setting should begin at the top, and that strong leadership will be needed from the department to ensure that the programs of the Army—as well as other military services—are aligned with the overall departmentwide strategy, not the reverse. Moreover, taking a service-centric approach to prepositioning may preclude opportunities for innovation, or lead to duplication across the department. Prepositioning should be viewed in a joint context, as part of broader mobility objectives. The ultimate departmentwide strategy should not just cobble together the plans of the

individual services into a departmentwide strategy. In our view, as it develops the DOD-wide strategy, the department should take advantage of the opportunity to reexamine its approach to prepositioning as part of broader mobility considerations including its interrelationship with airlift and sealift.

In the technical comments, the department also stated that the Army should not be criticized for its timing and lack of synchronization with a DOD strategy that had not yet been issued. The Army did expedite its strategy revision during the course of our review, completing it from start to finish in the latter half of 2006. The Army completed this revision while a broader strategy effort—specifically, a follow-on to the Mobility Capabilities Study focused on the future of prepositioning—was ongoing but had an unclear completion date. In a September 2005 report, we recommended that DOD develop a departmentwide strategy to set direction for and underpin the prepositioning programs of the services but this has still not been completed. Underscoring its interest in prepositioning—and consistent with our previous recommendation—the John Warner National Defense Authorization Act for Fiscal Year 2007 required the department to finalize a departmentwide prepositioning strategy by April 2007. Had the department implemented our recommendation in a more timely fashion, this synchronization concern would be moot and DOD may not have been called upon to establish a strategy for the department’s prepositioning programs.

The department concurred with our second recommendation that, once the Army’s strategy is aligned with the DOD-wide strategy, the Secretary of the Army should develop an implementation plan to address the requirements, readiness reporting, facilities, and maintenance oversight issues that we identified in our report. The department stated that the Army had included an implementation plan in its revised prepositioning strategy that addressed these issues and that the implementation plan had been aligned with a joint staff instruction published in November 2006 that provides logistics planning guidance for prepositioning and a department directive dated December 2003 that provides war reserve materiel policy. As a result, the department stated that no additional direction is required. We disagree. The Army’s implementation plan was to have been completed in December 2006, but was still unavailable as of the end of January 2007. As a result, GAO could not determine whether the elements of our recommendation have been addressed. However, we reviewed the recent logistics planning guidance and while the instruction provides general logistics planning guidance for prepositioned stocks, there are few specifics about requirements setting and readiness reporting for secondary

items and operational project stocks, facilities, or maintenance oversight. We also reviewed the identified department guidance. While it does require the determination of war reserve materiel requirements, and annual reports of the existing levels of these items, we do not believe this is a systematic reporting of readiness. In fact, our 2005 report found that the department was not enforcing the readiness-reporting provision, and planned to rescind it. Neither Instruction addresses the optimum mix of storage and maintenance facilities or prescribes oversight requirements for the maintenance of prepositioned equipment to ensure that it is combat ready. Moreover, since these issues have been long-standing, recognized both in prior GAO reports and assessments made by the Army's own audit organizations, we continue to believe that additional direction is needed.

We will send copies of this report to the Secretary of Defense and the Secretary of the Army. We will also make copies available to others upon request. In addition, this report will be available at no charge on the GAO Web site at <http://www.gao.gov>. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report.

If you or your staff has any questions, please contact me at (202) 512-8365. Key contributors to this report are listed in appendix IV.

A handwritten signature in black ink, appearing to read 'W. Solis', with a long horizontal flourish extending to the right.

William M. Solis, Director
Defense Capabilities and Management

Appendix I: Scope and Methodology

To assess whether the Army's report comprehensively addressed the required reporting areas in Public Law 109-163, we reviewed the Army's prepositioned stocks program. We obtained the Army's report and reviewed and compared it to the legislative mandate as well as other documents including Department of Defense (DOD) regulations, Army regulations that govern storage and maintenance of prepositioned stocks, and the Army Prepositioned Stocks Strategy 2012. We also reviewed Inspector General and Army Audit Agency reports on prepositioning issues as well as any relevant GAO reports. We interviewed officials in the Department of Defense Joint Staff, Department of the Army, Army Materiel Command, and the Army Sustainment Command and its subordinate units at each prepositioning location. We also collected and analyzed internal Army reports on inventory and readiness to verify the reported inventory levels and readiness rates of prepositioned stocks.

To assess the major challenges facing the Army as it revises and implements its prepositioning program, we reviewed the Army Prepositioned Stocks Strategy 2012 and DOD regulations and documents pertaining to a joint prepositioning strategy, along with relevant past GAO, Inspector General, and Army Audit Agency reports. We interviewed officials from the Department of the Army, the Office of the Secretary of Defense for Policy, the Department of Defense Joint Staff, the Army Materiel Command, and the Army Sustainment Command and its subordinate units at prepositioning locations in Europe, South Korea, South Carolina, and Kuwait. We conducted site visits to Army prepositioned stock facilities at each location to observe firsthand the current status of their storage and maintenance facilities and also reviewed existing maintenance and storage procedures and oversight processes. We also examined the Army's planned revisions to its existing Army Prepositioned Stocks Strategy 2012 and the efforts on behalf of DOD to develop an overarching prepositioning strategy. We examined the level of coordination between the Army and DOD with regard to the new prepositioning strategies currently under development. We could not fully assess these strategies, as they are still in the process of being developed. We also documented current inventory levels, funding for the program, and equipment readiness rates by collecting and analyzing internal Army reports on inventory, funding, and readiness. We reviewed past reports prepared by GAO, the Army Audit Agency, the Army Materiel Command Inspector General, and the Army Logistics Support and Evaluation Team that identified problems with the prepositioning program.

We conducted our review from February 2006 through October 2006 in accordance with generally accepted government auditing standards. We

reviewed available data for inconsistencies and also verified with the Army information technology contractor in Kuwait that they review and validate the input data we used in the report. We determined that the data we used were sufficiently reliable for the purpose of this report.

We interviewed officials, and obtained documentation when applicable, at the following locations:

- U.S. Army Headquarters, Washington, D.C.
- U.S. Army Material Command, Ft. Belvoir, Virginia.
- U.S. Army Forces Command, Ft. McPherson, Georgia.
- U.S. Army Central Command, Ft. McPherson, Georgia.
- U.S. Army Sustainment Command, Rock Island, Illinois.
- U.S. Army Europe, Campbell Barracks, Germany.
- 8th U.S. Army, Yongsan Garrison, South Korea.
- U.S. Army Field Support Brigade, Seckenheim, Germany.
- Material Support Center – Korea, Camp Carroll, South Korea.
- U.S. Army Field Support Battalion – Livorno, Camp Livorno, Italy.
- U.S. Army Field Support Battalion – Northeast Asia, Camp Carroll, Korea.
- U.S. Army Field Support Battalion – Southwest Asia, Camp Arifjan, Kuwait.
- U.S. Army Field Support Battalion- Afloat – Charleston, South Carolina.

Unified Commands

- U.S. Forces Europe, Patch Barracks, Germany.
- U.S. Forces Korea, Yongsan Garrison, South Korea.
- Joint Chiefs of Staff, J-4, Washington, D.C.

Appendix II: Past Products Identifying Challenges Facing the Army and DOD Regarding Prepositioning Programs

The Army's prepositioning program has faced a number of long-standing challenges including inadequate oversight and management; equipment and facility excesses and shortfalls; and invalid, inaccurate, poorly defined, and otherwise questionable requirements. In addition to problems with the prepositioning program, the Army has also had difficulty associated with the successful implementation of strategic plans and programs. GAO, the Army Audit Agency, Army's and the Department of Defense's (DOD) Inspector Generals along with others have called attention to these problems in products issued over the years.

Table 2 provides summaries of the challenges to the Army and DOD's prepositioning programs along with program implementation concerns identified in past GAO reports and testimonies issued between January 1996 and September 2006. Table 3 provides summaries of similar issues identified in select products released by other organizations during the same time period.

Table 2: GAO Products

Title	Key challenges identified
Force Structure: Army Needs to Provide DOD and Congress More Visibility Regarding Modular Force Capabilities and Implementation Plans, GAO-06-745 (September 2006)	In September 2006, we reported that the Army had not completed key details of the equipping strategy for its modular force and, as a result, it is unclear what level of equipment units will have, how this strategy may affect the Army's equipment funding plans, and how well units with low priority for equipment will be able to respond to unforeseen crises. We also reported that the Army lacks a comprehensive and transparent approach to measure progress against its modularity objectives, assess the need for further changes to modular designs, and monitor implementation plans. We noted that without performance metrics and a comprehensive testing plan, decision makers will not have full visibility into how the modular force is currently organized, staffed, and equipped and, as a result, will not have sufficient information to assess the capabilities, cost, and risks of the Army's modular force implementation plans.
DOD's High-Risk Areas: Challenges Remain to Achieving and Demonstrating Progress in Supply Chain Management, GAO-06-983T (July 2006)	In July 2006, we testified that DOD has continued to make progress implementing the 10 initiatives in its supply chain management improvement plan, but it will take several years to fully implement these initiatives. We noted that although DOD has incorporated several broad performance measures in its supply chain management improvement plan, it continues to lack outcome-focused performance measures for many of the initiatives, making it difficult to track and demonstrate progress toward improving the three focus areas of requirements forecasting, asset visibility, and materiel distribution. We additionally reported that although DOD's plan includes four high-level performance measures that are being tracked across the department, these measures do not necessarily reflect the performance of the initiatives and do not relate explicitly to the three focus areas. Further, DOD's plan does not include cost metrics that might show efficiencies gained through supply chain improvement efforts.

**Appendix II: Past Products Identifying
Challenges Facing the Army and DOD
Regarding Prepositioning Programs**

Title	Key challenges identified
Force Structure: Capabilities and Cost of Army Modular Force Remain Uncertain, GAO-06-548T (April 2006)	In April 2006, we testified that although the Army is making progress creating modular units, it faces significant challenges in managing costs and meeting equipment and personnel requirements associated with modular restructuring in the active component and National Guard. We noted that the Army does not have a comprehensive and transparent approach to measure progress against stated modularity objectives and assess the need for further changes to modular designs. We additionally testified that the Army has not established outcome-related metrics linked to many of its modularity objectives and although it is analyzing lessons learned from Iraq and training events, the Army does not have a long-term, comprehensive plan for further analysis and testing of the designs and fielded capabilities. Finally, we testified that without performance metrics and a comprehensive testing plan, neither the Secretary of Defense nor congressional leaders will have full visibility into the capabilities of the modular force as it is currently organized, staffed, and equipped.
Defense Logistics: Preliminary Observations on Equipment Reset Challenges and Issues for the Army and Marine Corps, GAO-06-604T (March 2006)	In March 2006, we testified that both the Army and Marine Corps will face a number of ongoing and long-term challenges that will affect the timing and cost of equipment reset, such as Army and Marine Corps transformation initiatives, reset of prepositioned equipment, efforts to replace equipment left overseas from the active, National Guard, and Reserve units, as well as the potential transfer of U.S. military equipment and the potential for continuing logistical support to Iraqi Security Forces. We also testified that the Marine Corps and Army will have to better align their funding requests with the related program strategies to sustain, modernize, or replace existing legacy equipment systems. We testified that both services will have to make difficult choices and trade-offs when it comes to their many competing equipment programs. Finally, we noted that while the services are working to refine overall requirements, the total requirements and costs are unclear and raise a number of questions as to how the services will afford them.
DOD's High-Risk Areas: High-Level Commitment and Oversight Needed for DOD Supply Chain Plan to Succeed, GAO-06-113T (October 2005)	In October 2005, we testified that DOD's plan to improve supply chain management provides a good start and framework for addressing long-term systemic weaknesses and in focusing the multiyear effort to improve supply support to the warfighter. We noted that successful resolution of DOD's supply chain management problems will require continued efforts to complete and successfully implement the plan. Based on GAO's criteria for removing programs from the high-risk designation, we reported that it is important for DOD to sustain top leadership commitment and long-term institutional support for the plan; obtain necessary resource commitments from the military services, the Defense Logistics Agency, and other organizations; implement proposed improvement initiatives across the department to address root causes; identify performance metrics and valid data to use in monitoring the initiatives; and demonstrate progress toward meeting performance targets.
Defense Logistics: Better Management and Oversight of Prepositioning Programs Needed to Reduce Risk and Improve Future Programs, GAO-05-427 (September 2005)	In September 2005, we reported that DOD faced near-term operational risks should another large-scale conflict emerge because existing prepositioned stocks had been heavily drawn to support operations in Iraq. We noted that some residual capability exists but many of the programs face significant inventory shortfalls and, in some cases, maintenance problems. We additionally reported that the department and the military services have provided insufficient oversight over DOD prepositioning programs resulting in long-standing problems with requirements determination and inventory management.
Defense Inventory: Actions Needed to Improve the Availability of Critical Items during Future Military Operations, GAO-05-275 (March 2005)	In March 2005, we reported on DOD's supply-chain management during Operation Iraqi Freedom. We developed detailed case studies of nine supply items that were reported to be in short supply and could have had operational impacts, and found that U.S. troops experienced shortages of seven of the nine items that led, in some cases, to a decline in the operational capability of equipment and increased risk to troops. We identified five systemic deficiencies that contributed to shortages of the selected items, including (1) inaccurate and inadequately funded Army war reserve requirements, (2) inaccurate supply forecasts, (3) insufficient and delayed funding, (4) delayed acquisition, and (5) ineffective distribution.

**Appendix II: Past Products Identifying
Challenges Facing the Army and DOD
Regarding Prepositioning Programs**

Title	Key challenges identified
High-Risk Series: An Update, GAO-05-207 (January 2005)	In January 2005, we reported that DOD's supply-chain management had experienced significant weaknesses in its ability to provide efficient and effective supply support to war fighters. While DOD reports showed the department owning about \$67 billion of inventory, shortages of certain critical spare parts were adversely affecting equipment readiness and contributing to maintenance delays. DOD also lacked visibility and control over the supplies and spare parts it owned and did not have the ability to provide timely or accurate information on the location, movement, status, or identity of its supplies.
Military Prepositioning: Observations on Army and Marine Corps Programs During Iraqi Freedom and Beyond, GAO-04-562T (March 2004)	In March 2004, we testified that during Operation Iraqi Freedom, the Army's prepositioning program had some equipment that was outdated or did not match unit needs. The program also faced shortfalls, such as trucks, spare parts, and other items. We noted that shortages in Army prepositioned and war reserve spare parts had been a long-standing systemic problem. We likewise reported that the theater supply-and-distribution system became overwhelmed and was worsened by the inability to track assets available in theater, which meant that warfighters did not know what was available.
Defense Logistics: Preliminary Observations on the Effectiveness of Logistics Activities During Operation Iraqi Freedom, GAO-04-305R (December 2003)	In December 2003, we reported that during Operation Iraqi Freedom poor asset visibility and insufficient and ineffective theater distribution capabilities contributed to substantial logistics support problems. DOD and military service officials raised a number of issues that may have contributed to the logistics problems, including (1) shortages of some spares or repair parts needed by deployed forces, (2) a reported mismatch between Army prepositioned equipment and unit needs, (3) DOD contractors used for logistics support during Operation Iraqi Freedom were not always effective, and (4) physical security at ports and other distribution points in the theater was not always adequate to protect assets.
Military Readiness: New Reporting System Is Intended to Address Long-Standing Problems, but Better Planning Is Needed, GAO-03-456 (March 2003)	In March 2003, we reported that DOD used readiness measures that varied 10 percentage points or more to determine readiness ratings and often did not report the precise measurements outside DOD. We additionally reported that DOD had complied with most, but not all, of the legislative readiness-reporting requirements and, as a result, Congress was not receiving all the information mandated by law. DOD issued a directive in June 2002 to establish a new comprehensive readiness-reporting system. However, as of January 2003, DOD had not developed an implementation plan containing measurable performance goals, identification of resources, performance indicators, and an evaluation plan to assess progress in developing the new reporting system.
Major Management Challenges and Program Risks: Department of Defense, GAO-03-98 (January 2003)	In January 2003, we reported that inefficient inventory management practices represented one of the most serious weaknesses in DOD's logistics operations. While DOD's inventory value had been declining for the previous 10 years, GAO's past and current work in the area indicated that DOD (1) continued to store unnecessarily large amounts of material, with about half of its secondary inventory exceeding then- war reserve or current operating requirements; (2) purchased material for which there was no valid requirement; (3) experienced equipment readiness problems because of a lack of key spare parts; and (4) maintained inadequate visibility over material being shipped to and from military activities.
Defense Inventory: Improved Industrial Base Assessments for Army War Reserve Spares Could Save Money, GAO-02-650 (July 2002)	In July 2002, we reported that the Army's approach to industrial-base capability assessments lacked key attributes that included the collection of current industry data, the analysis of that data, and the creation of management strategies for improving wartime spare parts availability. We noted that out-of-date data could result in reduced readiness and inflated or understated war reserve spare parts funding requests within budget submissions to Congress, and the Army's ability to identify long lead times and create management strategies to reduce lead times and thus the amount of inventory needed.

**Appendix II: Past Products Identifying
Challenges Facing the Army and DOD
Regarding Repositioning Programs**

Title	Key challenges identified
Defense Inventory: Army War Reserve Spare Parts Requirements Are Uncertain, GAO-01-425 (May 2001)	In May 2001, we reported that notwithstanding the apparent shortfall in funding for war reserve spare parts, our review showed uncertainties about the accuracy of the Army's requirements and funding needs in that area. Specifically, we found that (1) the best available data regarding the rate at which spare parts would be consumed during wartime had generally not been used in determining war reserve requirements for spare parts, (2) a potential mismatch existed between the Army's methodology for determining spare parts requirements and the Army's planned battlefield maintenance practices, (3) the capacity of the industrial base to support the parts requirements of the two major theaters of war scenario was not well defined or based on industry data, and (4) emerging issues, such as force restructuring actions, could significantly affect future war reserve requirements.
Military Prepositioning: Army and Air Force Programs Need To Be Reassessed, GAO/NSIAD-99-6 (November 1998)	In November 1998, we reported that the Army and Air Force had poorly defined, outdated, or otherwise questionable requirements in the major programs that GAO reviewed. The Army and the Air Force had reported significant shortages and poor maintenance conditions in their prepositioning programs. In some cases, however, reliable data to assess inventory fill and maintenance condition were unavailable. Thus, the precise readiness of the prepositioned stocks—and the impact of any shortfalls—was difficult to determine because of the questionable requirements that underpinned the programs and the poor information that the services used to manage the programs.
Afloat Prepositioning: Not All Equipment Meets the Army's Readiness Goal, GAO/NSIAD-97-169 (July 1997)	In July 1997, we reported that of the Army's unit sets considered when reporting the readiness of the brigade set of war reserve equipment; about 25 percent did not meet the Army's readiness goal for full-mission capability. According to Army maintenance records, some equipment aboard prepositioning ships had been reported as nonmission capable since September 1995. These records also erroneously identified some nonmission-capable equipment as repairable aboard ship, although Army officials said that many repairs could not be made until the equipment was downloaded. One factor that contributed to lower readiness rates was that some equipment was not fully mission capable when it was originally loaded on prepositioning ships. Other factors include the deterioration of the equipment while in storage aboard ships and the limited ability to conduct maintenance on the equipment while in storage.
Army War Reserves: DOD Could Save Millions by Aligning Resources With the Reduced European Mission, GAO/NSIAD-97-158 (July 1997)	In July 1997, we reported that DOD could have saved about \$54 million per year in personnel costs once the Army removed unneeded war reserve equipment from central Europe and aligned its resources with the reduced mission. Army data showed that of 128,000 items in central Europe identified as available for redistribution outside of Europe, the Army had firm plans for about 54,000 items, had proposed—but had not funded or implemented—the plans for about 27,000 items, and had no plans for about 46,000 items because it found no known requirement for them in the war reserve program.
Defense Inventory Management: Problems, Progress, and Additional Actions Needed, GAO/T-NSIAD-97-109 (March 1997)	In March 1997, we testified that inventory management problems had plagued DOD for decades. We had recently reported that about half of DOD's secondary inventory was not needed to support war reserve or current operating requirements. Most of the problems that contributed to the accumulation of this unneeded inventory still existed, such as outdated and inefficient inventory management practices that frequently did not meet customer demands, inadequate inventory oversight, weak financial accountability, and overstated requirements. We noted that while we continued to see pockets of improvement, DOD had made little overall progress in correcting systemic problems that had traditionally resulted in large unneeded inventories.

Source: GAO.

**Appendix II: Past Products Identifying
Challenges Facing the Army and DOD
Regarding Prepositioning Programs**

Table 3: Other Products

Title	Key challenges identified
Management of Army Prepositioned Stocks. Headquarters, Department of the Army, U.S. Army Audit Agency, A2006-0200-ALL (August 2006)	In August 2006, the Army Audit Agency reported that U.S. Army Material Command management practices for overseeing the Army prepositioned stocks program and ensuring it remained responsive to warfighters needs appeared to be on automatic pilot with little management intervention. They reported that this inattention has resulted in supply problems including problems associated with requirements determination and inventory management.
Army Prepositioned Stocks in Europe. Headquarters, Department of the Army, U.S. Army Audit Agency, A2006-0197-ALE (August 2006)	In August 2006, the Army Audit Agency reported that the requirements identified in the Army's APS Strategy 2012 would not effectively support responsibilities in the European theater or Army transformation goals. The Army Audit Agency indicated that while the APS strategy included requirements for six operational projects, only two were valid – special operations forces and aerial delivery. According to the Army Audit Agency, the remaining operational projects were either invalid or questionable for the U.S. European Command Area of Responsibility and proponents of these projects did not do required reviews and revalidations of the requirements.
Military Construction Projects Supporting Army Prepositioned Stocks in Europe. Headquarters, Department of the Army, U.S. Army Audit Agency, A2006-0149-ALE (June 2006)	In June 2006, the Army Audit Agency reported that the Army was continuing with its construction projects at Livorno, Italy, despite elimination of the original requirements for the projects and uncertainty about the facility's future mission. They additionally reported that the continuation of construction without a permanent requirement did not justify expenditure of Military Construction, Army funds appropriated for the project and violated the spirit in which Congress appropriated funds for the project.
Operation Iraqi Freedom (OIF) Maritime Prepositioning Force (MPF) Reconstitution, Regeneration, and Reembarkation (R3) Operations: Summary Findings, Center for Naval Analyses, CAB D0009974.A2/Final (June 2004)	In June 2004, the Center for Naval Analyses reported that although Marine Corps Maritime Prepositioning Force operations in Iraq could be characterized as a success, the execution of reconstitution, regeneration, and reembarkation was neither simple nor easy. Challenges and issues included (1) a lack of detailed published policies and guidance, and servicewide knowledge and experience, in planning and executing operations; (2) simultaneous conduct of combat and operations; and (3) a lack of effective systems, organizations, and procedures for tracking and accounting for prepositioned equipment after it was downloaded.
Operational Project Stocks - Phase II, Headquarters, Department of the Army, U.S. Army Audit Agency, A-2004-0108-AML (February 2004)	In February 2004, the Army Audit Agency reported that some operational projects—one of four categories of Army prepositioned stocks—had (1) invalid intended purposes; (2) inaccurate, overstated, outdated, or questionable requirements; (3) insufficient quantities of equipment on hand; or (4) a lack of requirements for essential equipment. Consequently, about \$472 million of the roughly \$1.5 billion in requirements reviewed were invalid and \$280 million were questionable.
U.S. Army Matériel Command (USAMC) Operation Iraqi Freedom (OIF) Lessons Learned Conference, 10-11 September 2003, Redstone Arsenal, Alabama	In September 2003, the U.S. Army Matériel Command sponsored an Operation Iraqi Freedom lessons learned conference during which 27 major issues were identified in such areas as personnel, supply, maintenance, and distribution. For example (1) supply-related lessons learned included the need to relook at requirements determinations, asset management and visibility, prepositioned stocks, and ammunition warfighter support; (2) maintenance-related lessons learned included the need to improve prepositioning maintenance, readiness and other reporting, accountability, and forward repair activity; and (3) distribution-related lessons learned included the need to modify force structure and doctrine to support the distribution system, appoint a single DOD distribution manager, and develop and implement a business system.

**Appendix II: Past Products Identifying
Challenges Facing the Army and DOD
Regarding Prepositioning Programs**

Title	Key challenges identified
Systematic Inspection of the Material Condition of Army War Reserve Stocks, U.S. Army Matériel Command Inspector General (August 2001)	In August 2001, the Army Matériel Command Inspector General reported the following problems with Army war reserve sustainment stocks related to the Army Prepositioned Stock program: (1) a lack of centralized strategic operational direction; (2) insufficient funding for program requirements; (3) a lack of data integrity in automated systems; (4) adverse mission impact caused by readiness reporting procedures and overall operational practices; (5) mismatches between recorded condition codes of matériel and true conditions; (6) no established procedures for test, measurement, and diagnostic equipment support; (7) an inability of the command to effectively support the Army's wartime mortuary affairs mission; (8) matériel excess to requirements stored at prepositioned sites; (9) ineffective government oversight of a contractor allowing decreased readiness and increased costs; and (10) bulk fuel, potable water, and other assets to support forces during deployment were not part of the package.
Army Prepositioned Stock Program, Combat Equipment Group - Europe, U.S. Army Audit Agency, AA 98-138 (March 1998)	In March 1998, the Army Audit Agency reported that while the Army Combat Equipment Group properly accounted for its war reserve stocks stored in Europe, improved accounting procedures were needed for its war reserve stocks loaned in support of Operation Joint Endeavor in Bosnia. The audit agency additionally reported that repair parts had been identified during the audit that were not needed to support the deployable unit sets authorized for the war reserve program. Moreover, while war reserve equipment was generally maintained and stored properly, some of the combat equipment companies retained too many line items, maintained excess stockage levels, and didn't establish an effective method to monitor maintenance operations.
Sustainment Requirements for the Army Prepositioned Stock Program, U.S. Army Audit Agency, AA 98-99 (February 1998)	In February 1998, the Army Audit Agency reported that a substantial number of undesignated war reserve assets were stored in Europe that could have been used to satisfy new sustainment stock requirements.
Total Asset Visibility-Operational Projects, U.S. Army Audit Agency, AA 98-31 (November 1997)	In November 1997, the Army Audit Agency reported problems in the Total Asset Visibility capability for Army operational projects, including (1) incomplete or unreliable on-hand asset balances, (2) a lack of visibility over loaned assets, (3) inadequate identification of key management controls in Army policy regulations, (4) weaknesses in data integrity, and (5) failure of Army managers at both the wholesale and retail levels to redistribute assets to improve readiness and reduce requirements.
Equipment Pre-positioned Afloat, Department of Defense Inspector General, 97-054 (December 1996)	In December 1996, the DOD Inspector General reported that the Army had rapidly expanded its afloat prepositioning program without first publishing criteria, policy, plans, and doctrine resulting in a possible inability to ensure effective equipment management in support of the combatant commanders.

Source: GAO.

Appendix III: Comments from the Department of Defense

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



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

January 17, 2007

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

Dear Mr. Solis:

This is the Department of Defense (DoD) response to the GAO draft report, GAO-07-144, "DEFENSE LOGISTICS: Army Needs to Take Steps to Address Prepositioning Strategy, Requirements, Facilities and Maintenance Oversight Issues," dated December 14, 2006 (GAO Code 350921).

The Department partially concurs with each recommendation. An explanation of the DoD position is enclosed. Additionally, since portions of the draft report supporting the recommendations could be misleading, technical comments are provided to improve the accuracy and clarity of the draft report. The Department appreciates the opportunity to comment on the draft report.

Sincerely,


Jack Bell

Enclosures:
As stated



GAO DRAFT REPORT – DATED December 14, 2006
GAO CODE 350921/GAO-07-144

**“DEFENSE LOGISTICS: Army Needs to Take Steps to Address Prepositioning Strategy,
Requirements, Facilities and Maintenance Oversight Issues”**

**DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATIONS**

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense direct the Secretary of the Army to take steps to synchronize the Army’s prepositioning strategy with the DoD-wide strategy to ensure that future investments made for the Army’s prepositioning program align with the anticipated DoD-wide prepositioning strategy.

DoD RESPONSE: Partially Concur. The DoD agrees with the need to synchronize Service prepositioning strategies with the DoD strategic positioning policy. The fiscal year 2007 National Defense Authorization Act directs that, “Not later than six months after the date of enactment of this Act, the Secretary of Defense shall establish the strategic policy on the programs of the DoD for the prepositioning of materiel and equipment.” In order to support the development of this mandated policy and ultimately publish a comprehensive strategy for the composition, location, maintenance, employment and reconstitution of stocks, the Army is participating fully in the ongoing Mobility Capability Study 2006 on pre-positioning. Under the auspices of that study and the Global Defense Posture Review, the Army’s strategy is being incorporated into these studies as DoD continues its efforts toward the development of a DoD-wide Prepositioning (PREPO) strategy. In anticipation of this study, the Army developed its own Service strategy that supports the anticipated DoD-wide strategic “policy” in order to ensure that future investments made for the Army’s prepositioning program are aligned. Additional direction regarding the synchronization of strategies/policy is not required.

RECOMMENDATION 2: The GAO recommended that once the strategic direction is aligned with the DoD strategy, the Secretary of the Army develop an implementation plan that:

- maintains ongoing reevaluation of the secondary item and operational project stock requirements as well as establishes systematic readiness measurement and reporting of secondary items and operational project stock programs;
- identifies the optimal mix of storage and maintenance facilities at each location to support the emerging strategy; and
- prescribes oversight requirements for the maintenance of prepositioned equipment to ensure that equipment is ready for combat.

DoD RESPONSE: Concur. This guidance already exists in the recently revised Chairman, Joint Chiefs of Staff Instruction 4310.01B (Logistics Planning Guidance for Global Pre-Positioning Materiel Capabilities) dated November 1, 2006 and DoD Directive 3110.6 (War Reserve Materiel Policy). The Army’s implementation plan, included in the *Army Prepositioned Stocks Strategy*

2013, is already aligned with this guidance as a result of their participation in the Joint Working Group, where the items in the GAO recommendation are specifically monitored by OSD and the Joint Staff. Additional direction is not required.

TECHNICAL COMMENTS

GAO DRAFT REPORT – DATED December 14, 2006
GAO CODE 350921/GAO-07-144

**“DEFENSE LOGISTICS: Army Needs to Take Steps to Address Prepositioning Strategy,
Requirements, Facilities and Maintenance Oversight Issues”**

Highlights Page, Para 1: What GAO Found

“The Army’s April 2006 report on the status of its prepositioning program addressed the areas required by Congress; for example, it included descriptions of operational capabilities, as well as inventory shortfalls *plus strategic capabilities assessments required in future operating environments shaped by insights gained through QDR 06* expressed in terms of procurement costs. However, the Army has significantly shifted its prepositioning strategy since that report was issued. Based primarily on budget reprogramming decisions—but influenced as well by worsening Army-wide equipment shortfalls—The Army concluded in summer 2006 that its prepositioning strategy was no longer viable and began work on a revised strategy. The Army’s revised strategy proposes significant changes to the program by 2013, including less reliance on heavy combat equipment afloat and the expansion of heavy equipment *in the European theater in Kuwait and Italy*. As a result, the Army’s April 2006 report to Congress is outdated, and neither Congress nor the Department of Defense (DoD) should base funding decisions on it,”

Comment: Change for clarity / accuracy. The Army APS 2012 strategy was changed due to insights gained during QDR 06 and other strategic initiatives, not due to budget reprogramming decisions.

See comment 1.

Highlights Page, Paragraph 2: What GAO Found

“The Army faces several strategic and management challenges as it revises and implements its prepositioning program. From a strategic perspective, the Army will *align its strategy with the forthcoming DoD strategic “policy” (under development) which will provide guidance for prepositioning capabilities, training, readiness and land base requirements. The DoD policy will result in the Army creating/modifying its strategy in accordance with the guidance provided in the DoD policy.* gauge how well it is emerging strategy will align with DoD plans currently under development. The Army plans to begin implementing its revised strategy by the end of 2006. However, DoD has a department-wide prepositioning study underway intended to set strategy and joint doctrine to guide the departments prepositioning programs, but this will not be completed for several months. As a result, the Army will implement its strategy before the DoD study is completed and is at risk of resourcing requirements that may be superseded by the DoD strategy. Moreover, because prepositioning is interconnected with airlift, sealift, and basing, the Army’s decisions will have an as-yet-undetermined effect on these areas.

Comment: Change for clarity/accuracy

See comment 2.

See comment 3.

Page 4, para 2, line 3:

- ~~“Inability to gauge its alignment with DoD-wide prepositioning policy strategy.”~~

Comment: Change for clarity/accuracy

Page 5, para 1, line 7:

- ~~“The fiscal year 2007 National Defense Authorization Act required DoD to complete a DoD-wide strategic policy by April 2007. In the interim the Army, at the time we finished our work, was planning to implement their internal strategy in accordance with their required missions and capabilities. Even though DoD and Army officials told us they have coordinated prepositioning plans, the timing of the two strategies could cause disconnects between the strategies that will need to be addressed after the Army’s strategy is implemented. The fiscal 2007 defense authorization act required DoD to complete a DoD-wide strategy by mid-April 2007. At the time we finished our work, the Army was planning to implement their strategy by the end of 2006—months ahead of the DoD-wide effort. The most significant problem resulting from this timing, is that the Army cannot be assured that its efforts will be aligned with DoD-wide efforts still ongoing. Even though DoD and Army officials told us they have coordinated prepositioning plans, the timing of the two strategies is not synchronized. As a result, DoD could not be restricted in developing an optimal DoD-wide strategy because the Army strategy already exists or the Army could be at risk of filling requirements that will be superseded when the DoD-wide strategy is issued. Moreover, prepositioning is interconnected with airlift, sealift, and basing so the Army’s decisions will have an as yet undetermined effect on lift requirements and basing. Such potential problems are avoidable if the strategies are synchronized.”~~

See comment 4.

Comment: Recommend the paragraph be modified. The Army should not be criticized for timing and lack of synchronization with an updated DoD strategic policy that has not been yet issued. The Services create individual prepositioning strategies in accordance with the required missions and capabilities.

Page 6, para 1, line 2:

~~“...be revalidated every 5 years, we recommended in September 2005 that the Army address this long – standing problem. In response the Army conducted a revalidation of their Operational Project Stocks in April 06. As of the date of this report, 98% of all the Stocks had completed that validation. but the most recent revalidation for many of the projects was last conducted in 1998. We recommended in September 2005 that the Army address this long –standing problem. In response, the Army has taken several steps to address it, but reviews of the secondary item and operational projects requirements were still ongoing when we completed our work in October 2006. Also, while the Army measures readiness of prepositioned equipment programs by assessing inventory levels against requirements and the maintenance condition of on—hand equipment, the Army does not systematically measure or report readiness for the secondary item and operational project programs. Without sound requirements or reporting mechanisms, the Army cannot reliably~~

assess the impact of any shortfalls, the readiness of its programs, or make informed investment decisions about them.

Comment: Change for accuracy. The Department of the Army started tracking War Reserve Secondary Items using the Strategic Management System in June 2006. The Strategic Management System is a monthly requirement that provides visibility to the Army Senior Leadership of the equipment on-hand and equipment readiness of the Army Prepositioned Stocks at the various worldwide locations i.e. Continental United States, Europe, Afloat, Northeast Asia and Southwest Asia. It provides the Current Year (2007), the Budget Year (2008), the Program Objective Memorandum and Fiscal Year-07 Supplemental funding status for War Reserve Secondary Items. Included in this report are the Authorized Stockage List, Prescribed Load List, Unit Basic Load, Operational Project Stocks and Sustainment Stocks funding information for each of the locations. The Strategic Management System process is a key component to enhancing the Army's ability to support future contingency and wartime operational requirements. Additionally, in October 2006 the Army began a test of a new process to identify War Reserve Secondary Items requirements based on using real world demand data gathered from Operations Iraqi Freedom and Enduring Freedom.

See comment 5.

Page 9, para 4:

- *“War reserve sustainment stocks include*
 - **Items to sustain the battle until CONUS resupply can be ramped up to war time levels and arrive in theater.**
 - **War Reserve Secondary Items include rations, clothing and textiles, construction and barrier materiel, medical supplies and repair parts and major assemblies (reparables and consumables).”**
 - *Replacement equipment for losses in early stages of operations or until unit resupply is established.*
 - *Major end items such as aircraft engines and tracked vehicles.*
 - *Secondary items such as meals, clothing, petroleum supplies, construction materials, ammunition, medical materials, and repair parts.*

See comment 6.

Comment: Change for clarity/accuracy. The GAO report incorrectly defines what comprises War Reserve Sustainment Stocks.

Page 10, para 3:

“THE ARMY’S APRIL 2006 REPORT TO CONGRESS ADDRESSED THE AREAS REQUIRED BUT THE ARMY STRATEGY IS EVOLVING

See comment 7.

Comment: Change for clarity/accuracy.

Page 10, para 4, line 8:

“The Army’s April 2006 report to congress on the status of its prepositioned program addressed the areas required by Congress, but the Army has significantly shifted its prepositioning strategy since then. The Army’s report included descriptions of operational capabilities as outlined in the Army Prepositioned Stocks Strategy 2012, addressed the maintenance condition of prepositioned equipment; and noted recent efforts to improve management and maintenance oversight of the program, including forming an independent inspection team. ~~However, since the report’s publication, the Army has begun a reexamination of its overall prepositioning strategy. Based primarily on recent budget cuts to the program as part of the DoD program review—as well as equipment shortfalls throughout the service—the Army concluded that its Prepositioned Stocks Strategy 2012 was no longer viable and began working on a revised strategy that was approved by Army leaders in late August 2006 and is expected to be completed by the end of 2006.~~”

Comment: Change for clarity/accuracy

See comment 8.

Page 11, para 1, last sentence:

“It did stipulate, however, that the equipment set was undergoing ~~reset-~~ repair, replacement and recap.”

Comment: Change for accuracy.

See comment 9.

Page 11, para 3, line 2:

“In particular, an internal *DoD* reprogramming action required the Army to offload a Heavy Brigade Combat Team equipment set stored on a prepositioned ship and redistribute it to meet existing equipment shortfalls and reduce costs.

Comment: Change for accuracy.

See comment 10.

Page 12, para 1, line 7:

“This decision effectively reduced the Army’s program in the near term from two to one Heavy Brigade Combat Team afloat, with implications for the Army’s *Combatant Commands*’ operational plans in both the near and longer term.”

Comment: Change for accuracy.

See comment 11.

Page 12, para 2, line 1:

“The Army’s examination of the global strategic context in 2013 and beyond and future operating environments shaped by insights gained through QDR 06 led to the development of a new strategy. Several factors combined to create a ripple effect that impacted the viability of the Army Prepositioned Stocks 2012 Strategy. Equipment shortfalls made it difficult for the Army to

See comment 12.

meet the requirements in the strategy at least partly because Army prepositioned stock equipment was continuing to be drawn to support ongoing operations. Also, the Army transformation to modularity exacerbated shortfalls in certain types of equipment and created excesses in others. In addition, the Army eliminated most of the remaining facilities and prepositioned stocks from Western Europe. ~~but was completing new maintenance and storage facilities in Italy which needed a mission.~~ As a result, the Army's 2006 report was outdated soon after its publication and should not be used by Congress or DoD for funding decisions."

Comment: Change for accuracy.

Page 13, para 3, line 1:

"DoD has efforts underway that will address gaps identified in GAO's September 2005 report, but have implications for the Army's efforts. First, to address Army Prepositioned Stocks in department-wide oversight, DoD convened a working group that includes representatives from the Office of the Secretary of Defense, Joint Staff, Defense Logistics Agency, the Army, *Joint Forces Command* and the other Services to develop joint doctrine for the prepositioning programs.

See comment 13.

Comment: Change for accuracy

Page 23, Table 1: Status of Facilities at Army Prepositioned Stock Locations

Insert:

"Qatar-

Camp As Sayliyah, Qatar: The Qatar facilities, which were completed in 1997, included 26 warehouses of about 60KSQFT each and two large maintenance shops, all dedicated to the ARMY PREPOSITIONED STOCKS-5 mission. During the recent Iraq war, 17 warehouses were diverted from ARMY PREPOSITIONED STOCKS storage to DA priority missions. Some diverted warehouses may be returned to ARMY PREPOSITIONED STOCKS use at some future date. 12 soft-skinned warehouse extensions were installed in 2005 to provide additional interim ARMY PREPOSITIONED STOCKS storage space of about 110KSQFT. Numerous minor construction projects (O&MA funded) to meet current needs are proposed or in progress.

Falcon 78, Qatar: Ammo Storage and Maintenance: 20 earth-covered storage igloos; 9 bermed upload sunshades (double stall); dunnage sunshade; hardened processing/storage building. No facility investment required."

See comment 14.

Comment: Change for accuracy.

GAO's Responses to DOD's Technical Comments:

1. DOD comments indicate that the reason the Army shifted its prepositioning strategy in 2006 was not due to budget reprogramming decisions; instead it was due to the 2006 Quadrennial Defense Review. We interviewed Army officials during the summer of 2006 who told us that the budget reprogramming decision and equipment shortfalls throughout the Army were the main impetus of the strategy review. We have added the Army's assertion that the quadrennial review influenced the decision to the text.
2. DOD indicates that the DOD policy under development "will result in the Army creating/modifying its strategy in accordance with the guidance in the DOD policy" when issued. We have added the department's assertion to the text. We agree that having an Army implementation plan in place before the DOD policy is issued will result in the need to modify the Army's strategy. However this is an apparent inconsistency with the main text of the department's comments stipulating that the Army's completed strategy will be incorporated into the DOD-wide strategy. As a result, we continue to believe that additional department-level direction is needed to ensure that future investments made by the Army are aligned with DOD policy.
3. We believe that strategy is a better description as it provides linkage to the recommendation in our 2005 report calling for a DOD-wide prepositioning strategy.
4. The department stated that the Army should not be criticized for creating an implementation strategy before the DOD policy is issued. Our intent was not to criticize but to demonstrate the potential risks associated with individual service strategies being implemented before the department's strategy is issued. In a September 2005 report GAO recommended that DOD develop a departmentwide strategy to set direction for and underpin the prepositioning programs of the services but this has still not been completed. The Army can ill afford to invest scarce resources to meet requirements that will not be aligned with the DOD policy when issued.
5. The department disagreed with several aspects of our description of the operational project and secondary item programs. We have included additional information to the report that, in response to a past GAO recommendation, the Army has conducted revalidations of most operational project stocks. Further, the Army asserted that it tracks the funding of the prepositioned secondary items and operational project stocks as part of the Army's Strategic Management System and that this constitutes readiness reporting. We disagree. The

requirements underpinning these programs are questionable, and funding information is inadequate for determining readiness.

6. We have changed the text to reflect the department's definition of war reserve sustainment stocks.
7. Since the Army strategy evolved during our review, we continue to believe our caption better reflects the substance.
8. See comment 1.
9. We have changed the text to delete "reset".
10. We have changed the text to insert "DOD".
11. We have made changes to the text to reflect the role of Combatant Commanders in operational planning.
12. The department's suggested language indicated that the shift in strategy was the result of the 2006 Quadrennial Review. We have reflected this throughout the report. The department also suggested deleting language in the draft report concerning the lack of mission in Italy in the previous Army strategy but offered no reason why this information should be deleted. When initially approved, the \$55 million construction project in Italy was intended to support the storage of a prepositioned combat brigade team equipment set there, but this requirement had been eliminated in the 2012 strategy leaving the facility with no mission. The Army decided to complete the construction as it was more costly to cancel than complete, and the Army's 2013 strategy indicates placing a combat brigade team equipment set at that location even though existing operational and contingency plans for the area do not require this type of equipment. We have retained this information in the report because we believe this information illustrates the need for better facilities planning by the Army.
13. We have made changes to the text to include the Joint Forces Command in DOD's working group.
14. We added information to reflect the facilities in Qatar.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

William M. Solis, (202) 512-8365

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