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Testimony

Before the Subcommittee on Readiness,  
Committee on Armed Services, House of  
Representatives

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For Release on Delivery  
Expected at 2 p.m. EST  
Wednesday, March 24, 2004

# MILITARY PREPOSITIONING

## Observations on Army and Marine Corps Programs During Operation Iraqi Freedom and Beyond

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Defense Management and Capabilities



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Highlights of [GAO-04-562T](#), a testimony before the Subcommittee on Readiness, Committee on Armed Services, House of Representatives

## Why GAO Did This Study

Since the Cold War, the Department of Defense (DOD) has increased its reliance on prepositioned stocks of military equipment and supplies, primarily because it can no longer plan on having a large forward troop presence. Prepositioned stocks are stored on ships and on land in the Persian Gulf and other regions around the world. Prepositioning allows the military to respond rapidly to conflicts. Ideally, units need only to bring troops and a small amount of materiel to the conflict area. Once there, troops can draw on prepositioned equipment and supplies, and then move quickly into combat.

Today's testimony describes (1) the performance and availability of Army and Marine Corps prepositioned equipment and supplies to support Operation Iraqi Freedom (OIF); (2) current status of the stocks and plans to reconstitute them; and (3) key issues facing the military as it reshapes these programs to support DOD's force transformation efforts.

GAO's observations are based on ongoing work as well as previous reports on equipment accountability, supply distribution, and other logistics issues during OIF, plus other past work on spare parts shortages and on the readiness of prepositioning programs.

[www.gao.gov/cgi-bin/getrpt?GAO-04-562T](http://www.gao.gov/cgi-bin/getrpt?GAO-04-562T).

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](mailto:solisw@gao.gov).

## MILITARY PREPOSITIONING

# Observations on Army and Marine Corps Programs During Operation Iraqi Freedom and Beyond

## What GAO Found

The importance of prepositioned stocks was dramatically illustrated during OIF. While they faced some challenges, the Army and Marine Corps relied heavily on prepositioned combat equipment and supplies to decisively defeat the Iraqi military. They both reported that prepositioned stocks were a key factor in the success of OIF. Prepositioned stocks provided most of the combat equipment used and, for the most part, this equipment was in good condition and maintained high readiness rates. However, the Army's prepositioned equipment included some older models of equipment and shortfalls in support equipment such as trucks, spare parts, and other supplies. Moreover, the warfighter did not always know what prepositioned stocks were available in theater, apparently worsening an already overwhelmed supply-and-distribution system. The units were able to overcome these challenges; fortunately, the long time available to build up forces allowed units to fill many of the shortages and adjust to unfamiliar equipment.

Much of the prepositioned equipment is still being used to support continuing operations in Iraq. It will be several years—depending on how long Iraqi Freedom operations continue—before these stocks will be available to return to prepositioning programs. And, even after they become available, much of the equipment will likely require substantial maintenance, or may be worn out beyond repair. The Army has estimated that it has an unfunded requirement of over \$1 billion for reconstituting the prepositioned equipment used in OIF. However, since most prepositioned equipment is still in Southwest Asia and has not been turned back to the Army Materiel Command for reconstitution, most of the funding is not required at this time. When the prepositioned equipment is no longer needed in theater, decisions will have to be made about what equipment can be repaired by combat units, what equipment must go to depot, and what equipment must be replaced with existing or new equipment to enable the Army to reconstitute the prepositioned sets that were downloaded for OIF.

DOD faces many issues as it rebuilds its prepositioning program and makes plans for how such stocks fit into its future. In the near term, the Army and Marines must necessarily focus on supporting ongoing OIF operations. While waiting to reconstitute its program, the Army also has an opportunity to address shortfalls and modernize remaining stocks. For the longer term, DOD may need to (1) determine the role of prepositioning in light of efforts to transform the military; (2) establish sound prepositioning requirements that support joint expeditionary forces; and (3) ensure that the program is resourced commensurate with its priority and is affordable even as the force is transformed. Congress will play a key role in reviewing DOD's assessment of the cost effectiveness of various options to support its overall mission, including prepositioning and other alternatives for projecting forces quickly.

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Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to discuss our work on logistical issues related to Operation Iraqi Freedom (OIF), focusing on prepositioned stocks. Since the end of the Cold War, the Department of Defense (DOD) has increased its reliance on prepositioned reserves of military equipment and supplies since it can no longer plan on having a large forward troop presence. Prepositioned stocks are stored on ships and on land in the Persian Gulf and other regions around the world. Prepositioning can speed response times. Ideally, the military needs only to bring troops and a small amount of materiel to the area of conflict. Once there, troops can draw on prepositioned equipment and supplies, and then move rapidly into combat.

My statement today reflects our preliminary observations drawn from ongoing work as well as previously published reports. As requested, my testimony today will focus on the performance, reconstitution, and future of prepositioning programs. Specifically, it describes (1) the performance and availability of Army and Marine Corps prepositioned equipment and supplies to support OIF; (2) the current status of the stocks and plans to reconstitute them; and (3) key issues facing the military as it reshapes these programs to support the military's force transformation efforts.

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## Summary

The importance of prepositioned stocks was dramatically illustrated during OIF. While they faced some challenges, the Army and Marine Corps relied heavily on prepositioned combat equipment and supplies to decisively defeat the Iraqi military. The following summarizes our preliminary observations and issues to consider for the future.

- Army and Marine Corps officials reported that prepositioned stocks were a key factor in the success of OIF. Prepositioned stocks provided a significant amount of the combat equipment used by the Army and the Marine Corps. For the most part, the prepositioned combat systems were in good condition and reportedly maintained high readiness rates throughout the war. However, the Army's prepositioning program had some less-than-modern equipment and had shortfalls, such as trucks, spare parts, and other items. Moreover, the warfighters did not always know what prepositioned sustainment stocks were available in theater, apparently worsening an already overwhelmed theater supply-and-distribution system. While these challenges were not insurmountable to the units, they did slow them down. Fortunately, the long time available to build up forces allowed U.S. forces to fill many of the shortages and adjust to unfamiliar equipment.

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- Much of the prepositioned equipment is still being used to support continuing operations in Iraq. It will be several years—depending on how long Iraqi Freedom operations continue—before these stocks will be available to return to prepositioning programs. And, even after these stocks become available, much of the equipment will likely require substantial maintenance, or it may be worn out beyond repair. The Army has estimated that it has an unfunded requirement of over \$1 billion for reconstituting the prepositioned equipment used in OIF. However, since most prepositioned equipment is still in Southwest Asia and has not been turned back to the Army Materiel Command for reconstitution, most of the funding is not required at this time. When the prepositioned equipment is no longer needed in theater, decisions will have to be made about what equipment can be repaired by combat units, what equipment must go to depot, and what equipment must be replaced with existing or new equipment to enable the Army to reconstitute the prepositioned sets that were downloaded for OIF. In the interim, both the Army and Marines have kept some land- or sea-based prepositioned stocks in the Pacific to cover a possible contingency in that region.
  - The defense department faces many issues as it rebuilds its prepositioning program and makes plans for how such stocks fit into the future. In the near term, the Army and the Marine Corps must necessarily focus on supporting ongoing operations in OIF. And while it may be several years before most prepositioned assets are available to fully reconstitute the Army's programs, opportunities exist to address shortfalls and selectively modernize the remaining stocks. For the longer term, the department may need to rethink its prepositioning programs to ensure that they are in sync with overall transformation goals and the evolving military strategy. Some changes are already underway. For example, the Army and Marine Corps are pursuing sea-basing ideas—where prepositioning ships could serve as floating logistics bases. Importantly, DOD needs to consider affordability. The drawdown of Army forces made prepositioning a practical alternative in recent years because the service had ample equipment. However, as the services' equipment is transformed or recapitalized, it may not be practical to buy enough equipment for units to have one set at their home station and another set in prepositioning. Consideration of the cost of various options will be critical as the department evaluates alternatives for transforming its force structure to achieve future mission objectives. Congress will have a key role in reviewing the department's assessment of the cost-effectiveness of options to support DOD's overall mission, including mobility and force projection.

In responding to your request, we conducted work that included officials from Headquarters, U.S. Army and U.S. Marine Corps, Washington, D.C.; Army Field Support Command, Rock Island, Illinois; Combat Equipment

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Group-Afloat, Goose Creek, South Carolina; and Blount Island Command, Jacksonville, Florida. At these locations, we interviewed officials familiar with prepositioning issues during OIF as well as plans for the future. We reviewed and obtained relevant documentation and performed analyses of reconstitution and options for the future. We also reviewed after-action reports on OIF and Operation Desert Storm. We obtained service estimates for funding prepositioned stocks requirements, but we did not validate these estimates. In addition, we drew on the preliminary results of our ongoing reviews of OIF lessons learned and OIF reconstitution and on our recent reports on OIF supply and distribution issues, Stryker deployment, and Army spare parts shortages. We also relied on our 2001 report on Army war reserve spare parts shortages, 1998 report on prepositioning in the Army and the Air Force, and early 1990s reports on Operation Desert Storm.<sup>1</sup> We performed our work in March 2004 in accordance with generally accepted government auditing standards.

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## Background

The basic purpose of prepositioning is to allow DOD to field combat-ready forces in days rather than in the weeks it would take if the forces and all necessary equipment and supplies had to be brought from the United States. However, the stocks must be (1) available in sufficient quantities to meet the needs of deploying forces and (2) in good condition. For prepositioning programs, these factors define “readiness.” If on-hand stocks are not what is needed—or are in poor condition—the purpose of prepositioning may be defeated because the unit will lose valuable time obtaining or repairing equipment and supplies. U.S. forces had months to build up for OIF, so speed was not imperative. Prepositioning sites became reception and staging areas during the months leading up to the war, and afforded the military the necessary time and access in Kuwait to build up its forces for the later offensive operations of OIF.

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<sup>1</sup> U.S. General Accounting Office, *Defense Logistics: Preliminary Observations on the Effectiveness of Logistics Activities during Operation Iraqi Freedom*, [GAO-04-305R](#) (Washington, D.C.: Dec. 18, 2003); *Military Transformation: Realistic Deployment Timelines Needed for Army Stryker Brigades*, [GAO-03-801](#) (Washington, D.C.: June 30, 2003); *Defense Inventory: The Army Needs a Plan to Overcome Critical Spare Parts Shortages*, [GAO-03-705](#) (Washington, D.C.: June 27, 2003); *Defense Inventory: Army War Reserve Spare Parts Requirements Are Uncertain*, [GAO-01-425](#) (Washington, D.C.: May 10, 2001); *Military Prepositioning: Army and Air Force Programs Need to Be Reassessed*, [GAO/NSIAD-99-6](#) (Washington, D.C.: Nov. 16, 1998); *Operation Desert Shield/Storm: Impact of Defense Cooperation Account Funding on Future Maintenance Budgets*, [GAO/NSIAD-93-179](#) (Washington, D.C.: June 10, 1993); and *Operation Desert Storm: Early Performance Assessment of Bradley and Abrams*, [GAO/NSIAD-92-94](#) (Washington, D.C.: Jan. 10, 1992).

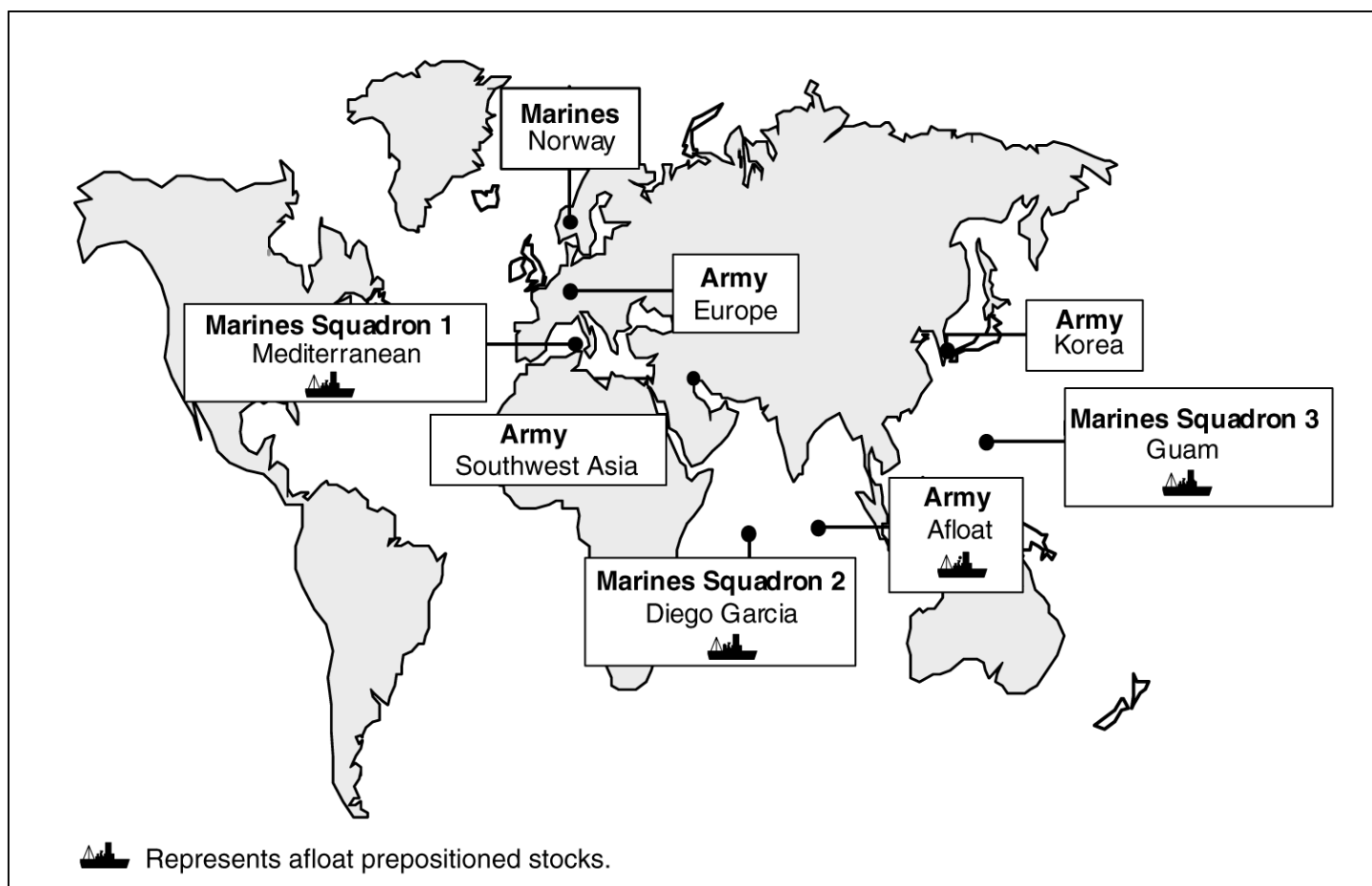
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Prepositioning programs grew in importance to U.S. military strategy after the end of the Cold War, particularly for the Army. Recognizing that it would have fewer forward-stationed ground forces—and to support the two-war strategy of the day—the Army used equipment made available from its drawdown to field new sets of combat equipment ashore in the Persian Gulf and in Korea. It also began an afloat program in the 1990s, using large ships to keep equipment and supplies available to support operations around the world. The Marine Corps has had a prepositioned capability since the 1980s. Its three Marine Expeditionary Forces are each assigned a squadron of ships packed with equipment and supplies—the Marines view this equipment as their “go-to-war” gear. Both the services also have retained some stocks in Europe, although the Army stocks have steadily declined since the end of the Cold War.<sup>2</sup> Today, the Army has sites in the Netherlands, Luxembourg, and Italy, while the Marine Corps retains stocks in Norway. Figure 1 shows the location of Army and Marine Corps prepositioned equipment prior to OIF.

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<sup>2</sup> U.S. General Accounting Office, *Army War Reserves: DOD Could Save Millions by Aligning Resources with the Reduced European Mission*, [GAO/NSIAD-97-158](#) (Washington, D.C.: Jul. 11, 1997).

**Figure 1: Location of Army and Marine Prepositioned Equipment Prior to OIF**



Sources: Army and Marine Corps data.

Prepositioning is an important part of DOD's overall strategic mobility calculus. The U.S. military can deliver equipment and supplies in three ways: by air, by sea, or by prepositioning. Each part of this triad has its own advantages and disadvantages. Airlift is fast, but 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 relatively slow. Prepositioning lessens the strain on expensive airlift and reduces the reliance on relatively slow sealift deliveries. However, prepositioning requires the military to maintain equipment that essentially duplicates what the unit has at home station. Moreover, if the prepositioned equipment stocks are incomplete, the unit may have to bring along so

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much additional equipment that using it could still strain lift, especially scarce airlift in the early days of a conflict.

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## Prepositioned Equipment Performed Well in OIF, Despite Shortfalls and Other Logistical Challenges

The Army and Marine Corps reported that their prepositioned equipment performed well during OIF but that some problems emerged. We reviewed lessons-learned reports and talked to Army and Marine Corps officials who managed or used the equipment. We heard general consensus that major combat equipment was generally in good condition when drawn and that it performed well during the conflict. However, Army officials said that some equipment was out-of-date and some critical items like trucks were in short supply and parts and other supplies were sometimes not available. The officials agreed that, overall, OIF demonstrated that prepositioned stocks could successfully support major combat operations.

Most of the issues we heard were with the Army's program. Marine Corps officials reported few shortfalls in their prepositioned stocks or mismatches with unit equipment. This is likely due to two key differences between the services. First, the Marines view prepositioned stocks as their "go-to-war" gear and give the stocks a very high priority for fill and modernization. Second, the units that will use the prepositioned stocks are assigned in advance and the Marine Corps told us that the combat units feel a sense of "ownership" in the equipment. This manifests itself in important ways. For example, the Marines have periodic conferences with all involved parties to work out exactly what their ships will carry and what the units will need to bring with them to the fight. Such an effort to tailor the prepositioned equipment increases familiarity, allows for prewar planning, and thus minimizes surprises or last-minute adjustments. The Marines also train with their gear periodically. By contrast, the Army does not designate the sets for any particular unit and provides little training with the equipment, especially with the afloat stocks.

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## Prepositioned Combat Equipment Performed Well

Personnel who used and managed the equipment agreed that the tanks, infantry fighting vehicles, and howitzers were in good condition when they were drawn from the prepositioned stocks; moreover, the equipment generally stayed operational throughout the fight. For example, the Third Infantry Division after-action report said that new systems and older systems proved to be very valuable and the tanks and Bradleys were both lethal and survivable. Additionally, according to Army Materiel Command documents, combat personnel reported that their equipment, in many cases, worked better than what they had at home station. Moreover, operational readiness data we reviewed showed that major combat



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equipment stayed operational, even in heavy combat across hundreds of miles. In fact, officials from both services agreed that OIF validated the prepositioning concept and showed that it can successfully support major combat operations. Moreover, the U.S. Central Command, in an internal lessons-learned effort, concluded that prepositioned stocks “proved their worth and were critical in successfully executing OIF.”

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### Some Prepositioned Equipment Was Out-of-Date or Did Not Match Unit Needs

Some of the Army’s prepositioned equipment was outdated or did not match what the units were used to at home station. At times, this required the units to “train down” to older and less-capable equipment or bring their own equipment from home. Examples include:

- **Bradleys**—The prepositioned stocks contained some older Bradley Fighting Vehicles that had not received upgrades installed since Operation Desert Storm. Such improvements included items like laser range finders, Global Positioning System navigation, thermal viewers, battlefield identification systems, and others. In addition, division personnel brought their own “Linebacker” Bradleys instead of using the outdated prepositioned stocks that would have required the crew to get out of the vehicle to fire.
- **M113 Personnel Carriers**—The prepositioned stocks contained many older model M113A2 vehicles. This model has difficulty keeping up with Abrams tanks and requires more repairs than the newer model M113A3, which the units had at home station.
- **Trucks**—The prepositioned stocks included 1960s-vintage model trucks that had manual transmissions and were more difficult to repair. Most units now use newer models that have automatic transmissions. The effect of this was that soldiers had to learn to drive stick shifts when they could have been performing other tasks needed to prepare for war; in addition, maintenance personnel were unfamiliar with fixing manual transmissions.
- **Tank Recovery Vehicle**—The prepositioned stocks contained M-88A1 recovery vehicles. These vehicles have long been known to lack sufficient power, speed, and reliability. We reported similar issues after Operation Desert Storm.<sup>3</sup> According to data collected by the Army Materiel Command, these vehicles broke down frequently, generally could not keep up with the fast-paced operations, and did not have the needed capabilities even when they were in operation.

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<sup>3</sup> [GAO/NSIAD-92-94](#).

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None of these problems, however, were insurmountable. The U.S. forces had months to prepare for OIF, and plenty of time to adjust to the equipment they had available. Additionally, the U.S. forces faced an adversary whose military proved much less capable than U.S. forces.

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## Army Faced Spare Parts Shortfalls and Theater Distribution Issues

Our preliminary work also identified shortfalls in available spare parts and major problems with the theater distribution system, which were influenced by shortages of trucks and material handling equipment. Prior to OIF, the Army had significant shortages in its prepositioned stocks, especially in spare parts. This is a long-standing problem. We reported in 2001 that the status of the Army's prepositioned stocks and war reserves was of strategic concern because of shortages in spare parts.<sup>4</sup> At that time the Army had on hand about 35 percent of its stated requirements of prepositioned spare parts and had about a \$1-billion shortfall in required spare parts for war reserves.

Table 1 shows the percentage of authorized parts that were available in March 2001 in the prepositioned stocks that were later used in OIF. These stocks represent a 15-day supply of spare and repair parts for brigade units (Prescribed Load List) and for the forward support battalion that backs up the brigade unit stocks (Authorized Stockage List). While the goal for these stocks was to be filled to 100 percent, according to Army officials the Army has not had sufficient funds to fill out the stocks. In March 2002, the Army staff directed that immediate measures be taken to fix the shortages and provided \$25 million to support this effort. The requirements for needed spare and repair parts were to be filled to the extent possible by taking stocks from the peacetime inventory or, if unavailable there, from new procurement.

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<sup>4</sup> [GAO-01-425](#).

**Table 1: Status of Army Unit Spare Parts Available in Afloat and Selected Land-Based Prepositioned Sets in March 2001<sup>a</sup>**

Location	Unit type	Type of spare parts	Percent fill of authorization
Afloat	Brigade set	ASL	63
		PLL	60
	Corps Support	ASL	0
		PLL	30
	Theater Support 1	ASL	18
		PLL	15
	Theater Support 2	ASL	0
		PLL	6
Qatar	Brigade set	ASL	13
		PLL	19
	Division base	ASL	0
		PLL	0

Legend: ASL= Authorized Stockage List, PLL=Prescribed Load List

Source: Army Materiel Command.

<sup>a</sup>Information is provided for prepositioned sets later used in OIF that were managed by the Army Materiel Command. Army Central Command managed the Kuwait set.

By the time the war started in March of 2003, the fill rate had been substantially improved but significant shortages remained. The warfighter still lacked critical, high-value replacement parts like engines and transmissions. These items were not available in the supply system and could not be acquired in time. Shortages in spare and repair parts have been a systemic problem in the Army over the past few years. Our recent reports on Army spares discussed this issue<sup>5</sup> and, as previously noted, our 2001 report highlighted problems specifically with prepositioned spares. According to Army officials, the fill rates for prepositioned spare parts—especially high-value spares—were purposely kept down because of systemwide shortfalls. The Army’s plan to mitigate this known risk was to have the units using the prepositioned sets to bring their own high-value spare parts in addition to obtaining spare parts from non-deploying units.

<sup>5</sup> [GAO-03-705](#).

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Nonetheless, according to the Third Infantry Division OIF after-action report, spare parts shortages were a problem and there were also other shortfalls. In fact, basic loads of food and water, fuel, construction materials, and ammunition were also insufficient to meet the unit sustainment requirements.

The combatant commander had built up the OIF force over a period of months, departing from doctrinal plans to have receiving units in theater to receive the stocks. When it came time to bring in the backup supplies, over 3,000 containers were download from the sustainment ships, which contained the required classes of supply—food, fuel, and spare parts, among others. The theater supply-and-distribution system became overwhelmed. The situation was worsened by the inability to track assets available in theater, which meant that the warfighter did not know what was available. The Third Infantry Division OIF after-action report noted that some items were flown in from Europe or Fort Stewart because they were not available on the local market. Taken together, all these factors contributed to a situation that one Army after-action report bluntly described as “chaos.”

Our recent report on logistics activities in OIF described a theater distribution capability that was insufficient and ineffective in managing and transporting the large amount of supplies and equipment during OIF.<sup>6</sup> For example, the distribution of supplies to forward units was delayed because adequate transportation assets, such as cargo trucks and materiel handling equipment, were not available within the theater of operations. The distribution of supplies was also delayed because cargo arriving in shipping containers and pallets had to be separated and repackaged several times for delivery to multiple units in different locations. In addition, DOD’s lack of an effective process for prioritizing cargo for delivery precluded the effective use of scarce theater transportation assets. Finally, one of the major causes of distribution problems during OIF was that most Army and Marine Corps logistics personnel and equipment did not deploy to the theater until after combat troops arrived, and in fact, most Army personnel did not arrive until after major combat operations were underway.

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<sup>6</sup> [GAO-04-305R](#).

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## Continuing Support of Operations Will Likely Delay Reconstitution

Forces are being rotated to relieve personnel in theater. Instead of bringing their own equipment, these troops are continuing to use prepositioned stocks. Thus, it may be several years—depending on how long the Iraqi operations continue—before these stocks can be reconstituted.

The Marine Corps used two of its three prepositioned squadrons (11 of 16 ships) to support OIF. As the Marines withdrew, they repaired some equipment in theater but sent much of it back to their maintenance facility in Blount Island, Florida. By late 2003, the Marine Corps had one of the two squadrons reconstituted through an abbreviated maintenance cycle, and sent back to sea.<sup>7</sup> However, to support ongoing operations in Iraq, the Marine Corps sent equipment for one squadron back to Iraq, where it is expected to remain for all or most of 2004. The Marine Corps is currently performing maintenance on the second squadron of equipment that was used during OIF, and this work is scheduled to be completed in 2005.

Most of the equipment that the Army used for OIF is still in use or is being held in theater in the event it may be needed in the future. The Army used nearly all of its prepositioned ship stocks and its ashore stocks in Kuwait and Qatar, as well as drawing some stocks from Europe. In total, this included more than 10,000 pieces of rolling stock, 670,000 repair parts, 3,000 containers, and thousands of additional pieces of other equipment. According to Army officials, the Army is repairing this equipment in theater and reissuing it piece-by-piece to support ongoing operations. Thus far, the Army has reissued more than 11,000 pieces of equipment, and it envisions that it will have to issue more of its remaining equipment to support future operations. Thus, it may be 2006 or later before this equipment becomes available to be reconstituted to refill the prepositioned stocks. Officials also told us that, after having been in use for years in harsh desert conditions, much of the equipment would likely require substantial maintenance and some will be worn out beyond repair. Figure 2 shows OIF trucks needing repair.

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<sup>7</sup> Marine Corps officials told us that they focused on getting equipment repaired to a mission-capable status, but did not return the equipment to the high standard to which it is normally maintained.

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**Figure 2: Some Trucks Used in OIF that Need Repair**



Source: U.S. Army.

Both the Army and the Marine Corps have retained prepositioned stocks in the Pacific to cover a possible contingency in that region. While the Marine Corps used two of its three squadrons in OIF, it left the other squadron afloat near Guam. The Army used most of its ship stocks for OIF, but it still has a brigade set available in Korea and one combat ship is on station to support a potential conflict in Korea, although it is only partially filled. Both the Army and the Marine Corps used stocks from Europe to support OIF. The current status of the services' prepositioned sets is discussed in table 2.

**Table 2: Current Status of Selected Prepositioning Programs (as of March 2004)**

	Location	Status
Army	Kuwait and Qatar	The equipment and supplies from these locations are still in use to support continuing operations in Iraq.
	Korea	This brigade set of equipment is currently filled to approximately 90 percent.
	Afloat	Equipment and supplies from 10 of 11 ships were downloaded to support OIF and most of this equipment remains in Iraq or Kuwait. One combat ship has been partially filled to support two Army battalions. One ammunition ship remains on station and another is in its maintenance cycle. The Army is also working to reconstitute equipment for a support ship and another combat ship, but it is unclear how much equipment will be available to source these requirements.
	Europe	Stocks in Luxembourg, the Netherlands, and Italy have been depleted to support ongoing operations.
Marines	Afloat (Guam)	This 6-ship squadron was not used in OIF and has almost its full complement of stocks.
	Afloat (Mediterranean)	One ship has been downloaded in support of OIF and another has been partially downloaded. This squadron's equipment is currently filled to about half of its requirement and will complete its normal maintenance cycle in 2005.
	Afloat (Diego Garcia)	This squadron's equipment was used during the first phase of OIF, was repaired to combat condition but not to normal standards, and has been downloaded for reuse in Iraq.
	Norway	Stocks in Norway were used to support OIF. Currently, the stocks have approximately two-thirds of the authorized equipment.

Source: U.S. Army and U.S. Marine Corps data.

Army and Marine Corps maintenance officials told us that it is difficult to reliably estimate the costs of reconstituting the equipment because so much of it is still in use. As a result, the reconstitution timeline is unclear. Based on past experience, it is reasonable to expect that the harsh desert environment in the Persian Gulf region will exact a heavy toll on the equipment. For example, we reported in 1993 that equipment returned from Operation Desert Storm was in much worse shape than expected because of exposure for lengthy periods to harsh desert conditions. The Army has estimated that the cost for reconstituting its prepositioned equipment assets is about \$1.7 billion for depot maintenance, unit level maintenance, and procurement of required parts and supplies. A request for about \$700 million was included in the fiscal year 2004 Global War on Terrorism supplemental budget, leaving a projected shortfall of about \$1 billion. Army Materiel Command officials said they have thus far received only a small part of the amount funded in the 2004 supplemental for reconstitution of the prepositioned equipment, but they noted that not much equipment has been available. Additionally, continuing operations in Iraq have been consuming much of the Army's supplemental funding intended for reconstitution. Since much of the equipment is still in Southwest Asia, it is unclear how much reconstitution funding for its prepositioned equipment the Army can use in fiscal year 2005. But it is

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clear that there is a significant bill that will have to be paid for reconstitution of Army prepositioned stocks at some point in the future, if the Army intends to reconfigure the afloat and land-based prepositioned sets that have been used in OIF.

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## Issues Facing the Prepositioning Program

The defense department faces many issues as it rebuilds its prepositioning program and makes plans for how such stocks fit into the transformed military. In the near term, the Army and the Marine Corps must focus on supporting current operations and reconstituting their prepositioning sets. Moreover, we believe that the Army may be able to take some actions to address the shortfalls and other problems it experienced during OIF. In the long term, however, DOD faces fundamental issues as it plans the future of its prepositioning programs.

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## Near-Term Issues

As it reconstitutes its program, the Army would likely benefit from addressing the issues brought to light during OIF, giving priority to actions that would address long-standing problems, mitigate near-term risk, and shore up readiness in key parts of its prepositioning program. These include

- ensuring that it has adequate equipment and spare parts and sustainment supplies in its prepositioning programs, giving priority to afloat and Korea stocks;
- selectively modernizing equipment so that it will match unit equipment and better meet operational needs; and
- planning and conducting training to practice drawing and using prepositioned stocks, especially afloat stocks.

Based on some contrasts in the experiences between the Army and the Marine Corps with their prepositioned equipment and supplies in OIF, some officials we spoke to agree that establishing a closer relationship between operational units and the prepositioned stocks they would be expected to use in a contingency is critical to wartime success. The Marines practice with their stocks and the Army could benefit from training on how to unload, prepare, and support prepositioned stocks, particularly afloat stocks. While the Army has had some exercises using its land-based equipment in Kuwait and Korea, it has not recently conducted a training exercise to practice unloading its afloat assets. According to Army officials, such exercises have been scheduled over the past few years, but were cancelled due to lack of funding.



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## Long-term Issues

The long-term issues transcend the Army and Marines, and demand a coordinated effort by the department. In our view, three main areas should guide the effort.

- **Determine the role of prepositioning in light of the efforts to transform the military.** Perhaps it is time for DOD to go back to the drawing board and ask: what is the military trying to achieve with these stocks and how do they fit into future operational plans? If, as indicated in Desert Storm and OIF, prepositioning is to continue to play an important part in meeting future military commitments, priority is needed for prepositioning as a part of transformation planning in the future.
- **Establish sound prepositioning requirements that support joint expeditionary forces.** If DOD decides that prepositioning is to continue to play an important role in supporting future combat operations, establishing sound requirements that are fully integrated is critical. The department is beginning to rethink what capabilities could be needed. For example, the Army and Marines are pursuing sea-basing ideas—where prepositioning ships could serve as offshore logistics bases. Such ideas seem to have merit, but are still in the conceptual phases, and it is not clear to what extent the concepts are being approached to maximize potential for joint operations. In our view, options will be needed to find ways to cost-effectively integrate prepositioning requirements into the transforming DOD force structure requirements. For example, Rand recently published a report suggesting that the military consider prepositioning support equipment to help the Stryker brigade meet deployment timelines.<sup>8</sup> Such support equipment constitutes much of the weight and volume of the brigade, but a relatively small part of the costs compared to the combat systems. Such an option may be needed, since our recent report revealed that the Army would likely be unable to meet its deployment timelines for the Stryker brigade.<sup>9</sup>
- **Ensure that the program is resourced commensurate with its priority, and is affordable even as the force is transformed.** In our view, DOD must consider affordability. In the past, the drawdown of Army forces made prepositioning a practical alternative because it made extra equipment available. However, as the services' equipment is transformed and recapitalized, it may not be practical to buy enough equipment for

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<sup>8</sup> Eric Pelty, John M. Halliday, and Aimee Bower, *Speed and Power: Toward an Expeditionary Army* (Santa Monica, Calif.: Rand Arroyo Center, 2003).

<sup>9</sup> U.S. General Accounting Office, *Army Stryker Brigades: Assessment of External Logistics Support Should Be Documented for the Congressionally Mandated Review of the Army's Operational Evaluation Plan*, [GAO-03-484R](#) (Washington, D.C.: Mar. 28, 2003).

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units at home station and for prepositioning. Prepositioned stocks are intended to reduce response times and enable forces to meet the demands of the full spectrum of military operations. Once the future role of prepositioning is determined, and program requirements are set, it will be important to give the program proper funding priority. Congress will have a key role in reviewing the department's assessment of the cost effectiveness of options to support DOD's overall mission, including prepositioning and other alternatives for projecting forces quickly to the far reaches of the globe.

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Mr. Chairman, I hope this information is useful to Congress as it considers DOD's plans and funding requests for reconstituting its prepositioned stocks as well as integrating prepositioning into the department's transformation of its military forces.

This concludes my prepared statement. I would be happy to answer any questions that you or the Members of the Subcommittee may have.

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## Contacts and Acknowledgments

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