

GAO

Testimony

Before the Subcommittees on Readiness
and Tactical Air and Land Forces,
Committee on Armed Services,
House of Representatives

For Release on Delivery
Expected at 1:00 p.m. EST
Thursday, March 30, 2006

DEFENSE LOGISTICS

**Preliminary Observations
on Equipment Reset
Challenges and Issues for
the Army and Marine Corps**

Statement of William M. Solis
Director, Defense Capabilities and Management





Highlights of [GAO-06-604T](#), testimony before the Subcommittee on Readiness and Subcommittee on Tactical Air and Land Forces, Committee on Armed Services, House of Representatives

Why GAO Did This Study

The United States is engaged in an unconventional war, not a war against military forces of one country, but an irregular war against terrorist cells with global networks. Operations Iraqi Freedom and Enduring Freedom are sustained military operations, which are taking a toll on the condition and readiness of military equipment that, in some cases, is more than 20 years old. The Army and Marine Corps will likely incur large expenditures in the future to reset (repair or replace) a significant amount of equipment when hostilities cease. The Army has requested about \$13 billion in its fiscal year 2006 supplemental budget request for equipment reset.

Today's testimony addresses (1) the environment, pace of operations, and operational requirements in Southwest Asia, and their affects on the Army's and Marine Corps's equipping and maintenance strategies; (2) equipment maintenance consequences created by these equipping and maintenance strategies; and (3) challenges affecting the timing and cost of Army and Marine Corps equipment reset.

GAO's observations are based on equipment-related GAO reports issued in fiscal years 2004 through 2006, as well as ongoing related work.

www.gao.gov/cgi-bin/getrpt?GAO-06-604T.

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

Preliminary Observations on Equipment Reset Challenges and Issues for the Army and Marine Corps

What GAO Found

In response to the harsh operating environments in Iraq and Afghanistan, and the unanticipated and prolonged length and pace of sustained operations, the Army and Marine Corps have developed and implemented several initiatives to equip its forces and maintain the extensive amounts of equipment in theater. Environmental factors such as heat, sand, and dust have taken their toll on sensitive components. In addition, operating equipment at a pace well in excess of peacetime operations is generating a large operational maintenance and replacement requirement that must be addressed when units return to their home stations. To meet ongoing operational requirements, the Army and Marine Corps have developed pools of equipment in theater to expedite the replacement of equipment damaged during operations and directed that equipment necessary for OIF and OEF operations remain in theater. In response, the Army and Marine Corps have developed several initiatives to increase the maintenance capacity in theater to be able to provide near-depot level repair capabilities.

Although the Army and Marine Corps are reporting high rates of equipment readiness and have developed and implemented plans to increase the maintenance capabilities in theater, these actions have a wide range of consequences. Many of the equipment items used in Southwest Asia are not receiving depot-level repair because equipment items are being retained in theater or at home units and the Army has scaled back on the scope of work performed at the depots. As a result, the condition of equipment items in theater will likely continue to worsen and the equipment items will likely require more extensive repair or replacement when they eventually return to home stations.

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. Also, both 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. Finally, both services will have to make difficult choices and trade-offs when it comes to their many competing equipment programs. 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. Until the services are able to firm up these requirements and cost estimates, neither the Secretary of Defense nor the Congress will be in a sound position to weigh the trade offs and risks.

Mr. Chairmen and Members of the Subcommittees:

We welcome the opportunity to appear before you today to discuss a number of maintenance and equipment reset challenges facing the Army and Marine Corps. The United States is engaged in what the Department of Defense has termed the long war. This is not a conventional war against military forces of one country but an irregular war against terrorist cells with global networks, with operations currently centered in Iraq and Afghanistan. These sustained operations are taking a toll on the condition and readiness of military equipment that, in some cases, is more than 20 years old. Age, along with the harsh environment in theater and combat conditions over long periods of time, magnifies an already growing problem of equipment repair, replacement, and procurement that existed even before the onset of combat operations in Iraq and Afghanistan. While combat units report high readiness rates, these reports reflect only that equipment is fully mission capable, meaning that the equipment has no critical or safety deficiencies as outlined in technical readiness reporting instructions. However, equipment that is considered fully mission capable may have a number of deficiencies that will need to be addressed in the longer term.

In addition to the billions of dollars already spent to maintain this well-worn equipment for ongoing operations, the Army and Marine Corps will likely incur large expenditures in the future to repair or replace (reset) a significant amount of equipment when hostilities cease. The services are currently funding their reset programs entirely through the use of supplemental appropriations, and plan to rely on supplemental appropriations for reset funding through at least fiscal year 2007. The fiscal year 2006 supplemental budget request includes \$10.4 billion for equipment maintenance and reset. The Marine Corps has incurred a cost of more than \$12 billion to date to reset equipment. The Army estimates its total reset bill for fiscal year 2006 alone to be nearly \$13.5 billion. The uncertainties of how long ongoing operations will continue make it difficult to estimate future equipment reset costs. The overall condition of major equipment items at the end of these operations, although difficult to predict, will also be a significant factor affecting reset costs. Equipment used in operations in Iraq and Afghanistan will eventually require more intensive repair and overhaul than what is typically expected in peacetime. Furthermore, the affordability of these maintenance requirements will be an issue as the cost of these requirements compete for available funding in the future with other Army and Marine Corps programs, as well as the overall Department of Defense budget.

My statement today reflects our preliminary observations drawn from ongoing work as well as recently published reports. As requested, my testimony today will focus on the equipment maintenance and reset challenges facing the Army and Marine Corps. Specifically, it addresses the (1) environment, pace of operations, and operational requirements in Southwest Asia, and their effects on the Army's and Marine Corps's equipping and maintenance strategies; (2) equipment maintenance consequences and issues created by these equipping and maintenance strategies; and (3) challenges affecting the timing and cost of Army and Marine Corps equipment reset.

The observations we will discuss today regarding Army and Marine Corps equipment maintenance and reset plans is based on reports we issued in fiscal years 2004 through 2006, as well as preliminary observations based on related ongoing work. Several GAO teams conducted audit work related to these issues in Iraq and Kuwait from November 2005 through January 2006. We conducted our work in accordance with generally accepted government auditing standards.

Summary

The harsh operating environment, prolonged length and pace of operations, and operational requirements in Iraq and Afghanistan have placed tremendous stress on deployed equipment. In response to these environmental and operational challenges, the Army and Marine Corps have developed and implemented initiatives to keep large amounts of equipment in theater and have developed enhanced maintenance capacity in theater above the unit level to sustain major equipment items.

While these initiatives and enhanced in-theater maintenance capability have reportedly contributed to high equipment readiness rates for combat units and improved availability of equipment in theater, they have presented the Army and Marine Corps with a wide range of consequences and issues. The consequences include (1) equipment items not receiving depot-level maintenance for long periods, (2) depots in the United States not operating at full capacity, and (3) reduced scope of depot repair packages because of affordability reasons. In addition, Army officials are concerned that contractors are not meeting performance expectations, and the condition and availability of theater sustainment stocks are not sufficient to meet replacement needs. These potential concerns may have long-term effects such as a decrease in near-term or long-term readiness of equipment or an increase in overall repair or replacement costs.

In addition, the Army and Marine Corps will likely face a number of ongoing and longer-term challenges and issues that will affect the timing and cost of equipment reset. These challenges include force structure and transformation initiatives; equipment requirements for prepositioned equipment sets; future equipment replacement needs for active, guard, and reserve forces; potential equipment transfer and logistical support to the Iraqi Security Forces; the lack of a comprehensive equipment strategy; and issues related to the timing of supplemental funding for depot maintenance. Lastly, the Army and Marine Corps will need to make difficult choices when it comes to their many competing equipment programs. 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. Until the services are able to firm up these requirements and cost estimates, neither the Secretary of Defense nor the Congress will be in a sound position to weigh the trade offs and risks.

Background

The scope of equipment reset efforts that will be required as a result of ongoing operations related to Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) is enormous. The services have committed a significant amount of equipment to these operations. From 2003 until April 2005, the Army had deployed more than 40 percent of its equipment in support of OIF and OEF. As of March 2005, the Marine Corps had about 22 percent of its total fleet assets engaged in Iraq. Recently, the Marines estimated that approximately 40 percent of all Marine Corps ground equipment, 50 percent to 55 percent of communications equipment, and 20 percent of aircraft assets are in use in support of current operations.

According to the Army, reset comprises a series of repair, recapitalization, and replacement actions to restore units' equipment to a desired level of combat capability commensurate with mission requirements and availability of resources. The purpose of reset is to bring unit equipment to combat-ready condition, either for the unit's next rotation in support of current operations or for other, unknown future contingencies.

The Army's standard level of maintenance is known as 10/20. This standard requires that all routine maintenance be executed and all deficiencies be repaired. Equipment at less than the 10/20 standard can be fully mission capable, which means there are no critical maintenance deficiencies as outlined in the technical manuals and instructions, and no safety deficiencies. Unit commanders have the authority to supersede the

technical manuals and declare a system fully mission capable even though it has a non-mission capable deficiency. The Marine Corps's equivalent term is "mission capable."

The Army's reset strategy for ground vehicles includes an additional set of maintenance procedures known as Delayed Desert Damage (3D) which are designed to address damage that results from these vehicles operating in a desert environment. These procedures are designed to address damage that might otherwise not be visible. These 3D checks are initially performed at the unit level. Equipment that goes to a depot is subjected to more extensive 3D maintenance procedures. Army aviation equipment is subject to Special Technical Inspection and Repair (STIR). Similar to 3D, this maintenance is designed to address damage caused by operation in a desert environment. STIR also includes other routine maintenance.

Although the terms may be slightly different, the Marine Corps equipment repair and replacement process and equipment standards parallel the Army process and standards for equipment maintenance. The Marine Corps equivalent to the Army's reset process is termed "recovery." Marine Corps equipment returning from combat theaters is evaluated and transported to either a maintenance depot or to a Marine Corps unit's home station for repair. The Marine Corps's equipment recovery process entails restoring all equipment used in Global War on Terror (GWOT) operations to its pre-GWOT condition. For equipment in the Marine Corps prepositioning fleet, this means restoring to a "like new condition," for all other equipment, this means restoring to a mission capable status. The Marine Corps also applies procedures similar to the 3D as appropriate.

The Department of Defense (DOD) reported in April 2005 that they expected a new set of protocols to emerge based on experience with equipment used in OIF and OEF.¹ These protocols may be similar to 3D and STIR which emerged as maintenance procedures based on experience from Operation Desert Storm. DOD, as part of its ongoing effort to assess stress on equipment, plans to look for unusual wear patterns and methods to address them as well as examining maintenance trends.

¹ Department of Defense, *Ground Force Equipment Repair, Replacement, and Recapitalization Requirements Resulting From Sustained Combat Operations* (Washington, D.C.: Apr. 2005).

Depot maintenance is defined as the highest level of maintenance activity, where the most complex maintenance work is done, from overhaul of components to complete rebuilds. Military depots and defense contractors throughout the United States perform depot-level maintenance.

Environment, Pace of Operations, and Operational Requirements Have Shaped Current Army and Marine Corps Equipping and Maintenance Strategies

In response to the harsh operating environments in Iraq and Afghanistan and the unanticipated and prolonged length and pace of sustained operations, the Army and Marine Corps have developed and implemented several initiatives to equip their forces and maintain extensive amounts of equipment in theater. Specifically, the Army and Marine Corps have implemented initiatives to keep large amounts of unit equipment in theater after the units redeploy to their home stations in the United States for the purpose of rapidly equipping follow-on units, and have developed additional maintenance capacity in theater above the unit level to sustain major equipment items such as high mobility multi-purpose wheeled vehicles (HMMWVs), other tracked and wheeled vehicles, and aviation equipment.

Environment and High Operational Tempo Have Increased Wear and Tear on Equipment Above What Would Normally Be Expected

Environmental factors such as heat, sand, and dust have taken their tolls on major equipment items. In addition, as we have previously reported, the Army and Marine Corps are operating equipment at a pace well in excess of their normal peacetime levels, which is generating a large operational maintenance and replacement requirement that must be addressed when the units return to their home stations.² Continued operations have increased the operational tempo for a great deal of Army and Marine Corps equipment. In April 2005, the Department of Defense (DOD) reported Army equipment usage rates averaged two to eight times that of peacetime rates. Senior Marine Corps officials recently testified that the Marine Corps usage rates for ground equipment in ongoing operations were four to nine times that of peacetime rates. Despite these high usage rates, the deployed Army units have generally reported high levels of overall readiness and relatively high levels of equipment readiness. Deployed Marine Corps units, however, report more degraded levels of overall and equipment readiness. Unit commanders in both services are able to subjectively upgrade their overall readiness ratings, although this

² GAO, *Defense Management: Processes to Estimate and Track Equipment Reconstitution Costs Can Be Improved*, [GAO-05-293](#) (Washington, D.C.: May 5, 2005).

Army and Marine Corps Hold Large Amounts of Unit Equipment in Theater

has been done to a lesser extent by the Marine Corps. Absent such upgrades, overall readiness levels (particularly for the Army) would be significantly lower as a result of units' low levels of equipment and supplies on hand.

To meet ongoing operational requirements, the Army and Marine Corps have developed and implemented initiatives to concentrate equipment in theater. When the Army initially developed its strategy of retaining equipment from redeploying units in theater, it did not envision this to be a long-term mechanism for managing equipment needs, but rather a short-term measure to conserve transportation assets and, more importantly, ensure that units were rapidly equipped. The Marine Corps, like the Army, developed a similar equipment management initiative. Additionally, the Army has developed a pool of equipment in theater to expedite the replacement of equipment damaged during these operations, referred to as theater sustainment stocks (TSS), which includes, for example, tanks, HMMWVs, Bradley Fighting Vehicles, and support vehicles. As of January 2006, TSS included an estimated 400 different types of vehicles and other equipment. The Marine Corps recently testified that they have developed a similar pool of ground equipment known as Forward In-Stores to replace damaged major equipment items.

To ensure that deployed units receive required amounts of equipment critical for their missions, the Army has designated certain major equipment items, such as add-on-armor vehicles, up-armored HMMWVs, selected communications and intelligence equipment, and other items deemed critical for OIF and OEF missions as "theater provided equipment" (TPE). According to Army officials, based on operational decisions, these theater-specific items are being left in theater because these are force protection items. This equipment is taken from active, Guard, and Reserve forces when they return to the United States and is retained in theater to hand off to follow-on units. TPE includes equipment such as armored vehicles, individual soldier body armor, and equipment used to counter improvised explosive devices. As of November 2005, the Coalition Forces Land Component Commander estimated that there were approximately 300,000 equipment items in the TPE inventory in Iraq, including more than 26,000 vehicles. The Army's TPE initiative began in late 2003, when the first Army units were directed to leave equipment in theater, then known as "stay behind equipment." The Army, in November 2005, replaced the term "stay behind equipment" with the term TPE to better manage equipment accountability and also reflect items that were procured directly for the theater. Unlike other less intensely managed equipment items, TPE is transferred directly from units leaving the theater to

deploying units taking their place. In most cases, these transfers take place at the unit's forward station in Iraq. As a result, most of this equipment has been in heavy use in harsh desert and combat conditions since it was first left in theater by the units that originally deployed with the equipment. Because TPE is maintained at the unit level, this strategy has not provided the Army with an opportunity to periodically rotate TPE back to the United States for depot level maintenance. As discussed in a later section, keeping large amounts of equipment in theater for long periods of time without the opportunity for depot-level repair has created a number of related consequences.

The Marine Corps, like the Army, has directed that equipment necessary for OIF and OEF operations remain in theater. Because many Marine Corps mission requirements have been exceeding the unit's typical combat equipment allowances, Marine Corps commanders in theater have developed expanded equipment packages for deploying units that are designed to ensure that units have the required equipment for their missions. Deploying Marine Corps units fall in on and assume custody of equipment left by other units departing the theater. According to recent Marine Corps testimony, this initiative allows it to provide the best equipment possible to forces in theater while also reducing equipment rotation costs. Marine Corps officials estimated they had deployed about 30 percent of its ground equipment, and 20 percent of aviation assets in support of ongoing operations. However, the percentage of ground equipment deployed in support of operations has been as high as 40 percent according to recent Marine Corps testimony. While this initiative has met equipment needs to date, it has caused some major equipment items to remain in constant operation, often in harsh desert conditions.

Initiatives to Develop More Extensive Maintenance Capacity in Theater

To address the effects of the harsh operating environments and the maintenance needs of rapidly deteriorating equipment that is being held in theater for extensive periods, the Army and Marine Corps have developed initiatives to increase the maintenance capacity in theater to be able to provide near-depot level repair capabilities. For example, the Army has developed a refurbishment facility for HMMWVs in Kuwait and a Stryker maintenance facility in Qatar to limit the repair time and resupply time of these assets. The HMMWV refurbishment facility in Kuwait began operations in July 2005 and is operated by a defense contractor. The primary objective of this refurbishment facility is to mitigate the effects of high mileage, heavy weights, high temperatures, and lack of sustained maintenance programs. The HMMWV refurbishment facility workload includes refurbishment maintenance, as well as modernization and

upgrades. As of December 2005, this facility had refurbished a total of 264 HMMWVs. Similarly, the Marine Corps created a limited aircraft depot maintenance capability in theater.

Additionally, both the Army and Marine Corps have taken other steps to increase maintenance capacity and the availability of spare parts in theater. For example, at the time of our visit to Kuwait in January 2006, the Army was developing plans to increase the maintenance capacity at contractor maintenance facilities in Iraq. In addition, according to recent Army testimony, the Army Materiel Command (AMC) and the Defense Logistics Agency have taken steps to allow the rapid delivery of critical, low-density parts to the theater to maximize their availability and minimize transportation costs. The Marine Corps has also recently testified on efforts to leverage Army ground depot maintenance capabilities in the theater, and developed a rotation plan for major equipment items.

Equipment Maintenance Consequences and Issues Created By Army and Marine Corps Equipping and Maintenance Strategies

Although the Army and Marine Corps are reporting high rates of equipment readiness for combat units and have developed and implemented plans to increase the maintenance capabilities in theater, these actions have a wide range of consequences and issues. The services have made a risk-based decision to keep equipment in theater, to forego depot repairs, and to rely almost exclusively on in-theater repair capabilities to keep equipment mission capable. As a result, much of the equipment has not undergone higher level depot maintenance since the start of operations in March 2003. While Army officials noted that not all equipment would undergo full depot-level maintenance, much of this equipment has incurred usage rates ranging from two to nine times the annual peacetime rate meaning that, in some cases, some equipment may have added as much as 27 years of use in the past three years. Continued usage at these rates without higher levels of maintenance could result in the possibility that more equipment will require more extensive and expensive repairs in the future or may require replacement rather than repair. Because most equipment is staying in Iraq, there are other ramifications that have implications for the depots in the United States such as the fact that depots are not operating at full capacity and that the scope of depot repair work is being reduced to meet operational needs. In addition, other maintenance issues are beginning to surface, which could have a variety of consequences such as a decrease in near-term and long-term readiness of equipment or an increase in repair or replacement costs. These additional issues include questions regarding contractor

performance for in-theater maintenance and the condition and availability of the Army's TSS in Kuwait.

Most Equipment Not Receiving Depot-Level Repair

Many of the equipment items used in Southwest Asia are not receiving depot-level repair because they are being retained in theater or at home units and the Army has scaled back on the scope of work performed at the depots. As a result, the condition of equipment items in theater will likely continue to worsen and the equipment items will likely require more extensive repair or replacement when it eventually returns to home stations. The Army retains equipment in theater to support ongoing operations. For example, as of November 2005, the Army had about 300,000 pieces of equipment retained in theater to support troop deployment rotations. Very little of this equipment is being returned from theater to depots in the United States for repair. Instead, redeploying units are expected to maintain their assigned equipment to a fully mission capable condition to facilitate the transfer of equipment to deploying units. Since TPE is transferred directly from units leaving the theater to deploying units taking their place, usually at the units' forward station in Iraq, the strategy has not allowed the equipment to receive periodic depot-level maintenance. Further, some units have commented that the TPE they received, while operable, requires higher levels of maintenance. The fully mission capable definition is to some extent a broad and malleable term. Unit commanders have reported concerns with downtimes, availability of spare parts, repair and replacement of damage or combat losses, and the need for additional contractor support. The Army is also reconfiguring its prepositioned equipment set and consequently is retaining some deploying units' equipment in theater to support this Army Prepositioned Set, Kuwait (APS-5) reconstruction. For example, according to officials at the U.S. Army Forces Command, approximately 13,000 pieces of equipment from a redeploying unit were transferred to prepositioned stocks in Kuwait instead of returning to the United States with the unit. This included about 7,000 tactical wheeled vehicles. While this equipment is supposed to be reset to a 10/20 standard before being transferred to prepositioned equipment stocks, it is not being returned for depot overhaul. According to Army officials, this equipment was not returned for depot overhaul because of short timeframe requirements. This equipment was reset to a fully mission capable standard.

In some instances, Army units retain equipment to reconstitute their unit quickly rather than send this equipment to depot for overhaul. According to officials in the Office of the Secretary of Defense, warfighters are not readily willing to give up equipment, which contributes to fewer

equipment items being returned to the depots for repair. Officials at the U.S. Army Forces Command and at army depots echoed this concern, stating that availability of assets to induct into the depot repair program is limited by units' need and desire to have equipment available for training. These officials added that the units fear that they will have to wait for replacement equipment because their unit priority is not high enough within the Army to ensure immediate replacement of the equipment items. To increase the number of equipment items going to depots from units, the Army created a list of equipment that it will now require units to automatically send to the Army depots for reset. The list is based on lessons learned from earlier experiences that damage and wear to certain types of equipment items used in Southwest Asia require more extensive depot level repairs. For example, some equipment reset at the units' home station was failing at higher than expected rates in theater during follow-on deployments. The list contains about 200 equipment items and has been updated several times, most recently in October 2005, to include items such as the Bradley Fighting Vehicle and the Abrams Tank. According to the implementing memorandum, unit commanders are required to nominate a minimum of 25 percent of the listed equipment for return to depots for reset. According to the memorandum, the intent is to provide units the flexibility to maintain equipment for training while placing the maximum possible into reset programs, and items retained for training are to be maintained in fully mission capable condition.

Depots Are Not Operating At Full Capacity Due to Fewer Equipment Returns and Enhanced In-Theater Maintenance Capability

Because the services are retaining most equipment in theater, depots in the United States, tasked with complex maintenance work above and beyond in-theater maintenance reset, are not operating at full capacity. For example, DOD has estimated that Army depots can produce about 19 million direct labor hours of production on a single shift basis—8 hours a day, 5 days a week. Based on this measure, the Army depots are currently utilized at about 110 percent of capacity. However, according to depot officials, the Army could double or triple depot capacity by adding more work shifts at the depots. Using this multiple shift approach the Army could produce up to approximately 57 million direct labor hours of production or 170 percent more than the current workload at Army depots. Army depots are currently using some second shifts; however, second shifts are primarily limited to manufacturing process shops such as cleaning, machining, sand-blasting and painting, which depot officials say could easily be contracted out to increase throughput. According to depot officials, the factors that impact their decision to add more shifts and increase throughput are a stable commitment of funding throughout the

year, the availability of retrograde equipment to repair, and the right mix of spare parts inventory to support production.

Scope of Depot Repair Work Is Being Reduced to Meet Operational Needs

In addition, the Army has reduced the scope of work performed on some equipment items to less than a full overhaul. According to U.S. Army Tank and Automotive Command (TACOM) officials, the Army cannot afford to do a full overhaul of its ground equipment and has therefore made a risk-based decision to perform a reduced scope of work for equipment at the depots. To determine what the repair scope should be, the Army focused on major readiness components on the vehicles. For example, the engine on the Abrams tank is the component that fails the most often and is the most expensive to replace. Consequently this was the number one component included in the reduced scope of depot repair work. The less robust depot level repair being performed speeds repair time and reduces expenditures on depot repair. For example, the reduced scope of work on the Abrams costs approximately \$880,000 versus \$1.4 million for a complete overhaul. This scope does not include complete disassembly of the vehicle and identifies 33 items to be inspected and repaired only if necessary. During a full overhaul these items would be reconditioned to like new condition, and consequently would be less likely to fail after the depot visit although it is unclear what actual failure rates might be. According to TACOM officials, the reduced overhaul represents what the Army can afford to do.

The Marine Corps recently instituted an annual equipment rotation plan to begin returning equipment from Southwest Asia to the United States for reset. The first of this returning equipment was received in the first quarter of fiscal year 2006. Previously, Marine Corps reset strategy was to overhaul equipment located in the United States, then provide the equipment to deploying units to fill requirements that could not be satisfied with the pool of mission capable equipment in theater. According to depot officials, the Marine Corps found it necessary to begin returning equipment from the theater because it is running short of available equipment in the United States for depot overhaul. However, depot officials told us that the equipment returning from theater is in much worse condition than they anticipated so they may not be able to reset as many vehicles as planned with available reset funds.

Army Concerned That Maintenance Contractors Are Not Meeting Performance Expectations

While we did not review copies of the contracts, our review of other Army documents and discussions with Army officials identified two examples to indicate that maintenance contractors are not meeting performance expectations. Army officials estimated that about 70 percent of equipment maintenance in theater above the unit level is being done by contractors. Some of these contractors have experienced a number of problems in the past few years, such as not being able to quickly acquire skilled maintenance personnel. Specifically, we identified a number of maintenance issues regarding the HMMWV refurbishment facility in Kuwait and the reset of equipment in the prepositioned set of equipment in Kuwait.

As of January 2006, according to Army maintenance officials in Kuwait, the contractor operating the HMMWV refurbishment facility in Kuwait had not been able to meet original production goals. In some cases, for example, the contractor's actual labor requirements for some vehicles exceeded the original estimates by almost 200 percent. This contributed to the facility falling over 200 vehicles short of its output goal of refurbishing 300 vehicles per month since the facility became operational in July 2005.³ Also cited as contributing to the facility's poor performance were difficulties the contractor experienced in obtaining the required number of third country national workers, mostly due to difficulties meeting host country visa requirements. Furthermore, according to Army maintenance officials in Kuwait, during the first 6 months the facility was operational, the contractor repeatedly failed to gather data on resources expended on vehicle refurbishments. Without accurate information on the actual level of resources required to refurbish these vehicles, it will be more difficult for the contractor to estimate and plan for future requirements. Since the original contract was issued in April 2005, it has been modified multiple times, increasing the total funding requirement from slightly more than \$36 million over the contract's first year of performance, an increase of over 100 percent.

In addition to concerns about the contractor management of the HMMWV refurbishment facility, theater commanders have also expressed concerns about contractor performance in support of efforts to reset equipment for reconfiguring Army prepositioned stocks. The Army has contracted for the maintenance and management of Army prepositioned equipment in Kuwait. The Army has recently noted several concerns about contractor

³ Based on production data from July 2005 through December 2006.

performance in the areas of personnel and maintenance. For example, there is a shortage of contractor personnel which contributes significantly to a decline in production. The contractor also attributed the shortages to difficulties obtaining the required number of third country national workers due to problems with host country visa requirements. The Army had to resort to acquiring additional vehicle mechanics and supply personnel from another contractor and an active duty Army unit and an Army maintenance company. The Army also reports that the contractor does not conduct thorough technical inspections. If thorough inspections were conducted it would significantly reduce the amount of time the equipment spends in maintenance shops. According to officials at the U.S. Army Field Support Command, equipment is often rejected because of the contractor's lack of attention to detail and inadequate maintenance inspection procedures.

Condition of Theater Sustainment Stocks Is Not Sufficient to Rapidly Meet Replacement Needs

The condition of TSS is not sufficient to replace battle damaged equipment without additional maintenance, which may delay the equipment's availability and strain in-theater maintenance providers. The purpose of TSS is to ensure that equipment is on hand to quickly fill unit requirements that may arise due to battle damage or other losses. The Army created this stockpile of equipment in Kuwait as a quick source to provide replacement equipment, as needed. As of January 2006, an AMC official responsible for TSS estimated that there were approximately 174,000 pieces of equipment in Kuwait and Qatar, representing 400 different types of equipment. TSS includes, for example, tanks, HMMWVs, Bradley Fighting Vehicles, and support vehicles. Expected loss rates are taken into consideration in setting TSS equipment levels. When a requirement arises in Iraq, equipment items are taken from TSS, maintenance is performed in theater to ensure the equipment is in suitable condition, and it is sent to units. Much of TSS requires additional maintenance before it can be reissued to operational units in Iraq and, in some cases, to restore it to fully mission capable. For example, as of January 2006, for a cross-section of several types of ground vehicles in TSS, less than 7 percent were fully mission capable. As such, TSS that requires additional maintenance before it can be reissued as replacement equipment increases requirements on the in-theater maintenance capability, which may affect other efforts to refurbish equipment in theater for prepositioned stocks. The Army Field Support Battalion at Camp Arifjan, Kuwait, is responsible for the management and reconstitution of prepositioned stocks, the management and repair of TSS in support of ongoing requirements, as well as a number of other logistics missions. The same contract workforce the Army Field Support Battalion employs for maintenance on prepositioned stocks is responsible for

maintenance of TSS. The capacity of the Army Field Support Battalion to conduct reset of equipment being used to reconstitute prepositioned stocks in Kuwait is directly affected by ongoing requirements to manage TSS and is affected by other missions in support of deployed units in Iraq.

A Number of Challenges Will Affect the Timing and Cost of Army and Marine Corps Equipment Reset

The Army and Marine Corps will face a number of ongoing and longer-term challenges that will affect the timing and cost of equipment reset. As previously mentioned, current military operations are taking a toll on equipment, which will affect the cost of repairing equipment as well as the amount and cost of equipment that will need to be replaced. In addition, other issues such as the Army and Marine Corps efforts to modularize and transform their forces, respectively, the reconstitution and reset of prepositioned equipment, and the ongoing and longer-term efforts to replace equipment from the active, National Guard, and Reserve units, as well as the potential transfer of U.S. military equipment and potential for continuing logistical support to Iraqi Security Forces will also affect the timing and cost of reset. Furthermore, both the Army and Marine Corps will have to better align their funding and program strategies to sustain, modernize, or replace existing legacy equipment systems. Similarly, both services will need to face difficult choices for the many competing equipment programs. Finally, working with the Congress, both services will have to determine the best approaches for dealing with the issues created by the timing of depot maintenance supplemental appropriations.

Army Modularity and Marine Corps Transformation

The Army's and Marine Corps's equipment reset programs will also have to compete with ongoing and planned force structure changes designed to provide more flexibility in deploying forces for ongoing and future operations. The Army began its modular force transformation in 2004 to restructure itself from a division-based force to a modular brigade-based force. The modular forces are designed to be stand-alone, self-sufficient units that are more rapidly deployable and better able to conduct joint and expeditionary operations than their larger division-based predecessors. Modular restructuring will require the Army to spend billions of dollars for new equipment over the next several years while continuing to reset and maintain equipment needed for ongoing operations. The Army estimates that the equipment costs alone will be about \$41 billion. In addition to creating modular units, the Army plans to continue to develop and fund the Future Combat System, which the Army recognizes is one of the greatest technology and integration challenges it has ever undertaken.

The Marine Corps has also initiated force structure changes to provide flexibility in deploying troops, which will also likely affect the Marine Corps's equipment reset strategies. Its force structure initiative is designed to reduce the effects of operational tempo on the force and reshape the Marine Corps to best support current and future operations. In 2004, the Marine Corps conducted a comprehensive force structure review to determine how to restructure itself to augment high demand, low density capabilities, reduce deployed tempo stress on the force, and shape the Marine Corps to best support the current and future warfighting environments.

Requirements to Reconstitute and Reset Army and Marine Corps Prepositioned Equipment

Both the Army and Marine Corps drew heavily upon prepositioned stocks for operations in Iraq and Afghanistan.⁴ As we reported in September 2005, DOD faces some near term operational risks should another large scale conflict emerge, because it has drawn heavily on prepositioned stocks to support ongoing operations in Iraq.⁵ And although remaining stocks provide some residual capability, many of the programs face significant inventory shortfalls and, in some cases, maintenance problems.

The focus of the Army's current prepositioned equipment reset program is building two brigade-sized equipment sets in Kuwait, as well as battalion-sized sets in Qatar and Afghanistan. Prepositioned stocks in Kuwait are not designated to serve as a pool of equipment available to support current missions. Equipment to form these sets is coming from a combination of equipment left in theater, as well as equipment being transferred from U.S. depots and from units around the world. While a sizeable portion of the needed equipment is now in place, much of this equipment needs substantial repair. Maintenance facilities are limited as are covered storage facilities. Lack of covered storage facilities presents yet another challenge. Prepositioned stock, like TSS, is stored in the open desert environment, which in some cases may lead to further degradation. Harsh environmental conditions such as sand and high humidity levels accelerate equipment corrosion, which may not be apparent until extensive depot

⁴ Prepositioned stocks are protected, go-to-war assets which reduce the demand on scarce mobility assets required to project forces from the United States and to sustain early arriving forces until the sea lines of communication are established.

⁵ GAO, *Defense Logistics: Better Management and Oversight of Prepositioning Programs Needed to Reduce Risk and Improve Future Programs*, [GAO-05-427](#) (Washington, D.C.: Sept. 6, 2005).

maintenance is performed. We have previously reported that outdoor storage aggravates corrosion and the use of temporary shelters with climate-controlled facilities is cost effective, has a high return on investment, reduces maintenance and inspections and, as a result, increases equipment availability. The Marine Corps has also drawn on a significant portion of its prepositioned stocks from five ships to support current operations. It is unclear when this equipment will be returned to prepositioned stocks because much of this equipment will be left in Iraq to support the continuing deployment of Marine Corps forces there.

Our September 2005 report also raised serious concerns about the future of the department's prepositioning programs, and we believe these concerns are still valid. No department-wide strategy exists to guide the programs, despite their importance to operational plans as evidenced in OIF. Without an overarching strategy, the services have been making decisions that affect the future of the programs without an understanding of how the prepositioning programs will fit into an evolving defense strategy. The Army's decision to accelerate the creation of substantial combat capabilities in Southwest Asia is understandable because it could speed buildup in the future, especially if large numbers of troops are withdrawn. However, the Army's decisions in other parts of its prepositioning programs are questionable. For example, the Army recently decided to cut its afloat combat capability in half (from two brigade sets to one) by the end of fiscal year 2006 as a result of a budget cut from the Office of Secretary of Defense. However, internal planning documents that we reviewed indicated that the Office of Secretary of Defense directed terminating a planned third set afloat, cutting an existing capability that would likely be critical to responding to another crisis should it occur. In the meantime, the Army is making plans to reduce its contractor workforce in Charleston, South Carolina, where it performs the maintenance on its afloat stocks. At the same time, in Europe, the Army has a \$55 million military construction project well underway at a site in Italy, but the Army's draft prepositioning strategy identifies no significant prepositioning mission in Europe. In our discussions with Army managers, they told us they are planning to use the Italian workforce to perform maintenance on equipment that ultimately will be placed afloat in 2013 or later.

Army and Marine Corps Will Need to Replace Active, Guard, and Reserve Equipment Left in Theater

The Army and Marine Corps must also plan for replacement of active, National Guard, and Reserve equipment left in theater to support ongoing operations. In late 2003, the Army began to direct redeploying Guard and Reserve units to leave their equipment in theater for use by deploying forces. As we have previously testified, DOD policy requires the Army to

replace equipment transferred to it from the reserve component including temporary withdrawals or loans in excess of 90 days,⁶ yet the Army had neither created a mechanism in the early phases of the war to track Guard equipment left in theater nor prepared replacement plans for this equipment, because the practice of leaving equipment behind was intended to be a short-term measure.⁷ As of March 2006, only three replacement plans have been endorsed by the Secretary of Defense, all to replace Guard equipment, while 33 plans are in various stages of approval.

Lack of equipment for the active, Guard, and Reserve forces at home stations affects the ability of the forces to conduct unit training, and adversely affects the ability of the Guard and Reserve forces to be compatible with active component units. As operations have continued, the amount of Guard equipment retained in theater has increased, which has further exacerbated the shortages in nondeployed Guard units. For example, when the North Carolina 30th Brigade Combat Team returned from its deployment to Iraq in 2005, it left behind 229 HMMWVs, about 73 percent of its pre-deployment inventory of those vehicles, for other units to use. Similarly, according to Guard officials, three Illinois Army National Guard units were required to leave almost all of their HMMWVs, about 130, in Iraq when they returned from deployment. As a result, the units could not conduct training to maintain the proficiency they acquired while overseas or train new recruits. In all, the Guard reports that 14 military police companies left over 600 HMMWVs and other armored trucks, which are expected to remain in theater for the duration of operations, which according to Army officials, would be required regardless of Guard, Reserve, or active unit. Lack of equipment for training also adversely affects Marine Corps units. For example, in the interest of supporting units in theater by leaving certain pieces of equipment in theater and drawing on equipment from elsewhere to meet theater needs, the Marine Corps has experienced home station equipment shortfalls, among both active and reserve components. According to a senior Marine Corps official, these shortfalls may have detrimental effects on the ability of the Marine Corps to train and to respond to any contingencies. In addition, the Army has acknowledged that the benefits of prepositioned stocks are diminished when units are not trained on equipment that matches that present in the stocks.

⁶ Department of Defense Directive 1225.6, *Equipping the Reserve Forces*, April 7, 2005.

⁷ GAO, *Reserve Forces: Army National Guard's Role, Organization, and Equipment Need to be Reexamined*, [GAO-06-170T](#) (Washington D.C.: Oct. 20, 2005).

The Army and Marine Corps strategy for retaining and maintaining significant numbers of low density, high demand equipment items in theater will affect plans to replace equipment left in theater by the Guard and Reserve. We have previously reported that to meet the demand for certain types of equipment for continuing operations, the Army has required Army National Guard units returning from overseas deployments to leave behind many items for use by follow-on forces.⁸ According to the National Guard and Reserve Equipment Report for Fiscal Year 2007, the Army National Guard has been directed to transfer more than 75,000 pieces of equipment valued at \$1.76 billion, to the Army to support OIF and OEF.⁹ However, the Army does not have a complete accounting of these items or a plan to replace the equipment, as DOD policy requires. The Army expects that these items will eventually be returned to the Guard, although the Guard does not know whether or when the items will be returned. We have also previously reported that like the Army National Guard, Army Reserve units have been required to leave certain equipment items, such as vehicles that have armor added, in theater for continuing use by other forces.¹⁰ This further reduces the equipment available for training and limits the Army Reserve's ability to prepare units for mobilizations in the near term. The Army is working with both the Army National Guard and the Army Reserve to develop memoranda of agreement on how equipment left in Iraq will be replaced. Until these plans are completed and replacement equipment provided, the Army Reserve and Army National Guard will face continuing equipment shortages while challenged to train and prepare for future missions.

According to Marine Corps testimony, the policy of retaining equipment in theater to meet the needs of deployed forces has led to some home station equipment shortfalls, among both active and reserve units, which if allowed to continue could have a direct impact on the ability of Marine Forces to train for known and contingent deployments. Furthermore, according to the National Guard and Reserve Equipment Report for fiscal year 2007, more than 1,800 major Marine Corps equipment items, valued at

⁸ GAO, *Reserve Forces: Plans Needed to Improve Army National Guard Equipment Readiness and Better Integrate Guard into Army Force Transformation Initiatives*, [GAO-06-111](#) (Washington, D.C.: Oct. 4, 2005).

⁹ Department of Defense, *National Guard and Reserve Equipment Report for Fiscal Year 2007* (Washington, D.C.: Feb. 2006).

¹⁰ GAO, *Reserve Forces: An Integrated Plan Is Needed to Address Army Reserve Personnel and Equipment Shortages*, [GAO-05-660](#) (Washington, D.C.: July 12, 2005).

\$94.3 million have been destroyed, and an additional 2,300 require depot maintenance.

Potential Requirements for Transferring Equipment and Providing Logistical Support to the Iraqi Security Forces Are Unclear

Future requirements to transfer equipment and provide logistical support to the Iraqi Security Forces and the extent of required U.S. support are unclear. In its report to Congress in April 2005, DOD stated that the primary constraint on future maintenance processes is the lack of equipment that is available for reset and recovery activities. DOD noted that a large amount of equipment is being held in the theater as a rotational pool for deploying units, and will remain in theater for the long term. DOD noted that when hostilities cease, some of the equipment being held in theater may be turned over to Iraqi Security Forces, if authorized by law. In addition, some equipment will be scrapped and the rest would be assessed for maintenance. Military service officials have recently testified that some types of equipment may be left for Iraqi Security Forces, and cited concerns with supporting that equipment in the future. Until the determination of what equipment will be given to the Iraqi Security Forces is made, it will be difficult to determine what will be available for reset. As the United States military draws down its combat forces, any continued logistical support using equipment such as wheeled vehicles and helicopters will have to come from the Army or Marine Corps and will have to be factored into plans for reset and reconstitution.

Lack of Comprehensive Sustainment, Modernization, and Replacement Strategies for Certain Army and Marine Corps Equipment Items

We have previously reported that, for certain equipment items, the Army and Marine Corps have not developed complete sustainment, modernization, and replacement strategies or identified funding needs for all priority equipment items such as the Army Bradley Fighting Vehicle and Marine Corps CH-46E Sea Knight Helicopter.¹¹ Given that funding for the next several years to sustain, modernize, and replace aging equipment will compete for funding with other DOD priorities, such as current operations, force structure changes, and replacement system acquisitions, the lack of comprehensive equipment strategies may limit the Army's and Marine Corps's abilities to secure required funds. Furthermore, until the services develop these plans, Congress will be unable to ensure that DOD's budget decisions address deficiencies related to key military equipment.

¹¹ GAO, *Military Readiness: DOD Needs to Reassess Program Strategy, Funding Priorities, and Risks for Selected Equipment*, [GAO-04-112](#) (Washington, D.C.: Dec. 19, 2003).

We first reported in 2003 that the condition of 25 selected military equipment items varied from very good to very poor and that, although the services had program strategies for sustaining, modernizing, or replacing most of the items reviewed, there were gaps in some of those strategies. Since this report, DOD's continued operations in Iraq and Afghanistan have resulted in additional wear and tear on military equipment. Given continued congressional interest in the wear and tear being placed on military equipment and the funding needed to reconstitute the equipment, we issued a follow up report in October 2005 in which we assessed the condition, program strategies, and funding plans for 30 military equipment items, including 18 items from our December 2003 report. With respect to these 30 selected equipment items, we identified that the military services had not fully identified near- and long-term program strategies and funding plans to ensure that all of these items can meet requirements. For many of the equipment items included in our assessment, average fleet wide readiness rates had declined, generally due to the high pace of recent operations or the advanced age or complexity of the systems. Although selected equipment items have been able to meet wartime requirements, the high pace of recent operations appears to be taking a toll on selected items and fleet wide mission capable rates have been below service targets, particularly in the Army and Marine Corps. For example, the Army's Bradley Fighting Vehicle, Abrams Tank, and AH-64A/D Apache Helicopter, and the Marine Corps's Light Armored Vehicle and Sea Knight Helicopter were assessed as warranting additional attention by DOD or the military services due to the high pace of operations increasing utilization beyond planned usage. Furthermore, according to officials, the full extent of the equipment items' degradation will not be known until a complete inspection of the deployed equipment is performed.

Marine Corps legacy aviation equipment in use faces special readiness challenges due to the increased usage rates coupled with the absence of new production of that equipment. Existing equipment must be maintained and managed to provide the warfighter with needed equipment until next generation equipment is constructed. We have recently reported severe problems or issues that warrant immediate attention by DOD or the military services with the near term program strategies and funding plans for the Marine Corps CH-46E Sea Knight Helicopter program due to anticipated parts shortages and maintenance issues, as well as potential problems with the readiness of Marine Corps M1A1 tanks, Light Armored Vehicles, and CH-53E helicopters stemming from the high pace of operations and increased utilization beyond planned usage. In recent Congressional testimony, Marine Corps officials discussed problems with a lack of active production lines for the CH-46 and CH-53 helicopters.

Given that no replacement aircraft is available, as these platforms are lost in combat they cannot be replaced. The Marine Corps has requested funds in the fiscal year 2006 supplemental to bring CH-53E helicopters out of desert storage and refurbish them to replace those destroyed during current operations.

Army and Marine Corps Face Difficult Choices For Competing Equipment Programs

The Army and Marine Corps will need to make difficult choices for competing equipment programs, such as Army modularity and equipment reset, when considering future equipment budget requests. 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. The growing requirement for future equipment repair, replacement, and reset will only serve to exacerbate the problem. For example, based on our preliminary observations, the Army's cost estimate, to create modular units has increased from \$28 billion in 2004 to its current estimate of \$52.5 billion. Of that \$52.5 billion, \$41 billion or 78 percent has been allocated to equipment. However, our preliminary observations also indicate that it is not clear how the Army distinguishes between costs associated with modularity and costs for resetting equipment used during operations. According to recent Army information, the Army's requirement for equipment reset is more than \$13 billion for fiscal year 2006. This includes funds to repair equipment in theater or at the depots, replace battle losses, and recapitalize equipment. In fiscal year 2006 alone, the Army estimated it would need to reset about 6,000 combat vehicles, 30,000 wheeled vehicles, 615 aircraft, and 85,000 ground support items. In addition, according to recent Marine Corps testimony, accurately forecasting the total cost to reset the force is dependent upon calculations of what percentage of current inventory in theater will be repairable or will need to be replaced, how much equipment may be left behind for Iraqi forces, and other determinations dependent on circumstances and conditions that cannot be easily predicted. The Army has also indicated that additional supplemental funding will be required for equipment reset for at least two years after hostilities cease. The Army and Marine Corps must consider these affordability challenges in the context of future fiscal constraints.

Depots Experience
Difficulties With Executing
Supplemental
Appropriations Received
Late in the Fiscal Year

The Army depots received their fiscal year 2005 supplemental in the June/July 2005 timeframe, at which time they began executing their reset workload. Subsequently, some of these funds were later pulled back by the AMC. According to AMC officials, the funds were pulled back from the depots for three reasons: (1) the depots could not complete the reset workload until several months after the end of fiscal year 2005, (2) the funds were needed to meet other Army-wide requirements, and (3) the Army wanted to avoid potential Congressional cuts to its fiscal year 2006 budget for depot carry over workload. In total, AMC pulled back \$193 million, or about 10 percent of reset funds for fiscal year 2005 for Army depot maintenance. According to AMC officials, the command did not use these funds for contract depot maintenance, but rather gave them back to Army headquarters to meet other unfunded fiscal year 2005 operation and maintenance requirements. According to Army and Marine Corps depot officials, receipt of funds too late in the fiscal year does not allow timely execution of major item workload within the current fiscal year. Given the time it takes to preposition parts and materials (at best 60 days), plus the repair cycle time to complete repairs (approximately another 60 to 90 days for major items) there is basically little end item production to be achieved at the depot within the fiscal year the funding is received. Receiving the supplemental late in the year of execution reduced the amount of planned depot maintenance work for 2005. Depot officials anticipate that the condition may repeat itself in fiscal year 2006. For example, one Army depot reported that its planned fiscal year 2006 workload of 27 million direct labor hours will likely be reduced to 21 million hours, a reduction of 6 million, or 22 percent, of planned direct labor hours.

Depot officials commented that the timing of the supplemental appropriations compounds problems depots have in efficiently managing their maintenance workload. The depots face the challenge of managing changes in funded requirements during the year of execution, obtaining the equipment they have programmed for overhaul, and ensuring that the right spare parts are purchased in advance of equipment overhauls. For example, in preparing its fiscal year 2006 supplemental budget request, AMC included the repair of HMMWVs at its depots. The depots planned accordingly to support this requirement. However, since the supplemental was submitted to Congress, the Army has requested that Congress shift \$480 million in HMMWV reset funds to new procurement. This change has reduced the planned depot workload by almost 6,000 HMMWVs creating disruptions in depots' workforce structure plans. Until the reduction, Red River depot anticipated hiring additional employees to perform the HMMWV and Bradley workloads, and Letterkenny Army Depot recently

reduced its contract workforce by 150 employees due to declining work on the HMMWV and the Patriot missile system.

Concluding Observations

Prior to the Global War on Terror, the Department of Defense, the Army, and the Marine Corps faced significant challenges in sustaining and modernizing legacy equipment as well as funding the procurements of replacement weapons systems. With the advent and continuation of military operations over the past several years in Afghanistan and Iraq, the challenges of sustainment and modernization of legacy weapons systems, and procurement of new and replacement weapons systems has been significantly exacerbated. The harsh operating environment and high operational tempo, coupled with the operational requirement to keep equipment in theater without significant depot repair, could lead to higher than anticipated reset costs and more replacements than repair of equipment.

Although the precise dollar estimate for the reset of Army and Marine Corps equipment will not be known until operations in Iraq and Afghanistan cease, it will likely cost billions of dollars to repair and replace the equipment used. As the funding requirements increase over time, the Army and Marine Corps will be forced to make difficult choices and trade-offs for the many competing equipment programs. 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. Until the services are able to firm up these requirements and cost estimates, neither the Secretary of Defense nor the Congress will be in a sound position to weigh the trade offs and risks.

Mr. Chairman, this concludes my statement. I would be happy to answer any questions.

This is a work of the U.S. government and is not subject to copyright protection in the United States. It may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

GAO's Mission

The Government Accountability Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday, GAO posts newly released reports, testimony, and correspondence on its Web site. To have GAO e-mail you a list of newly posted products every afternoon, go to www.gao.gov and select "Subscribe to Updates."

Order by Mail or Phone

The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. Government Accountability Office
441 G Street NW, Room LM
Washington, D.C. 20548

To order by Phone: Voice: (202) 512-6000
TDD: (202) 512-2537
Fax: (202) 512-6061

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm

E-mail: fraudnet@gao.gov

Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Gloria Jarmon, Managing Director, JarmonG@gao.gov (202) 512-4400
U.S. Government Accountability Office, 441 G Street NW, Room 7125
Washington, D.C. 20548

Public Affairs

Paul Anderson, Managing Director, AndersonP1@gao.gov (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, D.C. 20548