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Report to the Chairman, Subcommittee on Readiness, Committee on Armed Services, House of Representatives

April 1992

OPERATION DESERT STORM

Increased Work Loads at Army Depots Created Supply Backlogs

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National Security and
International Affairs Division

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The Honorable Earl Hutto
Chairman, Subcommittee on
Readiness
Committee on Armed Services
House of Representatives

Dear Mr. Chairman:

This report responds to your concerns about the hundreds of millions of dollars spent to modernize and automate the Army supply depots and the problems experienced by the depots during Operations Desert Shield and Desert Storm. We found that during the Persian Gulf conflict, work loads and backlogs had increased significantly at the New Cumberland and Red River Depots. Backlogs grew because (1) reductions-in-force were occurring even as work loads increased; (2) not all of New Cumberland's new automated storage and retrieval systems were operational; and (3) the depots' storage capacity was exceeded, adding to the time required to process materiel received and shipped.

We are sending copies of this report to the Chairmen of the House Committee on Government Operations, the Senate Committee on Governmental Affairs, the House and Senate Committees on Appropriations, and the Senate Committee on Armed Services; the Director of the Office of Management and Budget; and the Secretaries of Defense and the Army. Copies will also be made available to others on request.

Please contact me at (202) 275-4141 if you or your staff have any questions. Other major contributors to this report are listed in appendix I.

Sincerely yours,

Richard Davis

Richard Davis
Director, Army Issues

Executive Summary

Purpose

Operations Desert Shield and Desert Storm represented the largest U.S. military deployment effort since Vietnam. During these operations, the Army's depot supply and transportation systems moved over 519,000 tons of Army supplies to Southwest Asia. Much of these supplies were processed through two of the Army's major depots: the New Cumberland Army Depot and the Red River Army Depot.

The Chairman of the Subcommittee on Readiness, House Committee on Armed Services, was concerned that even though hundreds of millions of dollars had been spent to modernize Army depots, materiel and supplies had backlogged during the war. The Chairman asked GAO to determine (1) how much the New Cumberland and Red River Depots' work loads had increased in response to Operations Desert Shield and Desert Storm, (2) how large the depots' backlogs of received items and items to be shipped had become, (3) what had caused these backlogs, and (4) what lessons had been learned that could be applied to improving logistics operations.

Background

During Operations Desert Shield and Desert Storm, which lasted from August 7, 1990, to February 28, 1991, the New Cumberland and Red River Army Depots processed much of the supplies and materiel that were sent to support U.S. forces in the Persian Gulf. Their work loads are measured by the number of lines of materiel they receive, the number of requisitions they process, and the number of lines of materiel they ship.

Results in Brief

The work loads of the Army's New Cumberland and Red River Depots increased substantially during Operations Desert Shield and Desert Storm. New Cumberland receiving work load increased 44 percent; its requisition processing work load increased 59 percent; and its shipping work load increased 25 percent. While Red River's receiving and requisition work loads increased only slightly, its shipping work load increased 121 percent.

During the conflict, New Cumberland's work backlogs—the amount of work that exceeds the depot's processing capability within a given time frame—increased. The depot's materiel receiving backlog grew from 0 to 49 days, and its shipping backlog grew from 0 to 5 days. Red River's receiving backlog increased from 26 days to 38 days by October 1990 and then decreased to 15 days by February 1991. Its shipping backlog, however, increased from 9 days to 27 days.

Backlogs grew because (1) reductions-in-force were occurring even as work loads increased; (2) not all of New Cumberland's new automated storage and retrieval systems were operational; and (3) the depots' optimal storage capacity was exceeded, adding to the time required to process materiel received and shipped.

The Army has prepared a report on the logistics lessons learned during Operations Desert Shield and Desert Storm and has suggested ways to improve its supply and distribution systems. GAO believes that these suggested corrective actions are a step in the right direction, but they will require a long-term commitment on the part of the Department of Defense if they are to have any effect.

Principal Findings

Work Loads Increased at Army Depots During Operations Desert Shield and Storm

During Operations Desert Shield and Desert Storm, the average monthly amount of materiel New Cumberland received increased from 183,800 lines to 264,100. Its materiel requisitioning work load increased from a monthly average of 45,900 requests to 72,800. Likewise, its shipping work load increased from a monthly average of 193,500 lines to 241,000.

In contrast to New Cumberland's work loads, Red River's materiel receiving and requisition processing work loads increased only slightly during Operations Desert Shield and Desert Storm. However, its shipping work load increased substantially from a monthly average of 55,900 lines to 123,600 lines.

Receiving and Shipping Backlogs Also Developed at the Depots

From August 1990 through February 1991, New Cumberland's receiving backlog increased from 0 lines to about 65,100 lines: a 49-day backlog over its normal processing capability. During this same period, the depot's shipping backlog increased from 0 lines to over 49,100 lines—a 5-day backlog over its normal processing capability.

Red River's materiel receiving backlog increased from an average of 39,000 lines to an average of 43,600 lines a month. This represented about 29 days of backlog as compared to a 26-day receiving backlog before the beginning of Operations Desert Shield and Desert Storm. Red River's shipping backlog increased from a monthly average of 33,100 lines to a monthly

average of 100,800 lines. This represented a 27-day shipping backlog over the depot's processing capability as compared to a 9-day backlog before Operations Desert Shield and Desert Storm.

Reductions-in-Force Were Occurring at the Same Time That Work Loads Were Increasing

During Operations Desert Shield and Desert Storm, the size of the depots' work forces fluctuated. New Cumberland's work force was reduced from 1,952 in August 1990 to 1,836 in November 1990 as part of the Army's overall plan to reduce the size of its force structure. During November and December 1990, however, its work force increased to 2,146 employees as a result of the Army's decision to transfer employees from other depots and to activate military reservists. However, even with the increased work force, New Cumberland's receiving and shipping backlogs continued to increase.

Red River's work force was also initially reduced significantly—from about 5,200 in August 1990 to about 4,500 in November 1990. Then, between November 1990 and January 1991, the depot's work force increased to about 4,910 employees, when some of the employees who had been laid off during the reduction-in-force were rehired.

Automated Facilities at New Cumberland Were Not Fully Operational

New Cumberland's automated receipt, storage, and shipping facilities, which were built at a cost of about $221 million, were to be fully operational by April 1991. Although construction of the new facilities had been completed at the time Operation Desert Shield began, the Army had not completed its tests and evaluation.

In February 1991, New Cumberland was able to use that portion of the automated facilities related to preparing cargo for shipment by air. New Cumberland officials told GAO that if all the automated storage and retrieval functions had been available, the time required to perform receiving and shipping functions—and therefore the backlogs—would have been reduced.

Optimal Storage Capacity at the Depots Was Exceeded

The optimal storage capacity of the two depots was exceeded as a result of the increased amounts of materiel they received, stored, and shipped. This condition caused inefficiencies in the depots' operations and, in turn, contributed to the backlogs in the receiving and shipping functions.

The overcrowding of storage facilities necessitated that already stored materiel be moved to make room for incoming materiel. As more materiel had to be moved, it took longer to store and retrieve the items for packing and shipping. Overcrowded storage conditions also increased the possibility that items needed to fill requisitions would be lost or misplaced.

Army Plans to Apply Lessons Learned During Operations Desert Shield and Desert Storm

The various reports on lessons learned from Operations Desert Shield and Desert Storm cited the following problems in Army supply and distribution: (1) there was a lack of oversight and control of in-transit and in-theater materiel; (2) the manual processing of requisitions adversely affected the efficiency of supply operations; (3) the reductions-in-force during the crisis made it more difficult to get the necessary work done; and (4) there was a lack of accountability over materiel and equipment redeployed from the theater after the operations were completed.

A senior Army logistics official told GAO that many of the problems cited above were long-standing ones. The official also told GAO that the lessons learned during Operations Desert Shield and Desert Storm could serve as a basis for making the needed improvements and that the Army was developing plans and corrective actions to address the problems.

GAO believes that the Army's plans and actions are a first step in resolving many of these long-standing problems. However, correcting the identified problems will require an unwavering commitment on the part of Department of Defense officials over a long period of time and continuous follow-up by these officials to ensure that the corrective actions have been taken.

Recommendations

GAO is making no recommendations in this report.

Agency Comments

In commenting on a draft of this report, the Department of Defense agreed with the information presented.

Contents

Abbreviations

DOD	Department of Defense
GAO	General Accounting Office

Introduction

Operations Desert Shield and Desert Storm, which were conducted between August 7, 1990, and February 28, 1991, represented the largest U.S. military mobilization effort since Vietnam. During the operations, the Army's depot supply and transportation systems moved over 519,000 tons of Army supplies to Southwest Asia. Many of these supplies were processed through the Army's New Cumberland Army Depot, located in New Cumberland, Pennsylvania, and the Red River Army Depot, located in Texarkana, Texas.

A depot's work load is measured by the number of lines of materiel it receives, the number of requisitions (or "materiel release orders") it processes, and the number of lines of materiel it ships. The receiving function includes all actions required to process incoming materiel for (1) storage at the depot, (2) consolidation and containerization, and (3) use as installation supply. The depots' shipping process includes all actions required to select, pack, and consolidate materiel for shipment. When the number of lines of materiel received at the depot exceeds the depot's capability to process it within the Army's required time frames, a backlog occurs.

Objectives, Scope, and Methodology

Concerned about the performance of the Army depots during Operations Desert Shield and Desert Storm after hundreds of millions of dollars had been spent to modernize and automate them, the Chairman of the Subcommittee on Readiness, House Committee on Armed Services, requested that we determine (1) how much the New Cumberland and Red River Depots' work loads had increased in response to Operations Desert Shield and Storm, (2) how large the depots' backlogs of received items and items to be shipped had become, (3) what had caused these backlogs, and (4) what lessons had been learned that could be applied to improving depot operations.

To meet these objectives, we held discussions with officials and analyzed regulations, policies, and other documentation at the following locations:

- the Office of the Army Deputy Chief of Staff for Logistics, Washington, D.C.;
- the Army Materiel Command, Alexandria, Virginia;
- the Defense Logistics Agency, Alexandria, Virginia;
- the Depot Systems Command, Chambersburg, Pennsylvania;
- the New Cumberland Army Depot, New Cumberland, Pennsylvania;
- the Red River Army Depot, Texarkana, Texas;

- the Military Traffic Management Command, South Atlantic Outport, Charleston, South Carolina; and
- the Military Traffic Management Command, Bailey's Crossroads, Virginia.

We reviewed Army Materiel Command reports that tracked and evaluated key depot performance indicators—such as lines of materiel received, requested, and shipped and backlogs in receiving and shipping—prior to and during Operations Desert Shield and Desert Storm. The New Cumberland and Red River Army Depots received, stored, and shipped much of the Army materiel sent to Southwest Asia. In addition, the two depots experienced the largest receiving and shipping backlogs during the operations.

At the New Cumberland and Red River Army Depots, we examined the receipt, storage, and shipping procedures of materiel going to the aerial and water ports to identify the possible causes of any backlogs at the depots. We also examined the depots' work loads, work forces, and backlog data to determine whether correlations existed among these factors.

We performed our review from June 1991 to January 1992 in accordance with generally accepted government auditing standards.

Magnitude of Work Load and Backlog Increases at the New Cumberland and Red River Army Depots

During Operations Desert Shield and Desert Storm, significant backlogs in the materiel receiving and shipping functions occurred at the New Cumberland and Red River Depots. These backlogs developed principally because

- the depots' work loads increased at the same time that reductions-in-force were occurring,
- not all of the automated systems at the New Cumberland Depot were operational, and
- the depots' optimal storage capacity was exceeded.

Receiving and Shipping Backlogs Developed at the Depots During Operations Desert Shield and Desert Storm

New Cumberland, unlike Red River, did not have a receiving or shipping backlog prior to Operation Desert Shield. However, during the conflict, significant backlogs developed in both of these areas at both depots.

During Operations Desert Shield and Storm, New Cumberland's receiving backlog increased from 0 to about 65,100 lines. The depot was normally capable of processing 1,336 lines of received materiel each day. By February 1991, the end of the operations, there was a 49-day receiving backlog over the depot's normal processing capability.

New Cumberland also developed a shipping backlog during Operations Desert Shield and Desert Storm. Between August 1990 and February 1991, the depot's shipping backlog increased from 0 to over 49,100 lines. New Cumberland was normally able to process about 10,000 lines daily. By February 1991, the depot's backlog represented about 5 days of effort over its normal processing capability.

In contrast, Red River had receiving and shipping backlogs prior to the beginning of Operation Desert Shield. For the 7-month period ending July 1990, the depot's average monthly receiving backlog was about 39,000 lines—which represents about 26 days of processing. By October 1990, the backlog had increased to about 56,400 lines—an increase of 45 percent. Depot officials told us that the depot was capable of processing about 1,500 lines a day and that the 56,400 lines represented almost 38 days of backlog.

By February 1991, the receiving backlog had been reduced to 23,000 lines—that is, the backlog was smaller than it had been prior to the beginning of Operation Desert Shield. Officials told us that the backlog had decreased because materiel that would have been shipped to Red

River had been diverted to New Cumberland. New Cumberland had been designated the Army's primary distribution depot for Operations Desert Shield and Desert Storm. Consequently, Red River could devote its resources to reducing its backlog.

Red River's shipping backlog increased significantly during Operations Desert Shield and Desert Storm: from a monthly average of 33,100 lines between January and July 1990 to a monthly average of about 100,800 lines between August 1990 and February 1991—a 205-percent increase. According to Red River officials, the depot's daily processing capability was about 3,800 lines. The February 1991 shipping backlog at Red River was 27 days as compared to a 9-day backlog prior to the Operations.

Work Load Increases Resulting From Operations Desert Shield and Desert Storm

During Operations Desert Shield and Desert Storm, New Cumberland's work load factors—the amount of materiel and the numbers of requests for items it received and the amount of materiel it shipped—increased significantly over pre-Desert Shield levels. In contrast, Red River's receiving and materiel request work loads remained relatively consistent with its pre-Desert Shield work loads. However, its shipping work load increased significantly.

For the 7-month period prior to Operation Desert Shield, New Cumberland's monthly average receiving work load was 183,800 lines. This average increased to 264,100 lines a month during Operations Desert Shield and Desert Storm—a 44-percent increase.

Additionally, New Cumberland's average monthly requests for materiel increased from 45,900 for the 7-month period preceding the operations to 72,800 during the operations—a 59-percent increase. The depot's materiel shipping work load also increased from a monthly average of 193,500 lines for the 7-month period preceding the operations to 241,000 lines during the operations—a 25-percent increase.

For the 7-month period preceding Operation Desert Shield, Red River's average monthly receiving work load was 36,800 lines. During the operations, this average increased to 40,200 lines—a 9-percent increase. For the same time period, Red River's average monthly requests for materiel increased from 148,600 to 152,600—a 3-percent increase.

Unlike Red River's receiving and materiel request work loads, which increased only slightly, its shipping work load increased significantly.

Prior to the beginning of Operation Desert Shield, Red River's average monthly shipping work load was 55,900 lines. During Operations Desert Shield and Desert Storm, this average increased to 123,600 lines—a 121-percent increase.

Reductions-in-Force Occurring During Operations Desert Shield and Desert Storm

During Operation Desert Shield, the depots' work forces were being reduced as their work loads increased. Reductions-in-force were part of the Army's overall plan for reducing the size of its force structure in response to lessening of tensions throughout the world and efforts to reduce the budget deficit.

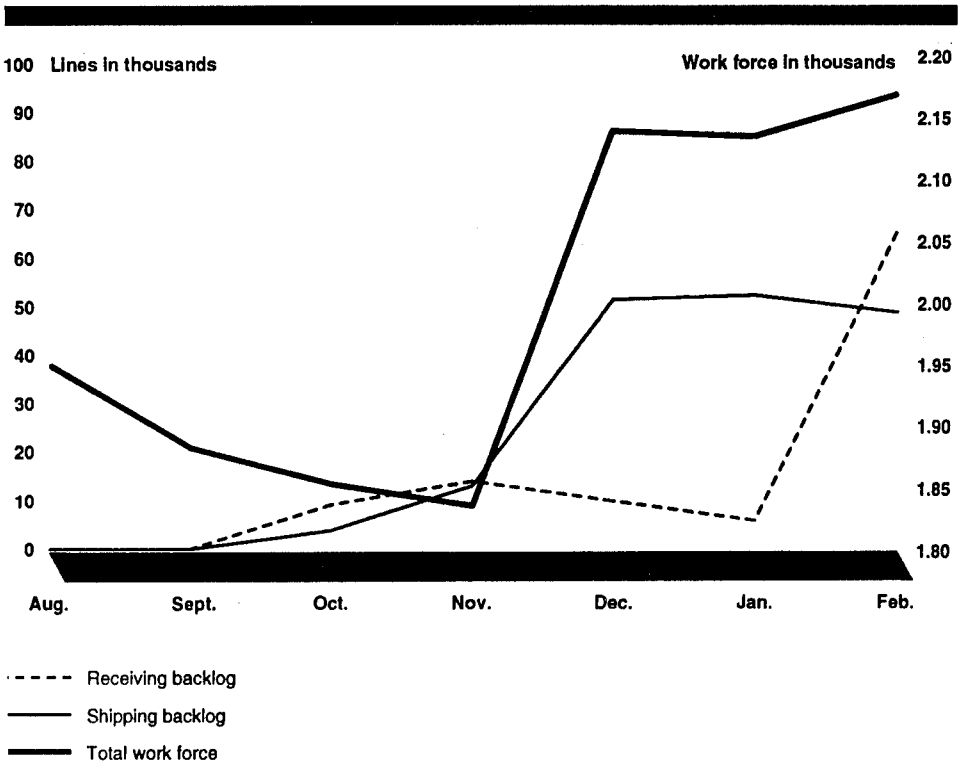
The reduction-in-force process began in August 1990. At the beginning of Operation Desert Shield, however, the Army initiated action with the Office of Personnel Management to suspend these reductions. Because the Army did not receive approval for this suspension until November 1990, the fluctation in the size of the work forces continued: as employees were laid off, some were rehired as temporary employees, and military reservists were activated to work in the depots.

New Cumberland's Work Force

New Cumberland's work force was reduced from 1,952 in August 1990 to 1,836 in November 1990. As previously discussed, during the same period, New Cumberland's receiving, materiel request, and shipping work loads and its receiving and shipping backlogs increased.

During November and December 1990, New Cumberland's work force was increased to 2,146 employees as a result of the transfer of 150 employees from Letterkenny and Tobyhanna Army Depots, the activation of about 150 reservists from the 814th General Supply Division, and the rehiring of some of the employees laid off as a result of the reduction-in-force. However, even with the increased work force, New Cumberland's receiving and shipping backlogs continued to increase, as shown in figure 2.1.

Figure 2.1: Increases in New Cumberland's Backlogs, as Compared With Its Fluctuations in Work Force



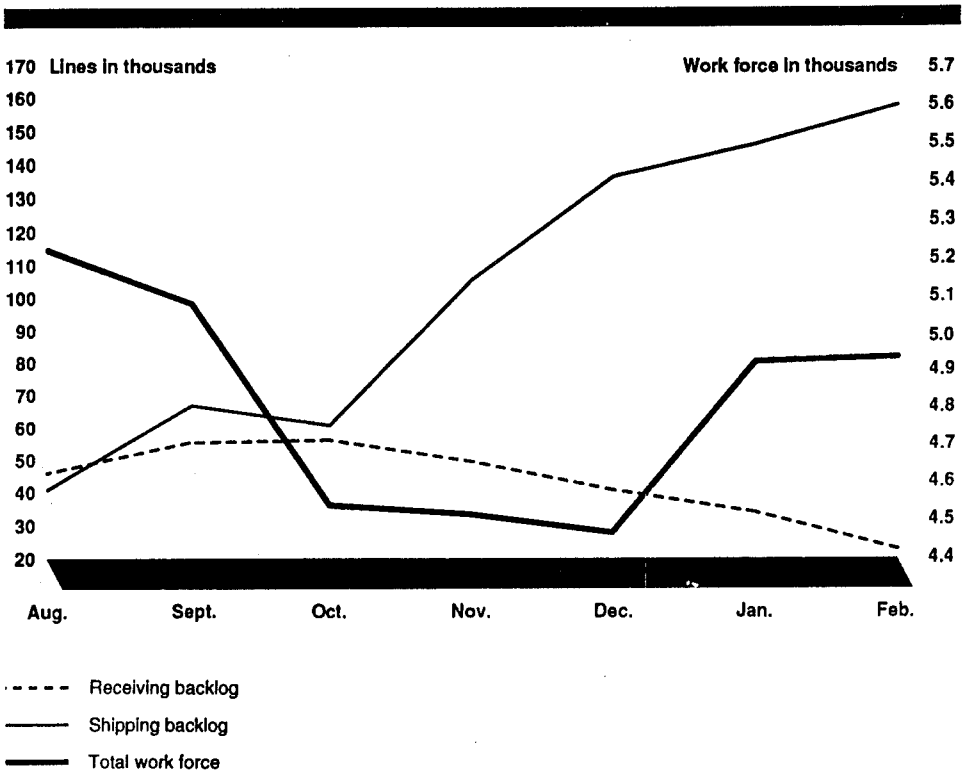
Source: GAO's analysis of Army data.

Red River's Work Force

Red River's work force was reduced from about 5,200 in August 1990 to about 4,500 in November 1990. During the same period, Red River's materiel receiving backlog increased 7 percent, and its shipping backlog increased about 157 percent. Between November 1990 and January 1991, the depot's work force increased to about 4,900 employees because some of the employees laid off during the reduction-in-force were rehired. The work force remained at this level throughout February 1991.

During this same period, the depot was able to reduce its receiving backlogs by 54 percent. The reduction was possible because materiel that otherwise would have been shipped to Red River had been diverted to New Cumberland. Red River was thus able to concentrate its resources on reducing its receiving backlog. Even so, while the receiving backlog was being reduced, the shipping backlog increased about 50 percent, as shown in figure 2.2.

Figure 2.2: Fluctuations in Red River's Backlogs, as Compared With Its Fluctuations in Work Force



Source: GAO's analysis of Army data.

Nonavailability of Automated Facilities at New Cumberland

New Cumberland's receipt, storage, and shipping processes were to be fully automated and operational by April 1991. The automated facility, built at a cost of $221 million, was intended to improve the depot's processing capability, reduce the cost of distribution, and maximize the efficiency of depot operations. Although construction of the new automated storage and retrieval facility had been completed at the time Operation Desert Shield began, the facility was not operational because the Army had not completed its tests and evaluation of the facility.

In February 1991, the Army was able to activate a portion of the automated facility—the air line of communication pallet portion. New Cumberland officials said that the pallet portion represented about 20 percent of the facility's total automation capability. New Cumberland officials also told us that, in their opinion, if all the automated storage and retrieval functions had been available throughout Operations Desert Shield and

Desert Storm, the time required to receive and ship items would have been reduced, thereby also reducing the backlogs.

Overcrowded Storage Conditions

As a result of the increased amounts of materiel the New Cumberland and Red River Army Depots received, stored, and processed during Operations Desert Shield and Desert Storm, the optimal storage capacity of the two depots was exceeded. This condition caused inefficiencies in the depots' operations, which, in turn, contributed to the backlogs in receiving and shipping.

According to Army instructions, when the amount of stock stored exceeds 85 percent of the depot's storage capacity, inefficiencies develop in the warehousing functions. When storage facilities are overcrowded, materiel must be moved to make room for incoming materiel, thereby requiring more time to store and retrieve the items for packing and shipping. Additionally, overcrowded storage conditions increase the possibility of losing or misplacing items needed to fill requisitions.

During Operations Desert Shield and Desert Storm, the New Cumberland and Red River Depots' storage exceeded 85 percent of the optimal storage space capacity. In fact, materiel that should have been stored under cover had to be stored outside. According to Army Materiel Command officials and reports, the inefficiencies resulting from the overcrowded conditions contributed to the depots' receiving and shipping backlogs.

Conclusions

The significant receiving and shipping backlogs that developed at New Cumberland and Red River were caused largely by factors beyond the depots' control. First, the unexpected increase in the volume of transactions, coupled with the reductions-in-force that were occurring, caused materiel to back up at the depots. While it might not have been possible to forecast the volume of materiel that would be needed to support Operations Desert Shield and Desert Storm, earlier cancellation of the reductions-in-force could have helped to alleviate the backlogs at the two depots.

Lessons Learned From Operations Desert Shield and Desert Storm for Improving Supply Operations

The various lessons learned reports prepared by the Army following Operations Desert Shield and Desert Storm cited serious problems in supply and distribution. They included (1) a lack of oversight and control of in-transit and in-theater materiel; (2) a reduced efficiency of supply operations due to the manual processing of requisitions; (3) difficulty in getting the necessary work done because of reductions-in-force during the crisis; and (4) a lack of accountability over materiel and equipment redeployed from the theater after the operations were completed.

According to a senior Army logistics official, the lessons learned from Operations Desert Shield and Desert Storm could serve as a basis for making the needed improvements.

Lack of Visibility Over In-Transit and In-Theater Cargo

According to Army officials, oversight and control of materiel ended when it reached the ports of embarkation. As a result, officials had difficulty determining the location or status of in-transit and in-theater materiel.

Army logistics officials told us that supply personnel had had problems identifying and locating materiel that had been received in theater. In some cases, materiel and supplies had been diverted to units that had not requisitioned them. In other cases, the materiel had been inappropriately placed in holding areas. As a result, after a period of time, units submitted new requisitions for the same items because it was more expedient to do so than to try to locate the items in theater. This contributed to the increased work loads and backlogs at the depots.

Army officials cited instances in which high priority aviation materiel had been misrouted, misplaced, or lost. In some cases, the materiel had been delivered to the wrong port of debarkation and could not be located for up to 3 weeks. In other cases, the materiel had been commingled with general cargo and placed in a holding area to await distribution.

To improve visibility over materiel in transit and in the theater of operation, the Army's lessons learned reports recommended that

- DOD develop and field a standard, automated, in-transit visibility documentation system to support worldwide operations;
- DOD ensure that there are a sufficient number of logistics specialists in the theater of operation before massive amounts of equipment and supplies start arriving in theater; and

- the Army Materiel Command review its in-transit documentation procedures to ensure the availability of data on items throughout the supply and transportation system.

Manual Processing of Requisitions Reduces Efficiency

The Army's requisitioning system allows high priority requisitions to be transmitted manually, that is, outside the automated requisitioning system. Army officials told us that during Operations Desert Shield and Desert Storm, many units had processed high priority requisitions manually due to the lack of automated requisitioning facilities and the criticality of the needed items.

Depot officials told us that processing requisitions manually was inefficient. The officials cited cases in which manually processed requisitions had not been posted as filled. Failure to do so, they said, caused inventory problems when officials attempted to take physical inventories or fill other requisitions for the same item. Additionally, when requisitions were manually processed, depots were unable to provide item status to customers on whether and when the requisition had been filled and shipped.

Army officials said that units ordering materiel needed to be reminded that the automated requisitioning system should be used as much as possible to (1) expedite the filling of requisitions and (2) enhance the depot's capability for providing the status of requisitions to requesters.

Reduction-in-Force Actions Impeded Support for Operations Desert Shield and Desert Storm

Reductions-in-force based on projected reductions to the Army's force structure and the Army Materiel Command's programs affected the depots' ability to support Operations Desert Shield and Desert Storm. In some cases, the depots lost skilled employees in critical support areas during the operations' most important period. For example, as a result of the reductions-in-force, supervisory positions were often vacant, and temporary employees were promoted to fill these positions. However, according to Office of Personnel Management guidelines, the promotions could remain in effect for a maximum of 120 days. As a result, there was often considerable turnover of supervisors in critical specialities.

Army officials and lessons learned reports pointed out that, because the Army had not immediately suspended or terminated the reductions-in-force, certain work load requirements were delayed or canceled. For example, the depots were instructed to reduce their efforts

to manage inventory and concentrate solely on receiving, storing, and shipping. The Army's studies concluded that as a result, control over receipts and issues was lost; accountability records were inaccurate; and items were misplaced or lost. New Cumberland and Red River officials told us that it was only after the reductions-in-force had been canceled in late November and temporary employees had been hired that the depots were able to process items for Operations Desert Shield and Desert Storm more quickly.

Lessons learned reports recommended that in future crises, any ongoing reductions-in-force should be suspended or terminated immediately.

Lack of Accountability Over Items Redeployed After Operations Desert Shield and Desert Storm

As a result of the President's decision to end the war and rapidly redeploy units back to their home stations, many units left materiel and equipment in theater without formal turn-in documents. Therefore, many of the containers sent back to the United States did not have documentation showing their contents, and the containers were used to store the materiel until delivery instructions were received from the units or until the contents of the containers were determined. Army officials told us that as of October 1991, demurrage[1] costs had exceeded $100 million and were increasing daily.

According to Army officials, because many of the returning containers did not have the required documentation showing the containers' contents or the addresses to which the containers were to be delivered, personnel at the receiving ports had to open nearly all of the containers to identify the cargo and disposition instructions.

During our visit to the South Atlantic Outport facilities in Charleston, we observed the type of conditions we describe above. In some cases, there was no indication of what was in the containers or where the containers were to be delivered. In such cases, port personnel had to open the containers to try to determine whether the materiel should be shipped to a unit or to a depot.

The officials told us that DOD was developing a uniform accountability system to track items from the depot to the user and back. The system, which is being developed as part of the Army's efforts to improve visibility

[1]"Demurrage" charges consist of two elements: compensation for the use of the cars or containers and a penalty designed to prevent their undue detention. The purpose is to promote car efficiency by penalizing shippers for undue detention.

over in-transit cargo, is expected to help prevent the lack of accountability that occurred during and after Operations Desert Shield and Desert Storm.

Conclusions

Operations Desert Shield and Desert Storm tested the Army's logistics system in responding to emergencies. The operations pointed out several supply system and distribution problems that need improvement if the Army is to meet future crises effectively. Improved responsiveness will be even more important as the Army reduces its overall force structure and refocuses its efforts toward the threat of regional conflicts requiring rapid deployment to distant geographical areas.

The actions recommended in the Army's lessons learned reports, if implemented, could go a long way toward resolving many long-standing problems. However, correcting the identified problems will require an unwavering commitment on the part of DOD officials over a long period of time and continuous follow-up by these officials to ensure that the corrective actions are effectively taken.

Agency Comments

In commenting on a draft of this report, DOD agreed with the information presented.

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