

GAO

United States General Accounting Office 133537  
Report to the Assistant Secretary of the  
Army (Logistics and Installations)

July 1987

# ARMY AIRLIFT

## Need to Use Air Lines of Communications for Essential Items



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National Security and  
International Affairs Division

B-226650

July 27, 1987

The Honorable John W. Shannon  
Assistant Secretary of the Army  
(Installations and Logistics)

Dear Mr. Shannon:

We have reviewed the Army's Air Lines of Communication (ALOC) program, which began as a test in 1977 to provide routine air transportation for class IX repair parts shipped to selected activities in Germany. Since then, the program has been expanded to other activities and to other overseas areas and now includes class II maintenance-related items and class VIII medical items. We also reviewed the reserve stocks of ALOC-eligible materials.

We found that the use of air transportation instead of surface transportation for the overseas delivery of ALOC-eligible items has significantly reduced the delivery time for routine orders, thereby reducing the amount of material in the supply pipeline. However, the program is presently airlifting nonessential materials that would not be airlifted in wartime. When we compared material that would be airlifted to a war zone in the early days of a conflict with material currently being moved under the ALOC program, we found considerable differences. For example, only essential materials are considered for airlift in wartime, but all class IX repair parts are eligible for ALOC except for air eligibility code (AEC) 5 items. (Air eligibility code 5 items are excluded from routine airlift generally because of size or some other physical characteristic.) A recent study by an Army Materiel Command activity showed that nearly half of ALOC-eligible items are identified as nonessential and would not be airlifted in wartime.

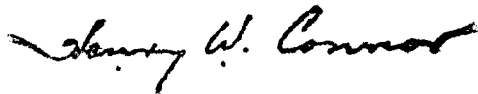
We also found that, because of the high cost of air transportation, the program is not cost-effective for peacetime use. Our analysis of the two largest ALOC channels—from New Cumberland Army Depot, Pennsylvania, to Germany and from Sharpe Army Depot, California, to Korea (which account for about 86 percent of the total ALOC traffic)—showed that about 19,600 short tons of low-priority ALOC-eligible items were airlifted during fiscal year 1985. We estimate that using airlift instead of sealift to transport this material increased overall costs to the Department of Defense by about \$30 million, after savings from reduced inventories were considered.

Finally, we question whether reserve stocks of repair parts stored overseas are adequate to sustain wartime operations until deliveries from the Continental United States (CONUS) can begin. Our review of ALOC-eligible war reserve materials stocked at the general support supply bases in Germany showed that these bases have neither the types nor amounts of stock necessary to sustain operations at wartime consumption rates until resupply from CONUS can begin—even if peacetime order and ship times can be achieved. Based on war reserve requirement computations by Army Materiel Command planners, the ranges of items stocked at the general support supply bases are short of those required to sustain wartime operations. Furthermore, objectives for stocked items are based on peacetime rather than the higher wartime demand levels.

We recommend that you direct that the peacetime airlift eligibility criteria under the ALOC program be made more consistent with the wartime airlift eligibility criteria. We also recommend that you reassess the types and quantities of repair parts included in prepositioned war reserve stocks.

Details of our findings are contained in appendix I. Appendix II is a comparison of transportation costs, and appendix III contains our objectives, scope, and methodology. We would appreciate being advised of any corrective actions taken in response to our recommendations.

Sincerely yours,



Henry W. Connor  
Senior Associate Director



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## Abbreviations

|       |                                     |
|-------|-------------------------------------|
| ALOC  | Air Lines of Communication          |
| AEC   | air eligibility code                |
| CONUS | Continental United States           |
| GSSB  | General Support Supply Base         |
| MTMC  | Military Traffic Management Command |



# Changes Needed to the Army's Air Lines of Communication Program

## Background

The Army's Air Lines of Communication (ALOC) program is a subsystem of its Direct Support System, which provides supplies to overseas units directly from depots in the Continental United States (CONUS). The ALOC program provides routine airlift of supply class IX repair parts, selected (maintenance-related) class II supply items, and class VIII medical supplies to certain overseas customers.

The ALOC to Germany was begun as a test in January 1977 to reduce overseas inventories by increasing reliance on CONUS depots for support. It has since become permanent and has been expanded to other overseas areas, including Korea, Hawaii, Alaska, Japan, Okinawa, Panama, and Honduras. In fiscal year 1985, more than 35 thousand tons of supplies moved through the ALOC system. The ALOC to Germany accounted for about 75 percent of this tonnage, with 11 percent going to Korea. During 1985, the average order and ship time for units in Germany was 24.0 days using ALOC, compared to 65.1 days for items shipped by surface. The order and ship time for items shipped to Korea using ALOC was 27.1 days, compared to 59.2 days for items shipped by surface.

## Criteria for Airlift— Peacetime and Wartime

One of the Army's justifications for the ALOC program is that it provides peacetime exercise of the air cargo shipment system that would be needed in wartime. Army officials stated that if there were no peacetime ALOC program, such a system would have to be established at the outbreak of a war, with resulting temporary confusion and disruption in the supply pipeline.

Planning personnel told us that, in planning wartime airlift requirements for resupply items, only essential items are considered for airlift. Department of Defense officials told us that airlift resources are not set aside to move ALOC cargo that is not covered in the war plans. In contrast, the criteria for ALOC eligibility includes all class IX, maintenance-related class II, and class VIII items regardless of essentiality codes. Only those items that are assigned air eligibility code 5 because they are oversized, hazardous or dangerous, classified, temperature sensitive, or excessively heavy are excluded.

In February 1985, the Army Materiel Systems Analysis Activity reported that 49.4 percent of all class IX and class II items were coded nonessential. Thus, a large part of the supply items eligible for airlift under the peacetime ALOC program would not qualify for wartime airlift. Because the peacetime ALOC system is incompatible with the wartime system, some initial confusion and disruption could result. If a war

began, the ongoing ALOC pipeline would include a large amount of material that should not be airlifted in wartime, with no practicable means of diverting it.

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## Cost-Effectiveness of Peacetime ALOC Questionable

In 1984, the Deputy Chief of Staff for Logistics asked the U.S. Army Materiel Systems Analysis Activity to compare ALOC program costs with sealift costs and to evaluate methods of reducing costs by selectively diverting shipments from ALOC to surface. In February 1985, the Activity reported that the ALOC program was marginally cost-effective when compared to surface transportation. This conclusion was based on the assumption that all of the defense cargo airlift requirements were being met with airlift capacity generated as a by-product of the Military Airlift Command's flying hour training program; thus, the only airlift cost attributable to peacetime ALOC was the cost of additional fuel required to fly the aircraft loaded instead of empty during training. The Army analysts cautioned that if the flying hour program were exceeded and airlift capacity had to be purchased, ALOC would then be much more costly than surface transportation.

To determine airlift costs, we reviewed how the Military Airlift Command meets its airlift requirements. We found that of 161 thousand tons of cargo airlifted from CONUS during fiscal year 1985, 122 thousand tons (about 76 percent) were moved on military aircraft, and 39 thousand tons (about 24 percent) were moved on chartered commercial aircraft. The percentage of cargo moved on commercial aircraft varied monthly from 17 percent to 28 percent.

Department of Defense officials told us that the commercial augmentation of military cargo airlift capacity is based on need. They stated that using commercial airlift is not required unless the need for airlift exceeds the military capability.

Table I.1 shows the amounts (in tons) of defense cargo moved from Dover Air Force Base to Germany and from Travis Air Force Base to Korea using commercial flights during fiscal year 1985.

Appendix I  
Changes Needed to the Army's Air Lines of  
Communication Program

**Table I.1: Defense Cargo Moved on  
Commercial Aircraft—Fiscal Year 1985.**

| Month        | Number of Tons Moved |                |
|--------------|----------------------|----------------|
|              | Germany              | Korea          |
| October      | 1,468.1              | 251.2          |
| November     | 1,311.0              | 113.6          |
| December     | 1,358.7              | 206.7          |
| January      | 1,080.0              | 62.3           |
| February     | 971.5                | 84.0           |
| March        | 1,438.9              | 112.9          |
| April        | 1,979.5              | 170.0          |
| May          | 1,989.1              | 215.8          |
| June         | 1,757.8              | 257.3          |
| July         | 1,902.3              | 251.0          |
| August       | 1,940.6              | 305.4          |
| September    | 1,663.3              | 239.0          |
| <b>Total</b> | <b>18,860.8</b>      | <b>2,269.2</b> |

During the same period, 17,389.1 tons of low-priority ALOC material was airlifted to Germany and 2,271.3 tons was airlifted to Korea. (Low-priority materials are moved under transportation priority 3—issue priorities 9 through 15—and would not be eligible for airlift outside of the ALOC program. Thus, we believe that this category of material could be moved by surface transportation.) We estimate that the amount of commercial airlift purchased could have been reduced by about 16,209.9 tons and 1,945.2 tons, respectively, if the low-priority ALOC material had not been airlifted. (See app. III for our method of estimating the potential reduction.)

Since the Military Airlift Command was unable to meet all cargo airlift requirements through the flying hour program and was required to purchase commercial augmentation in amounts approximately equal to the low-priority ALOC cargo airlifted, we estimated the cost of airlifting ALOC cargo using the commercial airlift rates. A comparison of the estimated costs of shipping low-priority cargo by ALOC and by surface transportation is summarized in table I.2 and is presented in detail in appendix II. Our methodology for computing costs for each element of transportation included in our cost comparison is described in appendix III.

**Table I.2: Comparison of Shipping Costs  
for Low-Priority Cargo—ALOC Versus  
Surface**

| Mode of Shipment                         | CONUS-<br>Germany | CONUS-<br>Korea |
|------------------------------------------|-------------------|-----------------|
| ALOC                                     | \$27,830,470      | \$7,592,232     |
| Surface                                  | (2,240,533)       | (443,705)       |
| Added pipeline cost for surface shipment | (2,441,526)       | (329,116)       |
| ALOC over surface                        | \$23,148,411      | \$6,819,411     |

## War Reserve Stocks May Be Inadequate

The ability of ALOC, or any other distribution system, to support overseas armed forces during a transition to war depends largely on the availability of adequate stocks of prepositioned war reserves in-theater to meet the need for essential items until resupply of the items from CONUS depots. We reviewed the adequacy of reserve stocks of ALOC-eligible class IX repair parts stored at general support supply bases (GSSB) at corps level and above in Germany. These supply bases were established in the V Corps, VII Corps, and 21st Support Command in the mid-1970s, and three additional bases have since been established for three CONUS-based units that would deploy to Germany in wartime.

According to regulation, each supply base is authorized to stock a 30-day supply of selected ALOC items, based on wartime consumption rates, for the weapons systems they are expected to support in wartime. Selection of material for stockage is generally restricted to essential items on the Army Materiel Command's war reserve listing for the theater of operation.

Assuming that the 24-day ALOC peacetime order and ship time could be continued, a 30-day reserve supply of essential items should allow the ALOC system to support the theater adequately during transition to war. However, our review of GSSB stockage practices raised questions regarding the adequacy of the numbers of items stocked and the on-hand quantities. Table I.3 shows the numbers of items stocked at each of the six bases as of December 1985. These items are largely ALOC-eligible repair parts. Since some national stock numbers are common to two or more bases, the total shown is an overstatement of the total different stock numbers in the theater.

Appendix I  
Changes Needed to the Army's Air Lines of  
Communication Program

**Table I.3: Stockage at General Support  
Supply Bases in Germany**

|                      | Number of<br>National<br>Stock<br>Numbers |
|----------------------|-------------------------------------------|
| <b>GSSB</b>          |                                           |
| V Corps              | 8,339                                     |
| VII Corps            | 10,552                                    |
| 21st Support Command | 5,316                                     |
| III Corps            | 8,853                                     |
| 310th TAACOM         | 3,155                                     |
| 7th Support Command  | 3,801                                     |
| <b>Total</b>         | <b>40,016</b>                             |

In contrast, an Army Materiel Command list of war reserve items needed in-theater included more than double the total in table I.3. Theater officials told us that it would not be feasible to stock all of the items on the list due to funding, storage, and mobility constraints. Army Materiel Command officials pointed out that these constraints have no bearing on whether the items are needed. They said that if a needed repair part cannot be stocked, the maintenance concept should be changed to eliminate the requirement for it.

Although stock levels for the GSSB were set at 30 days of supply, as called for by regulation, stock quantities are based on peacetime rather than expected wartime usage rates. Theater officials stated that they believe wartime usage would be much higher.

# Air and Surface Cost Comparison for ALOC-Eligible Items, Fiscal Year 1985

| <b>Germany (16,209.91 tons)</b> |                     |                    |
|---------------------------------|---------------------|--------------------|
|                                 | <b>ALOC</b>         | <b>Surface</b>     |
| Palletizing/containerizing      | \$301,342           | \$151,725          |
| Drayage to port of embarkation  | 354,187             | 218,347            |
| Over-water transportation       | 26,879,272          | 1,385,623          |
| Port to destination             | 295,669             | 484,838            |
| <b>Subtotal</b>                 | <b>27,830,470</b>   | <b>2,240,533</b>   |
| <b>Added cost of pipeline</b>   | <b>•</b>            | <b>2,441,526</b>   |
| <b>Total</b>                    | <b>\$27,830,470</b> | <b>\$4,682,059</b> |
| <b>Korea (1,945.22 tons)</b>    |                     |                    |
| Palletizing/containerizing      | \$422,288           | \$133,753          |
| Drayage to port of embarkation  | 39,332              | 20,503             |
| Over-water transportation       | 7,086,475           | 254,104            |
| Port to destination             | 44,137              | 35,345             |
| <b>Subtotal</b>                 | <b>\$7,592,232</b>  | <b>\$443,705</b>   |
| <b>Added cost of pipeline</b>   | <b>•</b>            | <b>329,116</b>     |
| <b>Total</b>                    | <b>7,592,232</b>    | <b>772,821</b>     |
| <b>Grand total</b>              | <b>\$35,422,702</b> | <b>\$5,454,880</b> |

# Objectives, Scope, and Methodology

We reviewed the ALOC program to determine its peacetime cost and its ability to function effectively in wartime. We also reviewed whether war reserve stocks of ALOC-eligible items could adequately support overseas forces during a transition to war.

Most of our work was directed toward analyzing the German and Korean supply channels, which accounted for about 86 percent of the ALOC tonnage during fiscal year 1985. Germany was also selected because it represents the most demanding wartime scenario.

In reviewing costs, we looked at the extent to which the Military Airlift Command was meeting its peacetime airlift requirements within its flying hour program and, in this context, what airlift costs were properly chargeable to the movement of ALOC materials. We identified the criteria used to ship items by ALOC and compared this to the criteria for items that would be airlifted in wartime. We also examined prepositioned war reserves of ALOC-eligible items to determine if they could sustain initial wartime operations.

Our review was made from August 1985 through May 1986. A list of activities visited during the review is included at the end of this appendix. We conducted our review in accordance with generally accepted government audit standards.

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## Source and Methodology for Transportation Cost Comparison

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### Germany

The costs for shipment to Germany were based on 16,209.91 tons of low-priority ALOC material that we estimated were airlifted to Army units in Germany during fiscal year 1985. This ALOC material was flown from Dover and McGuire Air Force Bases to Rhein-Main and Ramstein Air Bases in Germany. The volume of low-priority material was estimated from reports supplied by the U.S. Army Logistics Control Activity and a computer tape supplied by the Military Airlift Command Headquarters. The Logistics Control Activity reports showed the ALOC shipments during January through September 1985 by issue priority designator code. We calculated the percentage of low-priority tonnage moved during the

period and applied it to the total ALOC tonnage moved during the fiscal year, according to the Military Airlift Command computer tapes. We compared the estimated low-priority ALOC tonnage to the tonnage carried by commercial carriers each month and selected the lower figure to represent the potential reduction in commercial procurement.

The following notes explain how the costs included in our analysis were developed. To arrive at the costs included in the analysis, apply each tonnage rate to the 16,209.91 tons of ALOC cargo.

#### Palletization

The cost to palletize ALOC cargo was based on contract and in-house costs incurred at the New Cumberland Army Depot Consolidation and Containerization Point. From October through December 1984, a contractor performed the function at a rate of \$43.01 per pallet. From January through September 1985, the function was performed in-house. A New Cumberland analyst estimated the in-house cost to be \$41.42 per pallet. A Military Airlift Command computer tape showed that during the earlier period, 2,951 ALOC pallets were shipped to Germany, while 8,743 pallets were shipped during the later period. Applying the rates for the respective periods to the volumes moved resulted in total palletization costs of about \$489,058, which when divided by the total weight moved on the pallets (26,303.76 tons), resulted in a unit cost of \$18.59 per ton.

#### Containerization

The cost to containerize surface cargo was based on contract and in-house costs incurred at the New Cumberland Army Depot Consolidation and Containerization Point. From October through December 1984, a contractor performed the function for \$3.05 a measurement ton (40 cubic feet). From January through September 1985, the function was performed in-house. A New Cumberland analyst estimated the cost to be \$111.19 per container. Applying the \$3.05 rate to 70,860.15 measurement tons shipped to Germany by container during October through December 1984, and the \$111.19 estimated cost to 4,594 containers shipped during January through September 1985 results in a total cost of \$726,930. This cost was then divided by the total weight of 77,693.84 tons to arrive at a rate of \$9.36 per ton.

#### Drayage to Aerial Port of Embarkation

The cost of transporting ALOC pallets to the ports was based on contracts with commercial carriers, called standing route orders, in effect during fiscal year 1985. The route orders covered shipments from New Cumberland to both Dover and McGuire Air Force Bases at a rate of \$49.87

per pallet from October through December 1984, and \$48.90 per pallet from January through September 1985. By applying these rates to the numbers of pallets moved during the periods, we estimated the total drayage cost to be \$574,699, which when divided by the tonnage moved yielded a cost of \$21.85 per ton.

#### Drayage to Port of Embarkation

The cost of transporting containers to the port of Baltimore was calculated by using a computer tape obtained from the Military Traffic Management Command (MTMC) showing the containers shipped from New Cumberland to Germany via each of the two ocean carriers used during fiscal year 1985 and the applicable rates from the Military Sealift Command Container Agreement and Rate Guide. By dividing the total cost of \$1,008,177 by the total weight shipped by container (74,850 tons), we calculated a rate of \$13.47 per ton.

#### Air Transportation

The cost of air transportation from the aerial port of embarkation to Germany was calculated using a data base we created from the Military Airlift Command's TR-1 aircraft utilization reports for fiscal year 1985. Because the air carriers are paid on the basis of the contract rate, the contract mileage flown, and the available cabin load of the aircraft used, it was necessary to calculate an average available cabin load for each channel. We then developed an average cost per mission for each channel, which we divided by the average payload carried to arrive at a cost per ton for the channel. We then applied the tonnage rate to the tonnage of ALOC cargo moved over each channel to arrive at a total cost of \$43,616,901. We then divided by the total ALOC tonnage to arrive at an average cost of \$1,658.20 per ton.

#### Surface Transportation

The cost of ocean transportation from the port of Baltimore to the ports of Rotterdam and Bremerhaven was calculated using the MTMC computer tape and the Military Sealift Command Container Agreement and Rate Guide. Applying the applicable rates to the containers shipped via each of the two carriers during 1985, we calculated a total cost of \$6,398,501. Dividing this cost by the total weight of 74,850 tons gave a rate of \$85.48.

#### Drayage From Aerial Port of Debarkation

We used a computer tape generated by the Military Airlift Command Headquarters to identify the consignee of each ALOC shipment during fiscal year 1985. We then applied appropriate mileages and a weighted

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average cost per ton/mile developed from 4th Transportation Command cost data to calculate total costs. We divided total costs by total weight to develop an average cost of \$18.24 per ton.

#### Drayage From Port of Debarkation

The cost of transporting containers from the port to a consignee's city group was calculated using data from the MTMC computer tape and the Military Sealift Command Container Agreement and Rate Guide. By applying the appropriate rates to the containers shipped during fiscal year 1985, we calculated a total cost of \$2,238,434. Dividing this total cost by the total weight of 74,850 tons resulted in an average rate of \$29.91.

#### Pipeline Cost

To estimate the additional cost of pipeline inventory required to support surface transportation, we asked the Army Logistics Control Activity to develop the daily average cost of orders for low-priority, ALOC-eligible, authorized stockage list items during fiscal year 1985. We then applied this average cost, \$428,413, to the difference in the average order and ship times experienced during the fiscal year, 24 days ALOC versus 65 days surface, to arrive at the difference in pipeline value, \$17,564,933. Applying the interest rate (10.9 percent) earned by 12-month Treasury notes at the beginning of fiscal year 1985, plus the estimated cost of obsolescence and shrinkage (3 percent) used by the Tank/Automotive Command, we arrived at \$2,441,526 in additional costs of pipeline for the year. We believe that if the system operates as designed, changes in the order and ship time should affect only the material in transit (due-in); thus we did not increase storage costs.

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#### Korea

The costs shown for Korea were based on 1,945.22 tons of low-priority ALOC material that we estimated were airlifted to Army units in Korea during fiscal year 1985. Most of this material was flown from Travis Air Force Base to Osan Air Base. The volume of low-priority material was estimated in the same way as described earlier for shipments to Germany. The following notes explain how the costs included in the cost analysis were developed. To arrive at the costs included in the analysis, apply each per ton rate to the 1,945.22 tons of ALOC cargo.

#### Palletization

The cost to palletize ALOC cargo (\$217.09 per ton) was based on contract rates in effect at Sharpe Army Depot during the fiscal year.

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Containerization                          | The cost of containerizing cargo (\$68.76 per ton) was based on the contract rates in effect at Sharpe during the fiscal year.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Drayage to the Aerial Port of Embarkation | The cost of transporting ALOC material to the aerial port was based on the rate included in the standing route order in effect during the year. We obtained information on the numbers of truckloads shipped from Sharpe Army Depot to Travis Air Force Base from Sharpe's "Outbound Register" and applied the standing route order rate of \$165 per truckload to arrive at a total cost of \$118,965. Using the total net weight of 5882.4 tons from the register, we calculated a per-ton rate of \$20.22.                                            |
| Drayage to the Port of Embarkation        | The cost of container drayage was calculated using MTMC's container utilization reports (RCS-MT-IT-6) for shipments from Sharpe Army Depot to Korea during fiscal year 1985. Information was summarized for each of three carriers used during the fiscal year, and the applicable rates were applied from the Military Sealift Command Container Agreement and Rate Guide. The calculated total cost of \$261,583 was divided by the total weight of 24,811.54 tons to arrive at a per-ton rate of \$10.54.                                             |
| Air Transportation                        | The cost of air transportation from the aerial port of embarkation to Korea was calculated in the same way as described for shipments to Germany. We developed a total cost of \$13,137,911 and divided by the total weight of 3,606.32 tons to arrive at a per-ton rate of \$3,643.02.                                                                                                                                                                                                                                                                  |
| Surface Transportation                    | The cost of ocean transportation was based on data from the MTMC container utilization reports for container shipments from Sharpe Army Depot to Korea during fiscal year 1985. Again, data was summarized for each of the three carriers used, and by applying the applicable rates from the Military Sealift Command Container Agreement and Rate Guide to the total capacity offered, we calculated a total cost of \$3,241,178. We divided this total by the total weight of the shipments (24,811.54 tons) to arrive at a per-ton rate of \$130.63. |
| Drayage From Aerial Port of Debarkation   | Drayage of ALOC material within Korea is provided by both Army and commercial truck. Because we had no means of accurately estimating the cost of transportation by Army truck in Korea, we estimated this cost using only commercial rates. Using applicable commercial rates and                                                                                                                                                                                                                                                                       |

mileages and the ALOC shipment data obtained from a computer tape provided by the Military Airlift Command, we estimated the total cost of drayage to be \$57,899. We divided this total by the total weight of 2,551.69 tons to arrive at a rate of \$22.69 per ton.

Drayage From Port of  
Debarkation

The cost of transporting containers from the ports was based on data from MTMC's container utilization reports. Again, information was summarized for each of the three ocean carriers used, and applicable rates from the Military Sealift Command Container Agreement and Rate Guide were applied to the capacity offered to arrive at the total cost of \$450,829. The total cost was divided by the total weight to arrive at a per-ton rate of \$18.17.

Pipeline Cost

We estimated the additional cost of pipeline inventory required to support surface transportation in the same way as described for Germany. For Korea, the daily average cost of orders was \$73,992 and the average order and ship times were 27 days for ALOC and 59 days for surface, giving a difference of \$2,367,741 in inventory value. Application of the 10.9 percent interest rate and 3 percent obsolescence and shrinkage rate resulted in an additional pipeline cost of \$329,116 for the year.

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## Activities Visited During Review of Air Lines of Communication

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Continental United States

Headquarters, Department of Defense

Defense Depot Mechanicsburg, Mechanicsburg, Pennsylvania

Headquarters, Department of Army

Headquarters, U.S. Army Materiel Command, Alexandria, Virginia

Headquarters, Military Traffic Management Command, Bailey's Crossroads, Virginia

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Western Area, Military Traffic Management Command, Oakland Army Base, California

New Cumberland Army Depot, New Cumberland, Pennsylvania

Sharpe Army Depot, Lathrop, California

Army Materiel Systems Analysis Activity, Aberdeen Proving Grounds, Maryland

Army Logistics Control Activity, San Francisco, California

Headquarters, Department of the Air Force

Headquarters, Military Airlift Command, Scott AFB, Illinois

Headquarters, 21st Air Force, McGuire AFB, New Jersey

436th Military Airlift Wing, Dover AFB, Delaware

436th Aerial Port Squadron, Dover AFB, Delaware

Headquarters, 22nd Air Force, Travis AFB, California

60th Military Airlift Wing, Travis AFB, California

60th Aerial Port Squadron, Travis AFB, California

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Germany

Headquarters, United States European Command, Stuttgart

Headquarters, U. S. Army Europe, and 7th Army, Heidelberg

Headquarters, U.S. Army Materiel Command Europe, Seckenheim

Headquarters, V Corps, Frankfurt

Headquarters, VII Corps, Stuttgart

Headquarters, 21st Support Command, Kaiserslautern

200th Theater Army Materiel Management Center, Zweibruecken

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4th Transportation Command, Oberursel

U.S. Army Medical Materiel Center Europe, Pirmasens

2nd Support Command, Stuttgart

3rd Support Command, Wiesbaden

800th Materiel Management Center, Stuttgart

19th Support Center, Wiesbaden

9th Support Center, Kaiserslautern

Army Air Terminal Movement Control Teams, Ramstein Air Base and  
Rhein-Main Air Base

Mainz Army Depot, Mainz

3rd Armored Division Materiel Management Center, Frankfurt

3rd Armored Division Class 9 Warehouse, Hanau

85th Maintenance Battalion, Hanau

699th Maintenance Battalion, Hanau

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**Hawaii**

Headquarters, Commander-in-Chief Pacific, Camp Smith

Headquarters, U.S. Army Western Command, Ft Shafter

U.S. Army Support Command Hawaii, Ft Shafter

25th Infantry Division, Schofield Barracks

Headquarter, Pacific Air Force, Hickam AFB

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**Korea**

Headquarters, Eighth U. S. Army/U. S. Forces Korea, Yongsan Army  
Base

19th Support Command, Camp Henry Army Base

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6th Support Center, Camp Henry Army Base

2nd Infantry Division, Camp Casey Army Base

25th Transportation Center, Yongsan Army Base

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