United States General Accounting Office

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

June 1994

STRATEGIC AIRLIFT

Further Air Base Reductions in Europe Could Jeopardize Capability

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GAO

United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

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June 2, 1994

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

Dear Mr. Chairman:

Under the new national security strategy, more emphasis is placed on increasing our capability to rapidly deploy armed forces from the United States. Long-range strategic airlift aircraft, such as the C-5 and the C-141, are the principal means by which the United States can quickly respond to overseas military or humanitarian crises. Under the most logistically demanding battlefield scenario—the Middle East—the airlift aircraft would need to land somewhere in Europe for refueling, crew changes, and/or maintenance checks.[1] Over the past few years, U.S. airlift operations at several air bases in Europe have been closed, and operations at others reduced or placed on standby status. Six key air bases remain operational that can support U.S. airlift flights to the Middle East.

As requested, we determined (1) whether the Air Force has sufficient capability at these six bases in Europe to support airlift aircraft headed for the Middle East and (2) how reductions in U.S. operations at any of the six bases would likely affect airlift capabilities.

Background

Global airlift operations use a network of 14 key overseas air bases to service the flow of U.S.-based strategic airlift aircraft. Approximately every 3,500 miles, these aircraft must land at one of these bases for refueling, maintenance, crew changes, and/or cargo handling. Six of the bases are in Europe,[2] where they support airlift going to the Middle East. Some of them also support theater aircraft. Figure 1 shows the locations of the 14 air bases and highlights the 6 bases in Europe that are the subject of this report.

[1]Specific airlift requirements were established by the congressionally directed 1992 Department of Defense Mobility Requirements Study. The study projected requirements into the 1999 time frame.

[2]Another key air base, located at Incirlik, Turkey, primarily serves European scenario requirements.

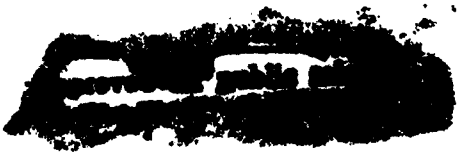
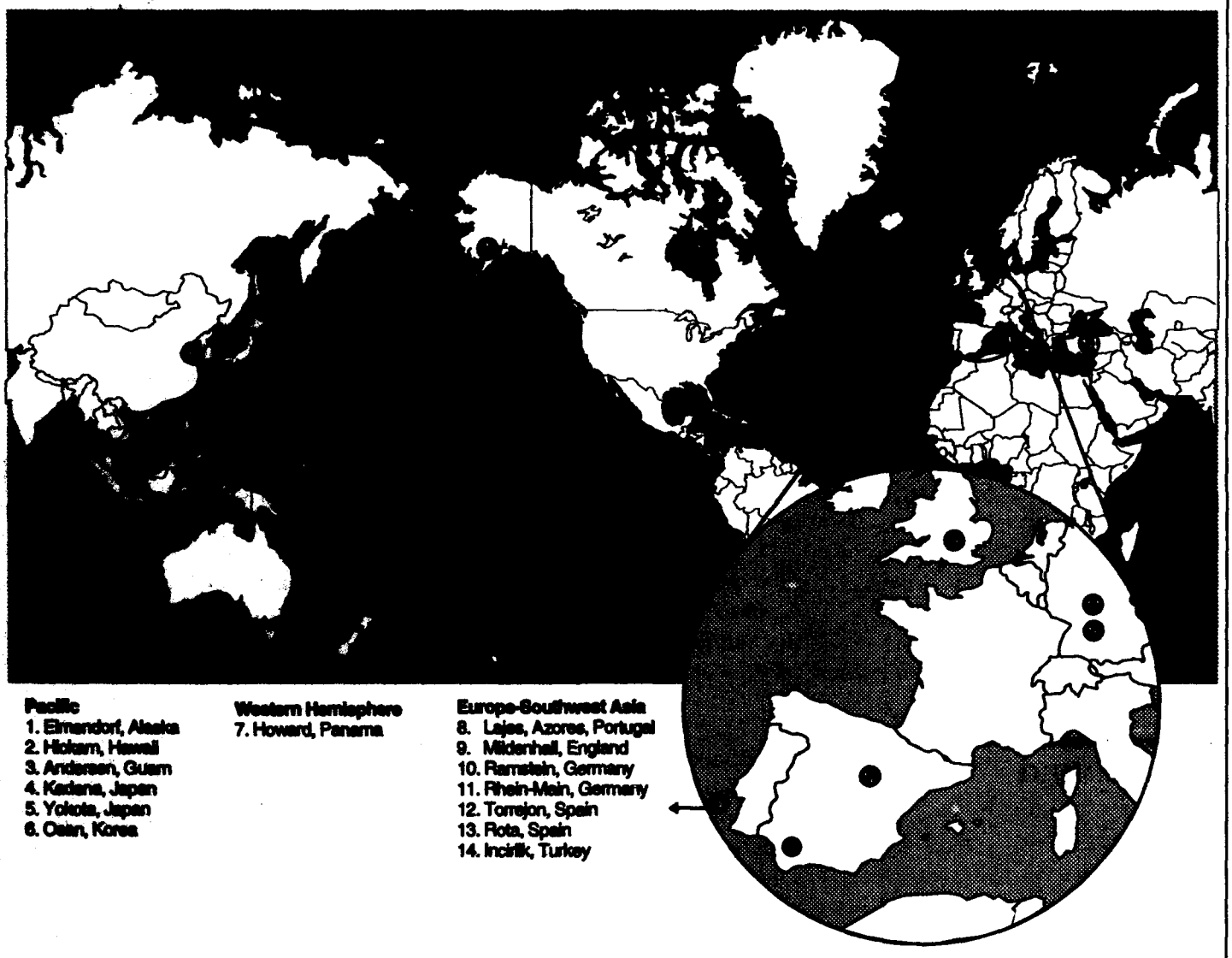


Figure 1: Fourteen Key Overseas Enroute Locations



Source: GAO Map and Air Mobility Command.

The air bases have two functions: (1) to fulfill peacetime operating requirements for theater aircraft and transiting airlift aircraft and (2) to support all U.S. aircraft during contingency operations. The first function

is the more frequent of the two, but strategic airlift contingency operations have larger infrastructure requirements. For example, the ramp space required to handle just one C-5 aircraft is about the same as that needed for a squadron of 24 F-16 fighter aircraft. This same amount of ramp space will handle about two C-141 airlifters. The size of the necessary airlift facilities, relative to the frequency of their use, often makes them candidates for closure.

The European Command's and U.S. Transportation Command's (TRANSCOM) responsibilities for overseas base infrastructure are different. The European Command's responsibility is to optimize the employment of forces in theater. This includes accomplishing in-theater force reductions to meet budgetary constraints. Thus, the European Command can suggest ending U.S. operations at air bases necessary to support airlift missions. TRANSCOM is responsible for global peacetime and wartime airlift operations that transcend theater boundaries. It must ensure that sufficient logistical support exists for airlift aircraft to complete assigned missions. Conflict occurs when the European Command suggests ending operations at an air base that TRANSCOM would need to meet contingency airlift requirements in another area of the world.

Results in Brief

As of March 1994, operational capabilities at the six key air bases in Europe that would best support airlift aircraft headed for the Middle East are just sufficient to meet the mobility requirements specified in the Mobility Requirements Study (MRS). However, this would not be the case if the United States had withdrawn airlift forces from the Rhein-Main and Torrejon air bases in Germany and Spain, respectively, as was planned by the European Command before the Persian Gulf War. Airlift operations at these bases could be future candidates for cuts in the ongoing process of meeting overseas force reduction goals.

If the United States did not have full access to facilities at Rhein-Main, Torrejon, or any of the other four key bases in Europe that support airlift aircraft, it would increase the risk that U.S. troops or cargo for a Middle East crisis would be delivered too late. Further, the Department of Defense (DOD) would be forced to compensate for the lack of established facilities by (1) relying on aerial refueling so that aircraft could fly non-stop to their destinations or (2) establishing new airlift support capability during the crisis at hand. Both of these options are less effective and more risky.

Airlift Facilities Are Sufficient to Meet Middle East Requirements, but Further Cuts Would Jeopardize Capability

DOD's 1992 MRS report defined airlift requirements for the Middle East scenario. According to this study, the Air Force must be capable of transporting about 4,750 tons of cargo per day from the United States to the Middle East and delivering the majority of the airlifted cargo within 39 days. A primary mission of airlift is to support early deployment activities.

Current Capabilities of Key Air Bases

Our analysis indicates that the six key airlift support bases in Europe have just enough capability to support the existing C-5 and C-141 airlift aircraft and move the approximately 4,750 tons per day requirement for a MRS Middle East scenario (see table 1). We reached this conclusion by comparing the maximum number of daily flights the six bases could handle with the expected flight frequency of C-5 and C-141 aircraft and considering the planned tonnage they would carry.

Table 1: Daily Flight Capabilities of Six Bases Compared With Flight Requirements During a Middle East Scenario

Strategic airlift aircraft	C-5	C-141
Capability available		
Mildenhall, United Kingdom	17	37
Rhein-Main, Germany	17	39
Ramstein, Germany	14	30
Torrejon, Spain	27	59
Rota, Spain	5	11
Lajes, the Azores, Portugal	10	21
Total capability	**90**	**197**
Requirements		
Middle East scenario	82	151
Continuing peacetime flights[a]	8	47
Total requirements	**90**	**198**

[a]Additional flights required to continue supporting U.S. forces overseas.

Note: Appendix I explains in detail how we derived our capability and requirements data.

Our capability estimates could be overstated because we assumed a smooth uninterrupted flow of airlift aircraft—which is unlikely. The Persian Gulf War and the Somalia relief effort demonstrated that because there were relatively few air bases capable of handling required airlift airflows, the entire airlift system was highly sensitive to disruptions

caused by adverse weather, air traffic control delays, and ramp congestion at on-load, off-load, or servicing locations. Bad weather can close airfield operations and cause aircraft to divert to other locations. In both the Persian Gulf War and Somalia relief effort, limited off-load locations and capabilities also caused disruptions in airlift flows and aircraft diversions throughout the global airlift support system. In the Gulf, these delays were further compounded by airfield closures due to the threat of SCUD missile attacks and competition for ramp space and refueling capability between airlift aircraft, air refueling aircraft, and fighter aircraft.

Ramifications of Losing the Bases

TRANSCOM studies show that ending airlift operations at any of the six air bases in Europe would imperil the airlift capability required for a Middle East scenario. In 1992, when faced with the possible loss of Rhein-Main, Torrejon, and Lajes (also an air refueling aircraft operating base),[3] TRANSCOM analyzed the specific impacts of their loss on the requirements specified in the MRS Middle East scenario. The analysis showed that the baseline 4,750 tons per day cargo delivery capability would be reduced by 1,375 tons per day, and crisis response time would increase from 39 days to 55 days. Analysis also showed that if Mildenhall in the United Kingdom had to absorb air refueling operations from Lajes, the baseline airlift delivery capability would be further reduced.

Before the Persian Gulf War, the European Command scheduled returning U.S. airlift facilities at Torrejon and Rhein-Main air bases to the host governments. Torrejon was to be returned in 1992 in accordance with a 1988 U.S. basing agreement with Spain. The European Command planned to return Rhein-Main airlift facilities by 1994, in part, because of budget reductions. However, convinced that these bases would be needed for Middle East scenarios, TRANSCOM officials asked that the Joint Chiefs of Staff oppose these plans. The airlift support facilities were retained. Torrejon and Rhein-Main supported 58 percent of the airlift missions during the Persian Gulf War and, according to TRANSCOM officials, the United States could not conduct another Persian Gulf War-sized, Middle East operation without these bases.

Despite the importance of U.S. airlift facilities at Torrejon and Rhein-Main during the Persian Gulf War, the continued retention of the facilities was uncertain as of late 1993. Both bases have seen a decrease in airlift support capability. Torrejon is being kept on a stand-by status but could be

[3]During "air refueling" operations, airlift aircraft are refueled in flight by KC-10 and KC-135 air refueling aircraft.

activated to support 10 to 12 aircraft, compared with its previous capability of 12 to 16. This reduced its cargo capability from about 2,200 tons per day in the Persian Gulf War to about 1,750. Table 1 is based on this reduced capability.

Current plans retain Rhein-Main's existing airlift infrastructure such as ramp space, hangars, terminals, and other facilities, and its contingency capability. Rhein-Main is able to support from 5 to 10 strategic airlift aircraft. However, airlift facilities are collocated with Frankfurt International Airport—one of the busiest commercial airports in Europe—and there is continued concern about underutilized or idle airlift facilities. If commercial activities begin operations in current base areas, it would reduce the space available for contingency airlift operations. Table 1 is based on Rhein-Main's current strategic airlift capability.

The most recent basing agreement with Portugal covering U.S. use of Lajes ran through 1991 with use continuing under provisions that extend the basic agreement barring formal notice of termination. Negotiations with Portugal have been ongoing since 1991 and, although negotiators have reached agreement regarding general provisions and language, a final agreement is still pending negotiation of labor provisions covering Portuguese nationals. DOD officials expressed confidence that the agreement will be renewed.

Further Loss of Air Base Capability Could Result in Less Effective Alternatives

If further cuts were made to airlift infrastructure at the six air bases that support airlift headed for the Middle East, the Air Force would probably adopt one of two less attractive alternatives. First, it could task KC-10 and KC-135 aircraft to refuel the airlift aircraft as they flew to and from the Middle East.[4] Second, the Air Force could wait to establish airlift support bases until a crisis began.

Air Refueling Is a Costly and Less Effective Alternative

TRANSCOM officials consider air refueling of airlift aircraft to be a costly alternative. If none of the six bases were used to support airlift aircraft in a Middle East scenario, TRANSCOM indicated it would need about 225 air refueling aircraft—not available under current plans. It would cost $30.6 million for each air refueling aircraft it would have to buy to meet this new air refueling requirement. Air Force officials estimated that

[4]For example, airlift aircraft flying missions directly to Somalia from the United States were air refueled twice, once over the Atlantic and once over the Eastern Mediterranean.

annual operating costs of 225 air refueling aircraft would be about $270 million.

Significant costs are not included in the $270 million estimate. For example, because the airlift aircraft would be flying non-stop to the Middle East, each C-5 and C-141 flight crew would have to be augmented with an additional pilot. This could result in requirements for an additional 69 to 225 C-5 and C-141 pilots, with personnel costs of $15 million to $50 million a year. Currently, only about half the present C-5 and C-141 crews are trained in air fueling, and it would cost about $41 million to initially train other crews and an additional $30 million per year to maintain their refueling qualifications. Overseas basing requirements would also increase to support the additional air refueling aircraft. A recent Air Force study determined that the overseas infrastructure required for additional air refueling aircraft in Europe would be 50 percent greater than at the six key air bases that currently are prepared to support airlift aircraft.

In addition to these costs, the Air Force would also have to absorb significant maintenance costs due to the added stress that air refueling places on C-5 and C-141 airframes. TRANSCOM officials estimate that air refueling is about 1.4 to 1.7 times more stressful than routine flying. It is a major contributing factor to the wing problems that have affected the C-141 fleet. Recently, these problems have required multimillion dollar repair programs.

TRANSCOM officials also stated that substitution of air refueling for immediate access to the six enroute bases was an ineffective option because airlift planners would be deprived of operational flexibility. For example, airlift aircraft would have fewer landing locations with support capabilities in the event of in-flight emergencies, air refueling problems, or adverse weather. Additionally, heavy reliance on air refueling would reduce flexibility and responsiveness in managing airlift flows at destination airfields in the event of hostile threats (such as SCUD attacks in the Persian Gulf War) or airfield congestion (as was the case during relief flights to Somalia).

Establishing Airlift Support Bases at Time of Deployment Is a Risky Alternative

TRANSCOM considers peacetime presence critical for ensuring that the United States maintains maximum flexibility to respond rapidly in a military crisis. TRANSCOM officials believe that foreign governments are more likely to allow the United States to use an existing U.S. airlift facility during an emergency deployment than to establish one at the time of a

regional crisis and disrupt host country activities. Even if foreign governments ultimately grant permission for the United States to establish needed airlift support bases, valuable time could be lost negotiating an agreement to do so.

Another delay inherent in this alternative is the time needed to move airlift support personnel, supplies, and equipment to new locations. Even at locations with peacetime U.S. airlift operations, it takes about 4 days to augment forces to full crisis operational levels. The present resources at these locations are based on peacetime workloads and require augmentation to achieve full operational capability. At Torrejon air base, which is being kept on standby, airlift planners estimate it would require about 10 to 14 days to reestablish full operational capability. Opening standby bases also diverts critical airlift from deploying combat forces in the early stages of a crisis. Airlift planners estimate even more time and airlift diversion would be required to establish a brand new airlift support air base.

Agency Comments and Our Evaluation

DOD agreed with the factual content of our report, pointing out that possessing an adequate enroute basing infrastructure is critical to the ability of the United States to conduct military operations around the globe and that the importance of European basing to support strategic mobility can not be overemphasized. DOD took exception to our draft report saying that European bases had been "closed" and that we had used an overly pessimistic scenario to quantify the increased costs and decreased effectiveness of air refueling as a substitute for European enroute bases. We have revised our report to address DOD's concerns. DOD's detailed comments are included as appendix II.

Scope and Methodology

We obtained information from officials in the Office of the Secretary of Defense, the Joint Chiefs of Staff, Air Force Headquarters, the Navy, TRANSCOM, the Air Mobility Command, the 15th Air Force, and the 60th Airlift Wing. We examined overseas basing agreements and reports and studies on airlift requirements and capabilities. We performed our work between July 1993 and February 1994 in accordance with generally accepted government auditing standards.

Copies of this report will be sent to the Chairmen and Ranking Minority Members of the Senate Committee on Armed Services and the Senate and House Committees on Appropriations; the Secretaries of Defense, the Army, the Navy, and the Air Force; the Commandant of the Marine Corps; the Chairman of the Joint Chiefs of Staff; the Commander in Chief, TRANSCOM; the Director, Office of Management and Budget; and other interested parties. We will also make copies available to others on request.

Please contact me at (202) 512-5140 if you or your staff have any questions. Other major contributors to this report are listed in appendix III.

Sincerely yours,

Mark E. Gebicke

Mark E. Gebicke
Director, Military Operations
and Capabilities Issues

Contents

Abbreviations

DOD	Department of Defense
MRS	Mobility Requirements Study
TRANSCOM	U.S. Transportation Command

Methodology Used to Calculate Airlift Support Capabilities and Requirements

To determine the daily airlift support base capabilities for a Middle East scenario, we used Air Force data on (1) the maximum number of airlift aircraft each location can service in a day (primarily a function of refueling capability) and (2) planned servicing times (a function of aircraft type).

To determine daily Middle East scenario requirements, we estimated maximum expected landings based on the number of primary assigned airlift aircraft—109 for the C-5 and 214 for the C-141; planned aircraft utilization rates; aircraft cycle times of about 57.9 and 51.5 hours for a C-5 and C-141, respectively, to load cargo at a base in the central United States, deliver it to Saudi Arabia, and return to the base; and a requirement for two European landings per cycle—one outbound and one inbound—with scheduled aircraft ground times of 3.25 hours and 2.25 hours for the C-5 and C-141, respectively. The cycle times we used are a weighted average of cycle time data provided by the Air Mobility Command for flights over a northern route (primarily through Germany) and a southern route (primarily through Spain) and weighted to reflect the airlift aircraft support capability of the key air bases along both routes. We then used Air Force cargo load planning factors of 68.9 tons for the C-5 and 27.5 tons for the C-141, times the numbers of C-5 and C-141 aircraft planned to directly support the MRS scenario, to determine whether the six bases could meet the MRS cargo delivery requirements of 4,750 tons per day.[1]

[1]TRANSCOM is considering using KC-10 air refueling aircraft exclusively as cargo airlifters. Also, Civil Reserve Air Fleet aircraft carrying hazardous cargo will use the key strategic airlift bases. The flow of these aircraft through the strategic airlift bases would decrease their C-5 and C-141 handling capabilities.

Comments From the Department of Defense

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

ASSISTANT SECRETARY OF DEFENSE
2100 DEFENSE PENTAGON
WASHINGTON, DC 20301-2100

3 MAY 1994

Mr. Frank C. Conahan
Assistant Comptroller General
National Security and International Affairs Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "STRATEGIC AIRLIFT: Additional Air Base Closures in Europe Could Jeopardize Capability," dated March 18, 1994 (GAO Code 703023), OSD Case 9642. The DoD partially concurs with the report.

The Department of Defense strategic airlift and air refueling forces provide the nation with rapid crisis response capability around the world. As the Department continues to drawdown force levels overseas and return troops and equipment to American soil, the DoD mobility forces will become even more important in the attainment of the national strategy. Possessing an adequate enroute basing infrastructure to support a long-term, maximum effort airbridge, as observed in OPERATION DESERT SHIELD/STORM, is critical to the ability of the United States to project power and to conduct military operations around the globe. The importance of European basing to support strategic mobility can not be overemphasized.

The detailed DoD comments on the draft report findings are provided in the enclosure. The DoD appreciates the opportunity to comment on the GAO draft report.

Sincerely,

for Edward L. Warner III

Enclosure

GAO DRAFT REPORT - DATED MARCH 18, 1994
(GAO CODE 703023) OSD CASE 9642

"STRATEGIC AIRLIFT: ADDITIONAL AIR BASES CLOSURES IN EUROPE COULD JEOPARDIZE CAPABILITY"

DEPARTMENT OF DEFENSE COMMENTS

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FINDINGS

- FINDING A: The U.S. Based Strategic Airlift Aircraft. The GAO observed that global airlift operations use a network of 14 key overseas air bases to service the flow of U.S.-based strategic airlift aircraft. The GAO explained that, about every 3,500 miles, the aircraft must land at one of the bases for refueling, maintenance, crew changes, and/or cargo handling. The GAO noted that six of the bases are in Europe and support airlift going to the Middle East. The GAO further noted that another key air base in Turkey primarily serves European scenario requirements.

  The GAO pointed out that the responsibility of the European Command in the overseas base infrastructure is to optimize the employment of forces in theater--including accomplishing in-theater force reductions to meet budgetary constraints. The GAO pointed out that the European Command can suggest closing facilities at U.S. air bases necessary to support airlift missions. The GAO indicated that, in contrast, the responsibility of the U.S. Transportation Command is for global peacetime and wartime airlift operations that transcend theater boundaries. The GAO noted that the U.S. Transportation Command must ensure that sufficient logistical support exists for airlift aircraft to complete assigned missions. The GAO determined that conflict occurs when the European Command suggests closing facilities at an air base that the U.S. Transportation Command would need to meet contingency airlift requirements in another area of the world. (pp. 1-3/GAO Draft Report)

  Now on pp. 1-3.

  DOD RESPONSE: Partially concur. The DoD concurs with the GAO observation that the U.S. must retain access to key overseas air bases to service the deployment flow of Continental U.S.-based strategic mobility aircraft during future major regional contingencies. Western European air bases provide a mature infrastructure and an ideal location to optimize airlift to the Central Command area of

1 Enclosure

responsibility. Notional planning factor payloads are possible as long as critical leg distances are 3,500 nautical miles or less. The European airfields detailed in the report, located within a 3,500 mile arc of both the east coast of the continental U.S. and Southwest Asia, are best suited to support peacetime and contingency strategic airlift operations to that theater.

The GAO correctly points out differences between European Command and U.S. Transportation Command basing requirements. The Air Force mobility forces allow the National Command Authorities to respond rapidly to crises in all areas of the world. Although they may not contribute significantly to theater employment operations, the European bases discussed in the report contain the infrastructure and capacity critical for supporting strategic airlift (and air refueling) aircraft deploying combat and support forces to those and nearby theaters.

The GAO references to overseas base "closures" may be misleading. Unlike installations in the continental U.S., overseas bases are not "closed." When the U.S. withdraws from an overseas installation, it "returns" or "partially returns" the installation or facility to the host nation. In fact, U.S. forces may retain access rights to support future exercise and contingency operations. The decision on what installations to return is based on inputs from all interested parties and coordinated through the Joint Staff. Considerations include operational requirements, budgetary constraints, and congressionally mandated troop strength ceilings.

See comment 1.

- FINDING B: Current Capability of Key Bases. The GAO concluded that the six key airlift support bases in Europe have just enough capability to support the existing airlift aircraft and move the approximately 4,750 tons per day requirement for a Middle East scenario cited in the Mobility Requirements Study Volume II. The GAO pointed out that conclusion was determined by comparing the maximum number of daily flights the six bases could handle with the expected flight frequency of the airlift aircraft, and considering the planned tonnage the aircraft would carry. The GAO acknowledged that the conclusion could be overstated because the GAO assumed a smooth uninterrupted flow of airlift aircraft--which, as the GAO pointed out, is unlikely. (pp. 4-5/GAO Draft Report)

Now on p. 4.

DOD RESPONSE: Concur. The six airlift support bases in Europe are critical for supporting operations in nearby theaters. The Mobility Requirements Study throughput capacity cited in the report assumes availability of a European support infrastructure capable of handling OPERATION DESERT SHIELD AND STORM levels of activity. Losing that infrastructure or reducing capability at any of those bases could

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significantly reduce throughput capability. Additionally, the possibility exists that allied military operations could result in competition for the limited airlift support infrastructure. Potentially, both the intratheater and intertheater support infrastructure may need to be increased. That possibility will be assessed in the ongoing Mobility Requirements Study Bottom Up Review Update. Due in October 1994, the study will also consider the need for enroute basing in two, nearly simultaneous major regional contingencies.

- **FINDING C: Ramifications of Closing the Bases.** According to the GAO, studies conducted by the U.S. Transportation Command show that closing any of the six air bases in Europe would imperil the airlift capability required for a Middle East scenario. The GAO reported that, before the Persian Gulf War, the European Command scheduled the closing of U.S. facilities at Torrejon and Rhein-Main air bases. The GAO stated that when the U.S. Transportation Command opposed the plans, the airlift support facilities were retained. The GAO noted that Torrejon and Rhein-Main supported 58 percent of the airlift missions during the Gulf War and, according to the U.S. Transportation Command, the U.S. could not conduct another Middle East operation without the bases. According to the GAO, despite the importance of U.S. airlift facilities at Torrejon and Rhein-Main during the Gulf War, the continued retention of the facilities was uncertain as of late 1993. The GAO noted that both bases have seen a decrease in airlift support capability.

  The GAO reported that the Rhein-Main facilities are collocated with the Frankfurt International Airport and there was concern about underutilized or idle airlift facilities. The GAO concluded that, if commercial activities begin operations in current base areas, it would reduce the space available for contingency airlift operations. (pp. 6-7/GAO Draft Report)

Now on pp. 5-6.

DOD RESPONSE: Concur. Previous mobility studies and actual experience in OPERATIONS DESERT SHIELD AND DESERT STORM demonstrate the importance of all six European bases to supporting contingency operations. Access to those bases is critical to maintain the Air Force ability to conduct mobility operations at planned wartime levels. The discussion of the U.S. Transportation Command analyses highlights in particular the importance of Rhein Main, Torrejon, and Lajes to both airlift and air refueling operations. In recent years, access to those bases or their capacity to support U.S. airlift operations has been reduced. The DoD expects use of those airfields for exercises and contingencies, but lower readiness states during peacetime may greatly reduce the initial airlift flow through those bases and increase the time required for closure of combat forces during wartime contingencies.

Now on pp. 6-7.

- FINDING D: Air Refueling Is a Costly and Less Effective Alternative. The GAO also concluded that air refueling of airlift aircraft is a costly alternative. The GAO indicated the Air Force estimated that annual operating costs of 225 air refueling aircraft would be about $270 million. The GAO observed that significant costs are not included in that estimate--for example, each aircraft flight crew would have to be augmented with an additional pilot. The GAO also reported that overseas basing requirements would increase to support the additional air refueling aircraft. The GAO cited an Air force study indicating that the overseas infrastructure required for additional air refueling aircraft in Europe would be 50 percent greater than at the six key air bases that currently are prepared to support airlift aircraft.

  The GAO also found the Air Force would have to absorb significant maintenance costs due to the added stress that air refueling places on the aircraft--about 1.4 to 1.7 times more stressful than routine flying. In addition, the GAO found that wholesale substitution of air refueling for the six bases was an ineffective option because airlift planners would be deprived of operational flexibility. In summary, the GAO concluded that reliance on air refueling would reduce flexibility and responsiveness in managing airlift flows at destination airfields in the event of hostile threats or airfield congestion. (pp. 8-9/GAO Draft Report)

  DOD RESPONSE: Partially concur. The Air Force air refueling fleet provides rapid deployment of combat aircraft and force extension of tanker and airlift aircraft. As demonstrated in the Persian Gulf War, air refueling operations served as a force multiplier during sustained employment operations, expanding both the reach and the effectiveness of U.S. and coalition forces. Air refueling is also vital to strategic airlift operations early in a contingency (while the Department establishes enroute staging bases and negotiates host nation support), when timely delivery of combat troops and equipment is critical to the operation, or when operating to austere locations without an established infrastructure. For example, in October 1993, responding to the call to move armor quickly to the DoD troops in Somalia, the Air Mobility Command C-5s flew non-stop from Savannah, Georgia to Mogadishu, Somalia using four aerial refuelings on missions lasting 17.5 to 19.5 hours.

See comment 2.

The GAO report uses an overly pessimistic scenario to quantify the increased costs and decreased effectiveness of air refueling as a substitute for enroute basing access. All six European bases are not under consideration for return to the host nation. Additionally, it would be unwise for the Air Force to conduct a long-term airlift flow in

The following are GAO's comments on the letter dated May 3, 1994, from the Department of Defense (DOD).

GAO Comments

1. Our report was revised to reflect that when the United States withdraws from an overseas installation, facilities are returned to host governments.

2. We disagree with DOD that our identification of the costs to DOD if none of the European enroute bases were available is based on an "overly pessimistic" assumption. We acknowledge that all six bases in Europe may not be closed to U.S. airlift aircraft in the future. However, we report the impact of such an event to emphasize the importance of these bases to our global strategic airlift capabilities. We agree with DOD that it would be unwise for the Air Force to conduct a long-term airlift operation without access to enroute basing.

Major Contributors to This Report

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