

GAO

May 1987

# MILITARY AIRLIFT

## Requirements for Aerial Port Personnel in Wartime Need to Be Determined



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

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National Security and  
International Affairs Division

B-225160

May 11, 1987

The Honorable Caspar W. Weinberger  
The Secretary of Defense

Dear Mr Secretary:

We evaluated the Military Airlift Command's requirements for aerial port personnel to support wartime airlift operations. This report discusses the duplication of manpower programmed for wartime unit moves and improvements needed to reduce costs and improve aerial port operations. It contains recommendations to you on page 18.

As you know, 31 U.S.C. 720 requires the head of a federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Chairmen of the above-mentioned Committees and the House and Senate Committees on Armed Services; to the Director, Office of Management and Budget; the Secretaries of the Army, the Navy, and the Air Force; and other interested parties.

Sincerely yours,

A handwritten signature in cursive script that reads 'Frank C. Conahan'.

Frank C. Conahan  
Assistant Comptroller General

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# Executive Summary

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## Purpose

Providing quick and efficient airlift during wartime is crucial to the U.S. ability to project and support an effective military force. The Air Force's Military Airlift Command (MAC), which manages the military's airlift system, spends about \$300 million a year for aerial port personnel to support peacetime airlift operations and to help load and unload military units (unit moves) and resupply those units (nonunit moves) during wartime.

GAO evaluated MAC's requirements for these aerial port personnel to support wartime operations.

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## Background

During wartime, each service has primary responsibility for loading and unloading its military units for initial deployment. MAC is responsible for providing technical supervision and assistance to the services and providing and operating specialized materials handling equipment when it is not otherwise available.

In resupplying military units during wartime, the Navy and Marine Corps operate 14 airfields and are responsible for providing personnel to load and unload MAC aircraft at these airfields.

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## Results in Brief

MAC has programmed personnel to load and unload military units, along with their equipment and supplies, during contingencies. The Air Force, the Marine Corps, and, to some extent, the Army have also assigned or identified personnel to perform these duties, and many have been trained and participate in unit moves and other exercises. Part of this duplication results from the disparity between the regulations that establish the services' responsibilities and the implementing regulations. Also, MAC is unsure of the services' capabilities to meet their responsibilities and of how many of its personnel will be needed to ensure that such operations run smoothly.

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## Principal Findings

MAC plans to provide personnel to perform wartime unit move functions that are assigned to other military service components. MAC also plans to provide personnel to support nonunit moves at Navy- and Marine Corps-operated airfields despite Navy and Marine Corps responsibilities for these functions.

MAC plans to provide personnel because it is unsure that the services can meet their responsibilities. The services believe they can, and they receive substantial training to prepare them.

Yet the Army is not taking some of the steps needed to perform its responsibilities. Some Army activities have not established active organizations to perform their unit move responsibilities. One reason for this may be that the Army regulation on unit moves does not recognize the responsibility of the moving service to load and unload aircraft as is required by joint service regulations.

Even where active organizations have been established, MAC expresses concern over their capabilities.

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## Recommendations

GAO recommends that the Secretary of Defense

- assess the services' capability to perform their unit move and aerial port responsibilities during wartime and, where needed, direct the services to strengthen their capability;
- direct the Air Force to reduce the number of personnel MAC has programmed for functions that are the services' wartime responsibility, consistent with its evaluation of the services' capability;
- direct the Army to revise its field manual to clearly place the responsibility on the moving service for the functions outlined in joint service regulations; and
- periodically evaluate the services' and MAC's aerial port personnel capabilities for wartime operations and revalidate MAC's aerial port staffing levels.

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## Agency Comments

The Department of Defense (DOD) agreed that there could be duplication of manpower programmed for unit moves. It concurred with GAO's recommendations to (1) assess the services' capabilities to perform their unit move and aerial port responsibilities and, where needed, strengthen their capabilities; (2) reduce the number of people MAC programmed for functions that are the services' responsibility; and (3) revise the Army field manual to place responsibility on the moving service for the functions outlined in the joint service regulation.

DOD also concurred with the recommendation to periodically evaluate the capability of aerial port and MAC personnel to perform wartime operations and revalidate MAC aerial port staffing levels. However, DOD

stated that the services' capabilities to mobilize are already evaluated through exercises and inspections. Also, DOD pointed out, the Air Force annually validates its staffing levels. Nevertheless, GAO believes that any service-specific validation process will not likely identify duplication among the services, which is the subject of this report.



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# Contents

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<b>Executive Summary</b>		2
<hr/>		
<b>Chapter 1</b>		8
<b>Introduction</b>	Objectives, Scope, and Methodology	8
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<b>Chapter 2</b>		12
<b>Duplication of Personnel for Unit Moves and Aerial Port Operations</b>	Responsibilities for Unit Moves	12
	Organizing Unit Moves	12
	Training for Unit Moves	13
	MAC Programs Personnel to Perform Unit Move	15
	Functions That Are the Services' Responsibilities	
	Overprogramming at Navy- and Marine Corps-Operated Aerial Ports	16
	MAC Programs Personnel Because It Is Uncertain About Service Capability	16
	Conclusions	17
	Recommendations	18
	Agency Comments and Our Evaluation	18
<hr/>		
<b>Appendixes</b>		
	Appendix I: Aerial Ports Designated by the Air Force Chief of Staff for Sustained Unit and Nonunit Traffic	20
	Appendix II: Methodology for Determining the Number of MAC Aerial Port Personnel Needed for Unit Moves	22
	Appendix III: MAC-Provided Data on MAC's Aerial Port Personnel Supporting Unit Moves, October 1985	23
	Appendix IV: Comments From the Deputy Assistant Secretary of Defense (Logistics)	25

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## Abbreviations

DOD	Department of Defense
GAO	General Accounting Office
MAC	Military Airlift Command
MHE	materials handling equipment



# Introduction

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The ability of the United States to rapidly deliver forces and material to potential areas of conflict is critical. Airlift plays a key role in rapidly moving and resupplying forces overseas.

The Military Airlift Command (MAC), under the direction of the Secretary of the Air Force, manages peacetime airlift operations within the Department of Defense (DOD). MAC also develops and executes airlift doctrine, strategy, and operational plans for wartime mobilization under the direction of the Joint Chiefs of Staff. Its responsibilities include managing unit and nonunit overseas movements for all the services. Unit moves are one-time contingency deployments of whole units, usually from and to airfields closest to the moving unit's origin and destination; nonunit moves are recurring airlift operations, including the resupply of units. Airlift operations are conducted in government-owned aircraft, such as the C-5, KC-10, C-130, and C-141, and in commercial, contracted aircraft, such as the Boeing 747 and McDonnell Douglas DC-10.

During wartime, MAC plans to conduct airlift operations at 311 locations throughout the world. Plans provide for conducting unit moves at 160 of these locations, nonunit moves at another 67, and both types at 84 locations. The Air Force has designated 44 airfields as aerial ports<sup>1</sup> for the sustained movement of traffic for both unit and nonunit moves. Fourteen of the 44 airfields are operated by the Navy or the Marine Corps, and 30 are operated by the Air Force (see app. I).

In fiscal year 1985, MAC was authorized 18,831 aerial port personnel to support wartime aerial port operations (out of an established requirement of 21,075). About 40 percent of these personnel are on active duty; the remainder are reserve forces. These personnel cost about \$300 million annually.

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## Objectives, Scope, and Methodology

Our objectives were to evaluate MAC's requirement to provide personnel (1) to load and unload military units for air movement during wartime and (2) for resupply at Navy- and Marine Corps-operated aerial ports. We did not review peacetime airlift operations.

We obtained regulations defining MAC's and the services' responsibilities for unit moves and MAC's summary information on overall aerial port personnel requirements and work load. We determined the number of

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<sup>1</sup>An airfield designated for the sustained air movement of personnel and material and for serving as a port for entrance to or departure from the country in which it is located

MAC personnel tasked to move Army, Air Force, and Marine Corps units at 14 military bases throughout the continental United States; we also identified how the services prepare to load and unload their units at these locations and obtained service officials' views of their capability to perform these functions during wartime. We did not review the Navy's unit move operations because few units are programmed to deploy by air.

In addition to reviewing 14 military bases, we obtained staffing plans and data for wartime operations for the 14 aerial ports operated by the Navy and the Marine Corps. We reviewed the support agreement between MAC and the Navy and determined staffing responsibilities.

Our review was performed in accordance with generally accepted government auditing standards.

Our audit work was performed between October 1985 and August 1986. Organizations contacted and locations visited included the following.

U.S. Air Force

- Headquarters, U.S. Air Force, Washington, D.C.
- Headquarters, Military Airlift Command, Scott Air Force Base, Illinois
- Headquarters, Tactical Air Command, Langley Air Force Base, Virginia
- Castle Air Force Base, California
- Langley Air Force Base, Virginia
- Nellis Air Force Base, Nevada
- Pope Air Force Base, North Carolina

U.S. Army

- Headquarters, U.S. Army Forces Command, Fort McPherson, Georgia
- U.S. Army Transportation School, Fort Eustis, Virginia
- Fort Bragg, North Carolina
- Fort Carson, Colorado
- Fort Meade, Maryland
- Fort Ord, California
- Fort Riley/Forbes Field, Kansas

**U.S. Navy**

- Office of the Chief of Naval Operations, Washington, D.C.
- Atlantic Fleet Command, Norfolk, Virginia
- Naval Air Station, Norfolk, Virginia

**U.S. Marine Corps**

- Headquarters, U.S. Marine Corps, Washington, D.C.
- El Toro Marine Corps Air Station, California
- Camp LeJeune, North Carolina

**Air National Guard**

- California Air National Guard Base, Van Nuys, California
- Nevada Air National Guard, Reno Airport, Nevada
- Maryland Air National Guard, Glenn Martin Airport, Maryland



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# Duplication of Personnel for Unit Moves and Aerial Port Operations

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Despite the responsibilities and capabilities of the military services to move their military units during wartime, MAC plans to provide personnel to perform wartime unit move functions that the services are required to do. MAC plans to provide these personnel because it lacks confidence that the services can load and unload themselves in a timely manner. There is evidence that the Army, particularly, is not taking some steps needed to perform its responsibilities.

MAC also plans to provide personnel to perform nonunit move, or resupply, duties assigned to the Navy and the Marine Corps. These services also plan to provide personnel to perform these functions during wartime.

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## Responsibilities for Unit Moves

Joint service regulations and MAC directives define responsibilities for unit moves. MAC is responsible for technical supervision and the operation of materials handling equipment (MHE) it provides. It is also responsible for providing loadmasters aboard MAC's aircraft and loadmasters, aerial port, and ground control personnel to manage arrivals and departures of aircraft at the operating airfield. However, the moving service is primarily responsible for preparing, loading, and unloading its units.

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## Organizing Unit Moves

To maintain a capability to move themselves during wartime, the Air Force and Marine Corps require their installations to have active organizations to load and unload their units. The Army requires its installations to form these organizations only after receipt of an order to deploy. The Air Force, the Marine Corps, and two of five Army installations we visited have established active organizations.

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## Air Force

Mobility plans at the seven Air Force locations we reviewed require each installation to prepare and load its units. Officials at each location stated that a small number of primary duty personnel manage mobility operations. They are augmented by personnel from other base functions who would be assigned during wartime to prepare, load, and unload deploying units. For example, at Nellis Air Force Base, 16 people manage the mobility operation, and 241 would be assigned on an additional duty basis to perform cargo- and passenger-loading functions in the event of a deployment.

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## Marine Corps

The two Marine Corps installations we reviewed each had a full-time organization to prepare, load, and unload its units. At El Toro Marine Corps Air Station, for example, the wing has a deployment office with nine people responsible for unit moves. Its seven subordinate air groups and a headquarters squadron each have three or more personnel, and each squadron within each air group has one or more full-time enlisted personnel and an additional duty deployment officer. The deployment offices plan, coordinate, and are responsible for managing the loading and unloading of personnel and equipment.

Air wing and ground embarkation officers told us that they can load and unload their units by augmenting their staffs with personnel from deploying and nondeploying units, as needed.

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## Army

Army loading and unloading capability for unit moves varied at the five locations we reviewed. Two of the five installations had organizations to support unit moves. The organizations were staffed with 43 personnel at one installation and 250 personnel at the other. The other three installations lacked ongoing organizations. They had, however, assigned responsibility to one or more persons to form the movement organization on receipt of deployment orders. The lack of active Army organizations at each activity may be one reason for MAC's concerns about the Army's capability to move its units. MAC's concerns may also be attributable to an inconsistency between the Army field manual and the joint service regulation (see p. 16).

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## Training for Unit Moves

Service personnel receive training to load and unload aircraft and to inspect and certify hazardous cargo. This includes MAC-conducted training and unit move exercises and courses given by the services. MAC trains the largest number of service personnel (over 7,200 were trained in fiscal year 1985).

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## Classroom Training

Under the MAC Affiliation Program, MAC trains service units to prepare, load, and unload their units. The 14 military bases we reviewed had 17 units that received regular training from MAC. Nine units were authorized quarterly training by MAC, two semiannual training, and six annual training. MAC reported that it trained over 1,300 people at these 14 locations in fiscal year 1985.

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## Exercises and Joint Training

Training for unit moves is also provided to service personnel during airlift exercises and joint air transportation training. In fiscal year 1985, MAC aircraft flew about 45,000 hours for exercises and about 15,000 hours for joint air transportation training.

For example, the 1986 Return of Forces to Germany exercise moved about 10,800 personnel and 940 tons of material and equipment and provided training in aircraft loading for Army personnel. The Army's movement organization at the departure airfield consisted of 212 personnel who loaded passengers and rolling stock cargo, such as helicopters and vehicles, aboard the aircraft under the supervision of MAC loadmasters assigned to each aircraft. MAC also provided 6 loadmasters and 28 aerial port personnel who loaded the palletized cargo with MAC-furnished MHE.

The joint air transportation training, designed for MAC airlift crews and members of the other services, includes practicing airlift planning, aircraft loading and unloading, and air deployments to maintain combat readiness. MAC officials said that 3 to 5 percent of the hours flown for this training provides training for the services in loading and unloading. They also said that many more of the hours flown for this training include aircraft loading and that a large part of the services' experience in aircraft loading is gained this way.

The U.S. Army Forces Command, which oversees most U.S.-based Army units that would deploy in wartime, also requires its units to exercise their unit move capabilities under its Emergency Deployment Readiness Exercise program. The purpose of this program is to ensure that mission-ready forces can deploy during emergencies with minimum notice. Division and brigade commanders must conduct a minimum of one exercise each fiscal year for their battalion-level or smaller units.

However, an Army audit report issued in April 1985 found that (1) Army participation in the program was low over 3 fiscal years, (2) evaluation was insufficient to detect significant deployment readiness deficiencies for those units participating, and (3) procedures often did not exist for following up on corrective actions.

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## MAC Programs Personnel to Perform Unit Move Functions That Are the Services' Responsibilities

Despite the responsibilities and capabilities of the services to move their units during wartime, MAC programs aerial port personnel to perform unit move functions that are the services' responsibility.

MAC plans to provide as many as 7,900 people in wartime to perform personnel- and cargo-loading functions, such as providing load team chiefs and performing hazardous cargo inspections, which are the services' responsibility. At the 14 military bases we reviewed, a total of 449 MAC aerial port personnel and 18 ground control loadmasters would be assigned during wartime to support unit moves. Yet all but 3 of the 14 locations also had active military service organizations, each with between 35 and 257 personnel, to perform unit moves. Loading and unloading personnel should not require MAC aerial port support, since all 14 locations we reviewed had service personnel assigned to passenger movement duties. Yet, at 11 of these 14 locations, MAC also plans to provide a total of 87 personnel to perform unit passenger move functions during wartime. MAC officials told us that it would need these 87 people to provide supervision. However, the joint service regulations require the services to appoint troop commanders to supervise unit personnel moves.

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## 7,900 Represents an Upper Limit

Our estimate that as many as 7,900 MAC aerial port personnel identified for unit move duties were programmed to perform functions that are the services' responsibility (see app. II) was based on staffing data provided by MAC to us in October 1985 and in February 1986. This data includes an estimate by MAC that up to 50 percent of its aerial port personnel are tasked to engage in unit moves (see app. III).

At the completion of our audit work, MAC officials said that a substantial number of the personnel whom they had previously identified for unit move functions were also required for nonunit move work loads and that they would provide data to demonstrate this. They provided us with revised summary work load data but could not separate unit from nonunit move work loads. Thus, we were unable to compute a precise number of personnel programmed for unit moves. Our 7,900 estimate, therefore, represents an upper limit of personnel tasked to perform unit move functions for which the services are responsible. To the degree that these personnel also perform nonunit move duties, the number should be reduced accordingly.

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## Overprogramming at Navy- and Marine Corps-Operated Aerial Ports

In addition to reviewing MAC personnel programmed for unit moves during wartime, we reviewed staffing levels programmed for 14 Navy- and Marine Corps-operated aerial ports used by MAC for nonunit moves, or resupply. These locations are covered by an agreement between the Chief of Naval Operations and MAC, requiring MAC to identify the work load and the Navy and Marine Corps to provide the personnel to do the work.

The Navy programs personnel to meet wartime requirements at these locations. At the same time, MAC, without coordinating with the Navy, also programs about 500 aerial port personnel at 13 of the 14 locations to perform nonunit move duties that are Navy and Marine Corps responsibilities.

To illustrate, at Norfolk Naval Air Station, 131 Navy personnel currently operate the aerial port. Another 184 Navy and 184 MAC personnel are scheduled to be added during wartime, for a total of 499 personnel. When we applied MAC's manpower criteria for wartime operations to the planned nonunit move work load at this port, we found that the 315 Navy personnel were more than adequate to meet wartime needs.

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## MAC Programs Personnel Because It Is Uncertain About Service Capability

MAC does not plan to fully rely on the services to perform their unit and nonunit move responsibilities during wartime because it does not believe that they can accomplish these tasks without causing operational delays. MAC officials explained that MAC is responsible for keeping aircraft on schedule. Since it lacks control over service personnel, MAC believes it needs to provide personnel to ensure that the units can be loaded and unloaded on time.

MAC's concerns appear to focus on the willingness and capability of the Army to assume its responsibilities. Some of these concerns appear to be valid. Three of the five Army installations we reviewed did not have active unit move organizations. In part, this may be due to the fact that the Army field manual on unit moves, which also applies to the Navy and the Marine Corps, does not assign the moving service the responsibility for loading and unloading itself. This is required by joint service regulation.

A draft revision to the manual does include a caveat that if no MAC personnel are available, the Army will load and unload the aircraft under the supervision of the MAC aircraft loadmaster. However, it still does not make explicit each service's responsibilities for unit moves.

Even where active units have been established by the services, MAC expresses concern over their capability. For example, participants at a 1983 MAC mobility conference expressed concern about the services' capabilities to conduct deployments without MAC aerial port support. The conference minutes included the following MAC comments:

"a The Affiliation Program is based on the assumption that the people we train will be used by the affiliation units when those units deploy. Attendees surfaced the constant and valid complaint that the majority of the trained people do not participate in preparing their unit or unloading their unit. The basic problem is twofold: (1) the users do not properly select, train and utilize their assets, and (2) MAC does not enforce the affiliation concept.

"b. When we train people for the users, the students are usually bodies to fill the slots. They are usually not designated as permanent air movement personnel. Some of the people are so important to the unit that they may be qualified to handle 3 or 4 jobs during a move, but working as the air movement officer/NCO is not the most important in the unit commander's view. In some units, especially the Army, people are rotated frequently. There is no mechanism to identify the special qualification of having been trained in the MAC Affiliation Program. The user feels no pressure to change this mode of operation because MAC forces ... always bail the user out.

"c MAC is a service-oriented organization. We are charged to move cargo and passengers safely. We have developed the affiliation concept to enable us to do our job in wartime. To move all the units we have to move to meet the delivery dates and stay within our manpower authorizations, we need the user's help. When we try to use this help in peacetime, we find the expertise lacking. (There are a few units which do a fine job, but that performance is usually tied directly to the attitude of the unit commander. When the commander changes, the priorities change.) At that point, our highly motivated people take over and 'get the job done.' When they return home, the wings are understandably reluctant to highlight problem areas which have not seen much change in five years. The ALCEs [Airlift Control Elements] provide good instruction and the users acknowledge that, but until we, in MAC, are willing to take the heat for deviation and late offloads by forcing the user to do its job, nothing will change."

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## Conclusions

The services have much of the responsibility for unit moves; they have some capability, and they receive what appears to be substantial training to develop and maintain it. Yet MAC does not believe that the services, particularly the Army, can effectively do the job and plans to use its personnel to perform functions that the services are required to do. The Army, in some instances, appears willing to let MAC do the Army's job. In doing so, MAC then has more control over the operation and greater assurance that it will work smoothly. Yet, even for the other services, MAC has programmed staff to do functions the services have shown a capability to perform.

While the extent of duplication and the exact number of MAC personnel programmed to perform activities assigned to the services are unclear, this number could be as high as 7,900 people.

The loading and unloading of cargo and passengers during a contingency are critical functions that need to be done well. We recognize MAC's desire to control the resources to load and unload its aircraft, especially where these functions might not otherwise be performed effectively. Yet the services have been given much of the responsibility for unit moves and for operating 14 aerial ports, and they appear to possess substantial capability to fulfill these responsibilities. MAC should focus on strengthening the services' capabilities to do their job rather than doing it for them. Until MAC withdraws, the services have little incentive to do their job. The Army also needs to clarify its field manual to make it consistent with the joint service regulation.

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## Recommendations

We recommend that the Secretary of Defense

- assess the services' capability to perform their unit move and aerial port responsibilities and, where needed, direct the services to strengthen their capabilities;
- direct the Air Force to validate the need for the personnel it has programmed to support unit move and aerial port operations and, consistent with its evaluation of the services' capabilities, reduce the number of personnel MAC has programmed for functions that are the services' responsibility;
- direct the Army to revise its field manual to clearly place the responsibility on the moving services for the functions outlined in the joint service regulation; and
- periodically evaluate the services' and MAC's capabilities and revalidate MAC's staffing levels.

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## Agency Comments and Our Evaluation

DOD stated that the disparity between the joint service regulation and service-unique regulations covering unit moves is of concern to DOD and merits examination. DOD stated that it will direct the Joint Chiefs of Staff to initiate a joint service review of implementing regulations for unit moves.

DOD agreed that there could be duplication of manpower programmed for unit moves and that manpower validation is required. DOD said that it will direct the Air Force to validate the need for aerial port personnel

to support unit and nonunit requirements during wartime. DOD added that the discovery of any duplication of effort will result in an immediate reduction of manpower authorizations.

DOD also agreed with the need to periodically evaluate the services' and MAC's capabilities. It stated that DOD, through the military departments, regularly evaluates its capability to mobilize. It added that the Air Force annually validates required wartime staffing levels through its computer-generated force sizing and manpower requirements process.

GAO is completing an assessment of the Air Force's manpower requirements determination process. However, any service-specific manpower requirements or validation process that focuses only on its own staffing levels will not likely identify duplication among the services, which is the issue of this report. Duplication of staffing can be avoided or minimized only if there is a clear delineation of responsibilities. In this way, forces can be appropriately sized to match responsibilities.

DOD did not agree with our estimate that as many as 7,900 MAC aerial port personnel identified for unit move duties had been programmed to perform functions that are the services' responsibilities. It stated that when MAC provided us with manpower figures, it failed to point out that the total requirements for aerial port personnel could be satisfied by substantially fewer personnel. MAC contends that it has programmed only 2,600 personnel to satisfy unit move requirements. Our report recognizes that the 7,900 figure should be reduced by the number of personnel who perform nonunit move duties. The exact amount of duplication is unknown at this time and should be better defined when the Air Force completes its manpower validation efforts

DOD agreed that the services' capabilities need to be assessed and, where needed, strengthened. It stated that, once the Joint Chiefs of Staff complete their review, capabilities can be determined and responsibilities assigned. DOD agreed that MAC should then focus on training the services to fulfill their defined responsibilities.

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# Aerial Ports Designated by the Air Force Chief of Staff for Sustained Unit and Nonunit Traffic

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## Air Force-Operated

Andersen AFB, Guam  
Andrews AFB, Maryland  
Aviano Air Base, Italy  
Charleston AFB, South Carolina  
Clark AB, Philippines  
Dover AFB, Delaware  
Elmendorf AFB, Alaska  
Hellenikon AB, Greece  
Hickam AFB, Hawaii  
Hill AFB, Utah  
Howard AFB, Pennsylvania  
Incirlik Installation, Turkey  
Kadena AB, Japan  
Kelly AFB, Texas  
Lajes Field, Azores  
McChord AFB, Washington  
McClellan AFB, California  
McGuire AFB, New Jersey  
Norton AFB, California  
Osan AB, Korea  
Patrick AFB, Florida  
Royal Air Force, Mildenhall, United Kingdom  
Ramstein AB, Germany  
Rhein-Main AB, Germany  
Robins AFB, Georgia  
Tinker AFB, Oklahoma  
Torrejon AB, Spain  
Travis AFB, California  
Wright-Patterson AFB, Ohio  
Yokota AB, Japan

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## Navy- and Marine Corps-Operated

Iwakuni Marine Corps Air Station, Japan  
Naval Air Station, Bermuda  
Naval Air Station, Cubi Point, Philippines  
Naval Air Station, Norfolk, Virginia  
Naval Air Station, Sigonella, Sicily  
Naval Station, Keflavik, Iceland  
Naval Station, Midway  
Naval Station, Roosevelt Roads, Puerto Rico  
Naval Station, Rota, Spain  
Naval Station, Guantanamo Bay, Cuba  
Naval Supply Facility, Diego Garcia

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**Appendix I  
Aerial Ports Designated by the Air Force  
Chief of Staff for Sustained Unit and Nonunit  
Traffic**

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Naval Supply Activity, Naples, Italy  
Naval Support Activity, Souda Bay, Crete  
Naval Support Activity, La Maddalena, Italy

# Methodology for Determining the Number of MAC Aerial Port Personnel Needed for Unit Moves

The joint service regulation governing unit moves requires MAC to provide and operate specialized materials handling equipment (MHE) when it is not available from the moving service or the airfield operator. According to MAC's transportation planners, MAC normally plans to provide two MHE operators per aircraft, per shift, to allow cargo loading by concurrent operation of forklifts and the large 25,000- or 40,000-pound loaders. We determined the number of MAC aerial port personnel required for unit moves by adding the maximum number of cargo aircraft on ground to the number of shifts for 244 unit move locations and, using MAC's planning factor, allowed two personnel per aircraft per shift. At a location where cargo aircraft were not programmed, we allowed MHE operators for passenger aircraft to serve functions such as baggage loading. Using this methodology, the maximum number of personnel required would be 1,464. Subtracting this from the 9,400 personnel that MAC identified as being engaged in unit move duties leaves about 7,900 aerial port personnel who would be performing duties that are the services' responsibility. Our calculation provides enough MAC aerial port personnel for other functions if needed, such as assisting the aircraft loadmasters and ground control loadmasters in providing technical supervision. This is because

- approximately 80 percent of unit move cargo is rolling stock, which does not require MHE;
- we included MHE operators for Air Force bases since MAC said that some bases may not have certain types of specialized MHE available when needed for unit moves;
- unit move operations will not occur simultaneously at all 244 locations, allowing some MHE operators to move between different deployments.

# MAC-Provided Data on MAC's Aerial Port Personnel Supporting Unit Moves, October 1985



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS MILITARY AIRLIFT COMMAND  
SCOTT AIR FORCE BASE ILLINOIS 62225

JUL 1985

REPLY TO  
ATTN OF TRXP (Mr Wallace/62951)

SUBJECT Wartime Aerial Port Personnel Requirements

TO US General Accounting Office  
1275 Market St., Suite 906  
Attn: Floyd Adkins  
San Francisco CA 94103

1. As you requested, we have looked at the breakout between personnel required for the resupply mission and those required for the unit move mission. Using one methodology, we calculated that 78.4 percent of our aerial port personnel would be engaged in the resupply mission, leaving 21.6 percent doing the unit move mission. Using another methodology, we calculated 49.9 percent would be doing resupply while 50.1 percent would be working unit moves.

2. In rolling together the personnel requirements for both of these missions during the deliberate planning process, the identity of which forces are for which mission gets lost. This is particularly true since many operational locations have both missions. Further, forces at these dual mission locations are frequently used for unit moves during early stages of the conflict and then switch over to the resupply mission. Thus, because of the lack of an exact methodology to answer your question, we looked at our data bases from two different perspectives.

3. One methodology went into the FORSIZE-85 data base and pulled out the number of personnel engaged in the aerial port function at each geographic location. Then we identified, from the corresponding war plans, the locations which would have a resupply mission. Totalling the manpower requirements at these locations and dividing this total by the total manpower requirement yielded the 78.4 percent number mentioned above. Subtracting this percentage from 100 percent yielded the percentage engaged in unit moves.

4. The other methodology used a three step procedure. First, we identified all of the resupply aerial port locations in the FORSIZE-85 scenario. At each location, we identified the resupply workload in both passenger movement requirements and cargo tonnage. We then determined the manpower requirements to handle the indicated workload at each of these locations by selecting representative UTCs. The resulting figures were summed and divided by the total manpower requirement of 21,075 personnel. This yielded the 49.9 percent number mentioned above. As before, subtracting this percentage from 100 percent yielded the percentage engaged in unit moves.

5. The methodology described in paragraph 4 above is by far the more rigorous one. Thus, we feel the approximate 50/50 split is the more accurate figure. However, we also believe the approximate 78/22 split represents an upper limit for the forces applied to the resupply mission (and conversely a lower limit on the personnel applied to the unit move mission).

MAC--THE BACKBONE OF DETERRENCE

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**Appendix III  
MAC-Provided Data on MAC's Aerial Port  
Personnel Supporting Unit Moves,  
October 1985**

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6. One final caveat. The figures above are scenario dependent. If the scenario changes, the splits will change. Also, the splits will change over time as we continually refine our plans.

7. If you have any further questions, please contact Lt Col Jim Sledge. He can be reached at (618) 256-2951.

  
JAMES H. SLEDGE, Lt Col, USAF  
Chief, Plans & Programs Division  
DCS/Air Transportation

# Comments From the Deputy Assistant Secretary of Defense (Logistics)



ACQUISITION AND  
LOGISTICS

L/TP

THE OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON DC 20301 8000

01 APR 1987

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 January 9, 1987, General Accounting Office (GAO) draft report, "MILITARY AIRLIFT: Wartime Aerial Port Requirements Need To Be Determined" (GAO Code 392176 - OSD Case 7209).

The Department agrees with the GAO that there may be duplications in manpower authorizations programmed for wartime aerial port operations. To rectify this situation, the Joint Chiefs of Staff will conduct a review of the Joint and Service implementing regulations and reconcile assigned responsibilities with capabilities. Once Service responsibilities have been defined, the Air Force will then size aerial port manpower requirements to match deploying unit capabilities. This process should be concluded by the end of FY 1988.

Specific comments relating to the report findings and recommendations are enclosed. The Department appreciates the opportunity to comment on the GAO draft report.

Sincerely,

H. D. Weatherston  
Acting Deputy Assistant  
Secretary of Defense (Logistics)

Enclosure

DEPARTMENT OF DEFENSE COMMENTS ON

GAO DRAFT REPORT - DATED JANUARY 9, 1987  
(GAO CODE 392176) OSD CASE 7209

"MILITARY AIRLIFT: WARTIME AERIAL PORT  
REQUIREMENTS NEED TO BE DETERMINED"

\* \* \* \* \*

FINDINGS

FINDING A: Services' Responsibilities And Capabilities For Unit Moves. The GAO reported that, under Joint Service regulations and Military Airlift Command (MAC) directives, the moving Service has the primary responsibility for preparing, loading and unloading its units aboard aircraft. The GAO found that in order to maintain a capability to move themselves during wartime, both the Air Force and the Marine Corps require installations to have active organizations to load and unload their units. The GAO reported that on the other hand, the Army only requires such organizations be established after an order to deploy. The GAO found that the Air Force and the Marine Corps have established such organizations, while the Army has not done so at two of five installations. The GAO noted that although three Army installations lacked ongoing unit move organizations, the responsibility to form such organizations on receipt of deployment orders had been assigned. The GAO also found that Service personnel receive unit move training, which includes MAC-conducted training as well as unit move exercises and courses given by the Services. The GAO reported that an April 1985 Army audit found (1) low participation in the Army's Emergency Deployment Readiness Exercise Program, (2) insufficient evaluation to identify deployment readiness deficiencies, and (3) inadequate procedures to follow-up on corrective actions. The GAO concluded that the Services have much of the responsibility for unit moves and currently possess a substantial capability to perform these responsibilities. (p. 2, pp. 10-14, p. 20/GAO Draft Report)

DOD RESPONSE: Concur. The Joint Service regulation and MAC directives require the moving Services to have primary responsibility for preparing, loading and unloading their units aboard aircraft. Implementing Service regulations require active or provisional organizations be established, trained and exercised to carry out these responsibilities. The disparity, as indicated by the GAO, between the Joint Service regulation and Service-unique regulations covering unit movement, is of concern to the Department and merits examination. The Department will direct the Joint Chiefs of Staff (JCS) to initiate a Joint Service review of Joint and Service implementing unit move

Now on pp 2-3, 12-14

regulations. Once Service capabilities have been determined, Service responsibilities can be properly defined and promulgated in governing regulations. This review should be completed by the end of FY 1987.

**FINDING B: The MAC Programs Personnel To Perform Unit Move And Aerial Port Functions.** The GAO found that despite the responsibilities and capabilities of the Services to move their units during wartime, the MAC programs aerial port personnel to perform many unit move functions. According to the GAO, these functions include providing load team chiefs and performing hazardous cargo inspections. The GAO also reported that, by agreement between the Navy and the MAC, the Navy and the Marine Corps are to provide the personnel for non-unit moves or resupply at their aerial ports. The GAO found that although the Navy programs personnel to meet these wartime requirements, the MAC, without coordinating with the Navy, has also programmed personnel to perform these functions. The GAO concluded that as many as 7,900 MAC personnel were programmed to perform unit move duties, and about 500 others programmed to perform non-unit move duties, which are actually the responsibility of the Services. (pp. 1-2, pp. 14-17/GAO Draft Report)

**DOD RESPONSE:** Partially concur. The Department agrees with the GAO that there could be duplications of manpower authorizations programmed for unit moves and that a manpower validation is required. The GAO stated that the MAC has over programmed manpower requirements by duplicating unit move functions. The MAC, in addition to providing material handling equipment operators also, programs supervisory support to assist units during their deployment. This support is specified in the Joint regulation. Augmentation by these personnel is not intended to absolve the moving unit of its responsibilities, but to assure safety is not compromised during aircraft loading or in-flight operations. When the MAC provided the GAO with manpower figures of those aerial port personnel engaged in unit movements, it failed to caveat in its response that the total requirements could be satisfied by substantially fewer personnel, multiply tasked, over a time phased period. Additionally, the MAC did not articulate the force sizing (FORSIZE) methodology it used when it informed the GAO that 51 percent of its manpower requirements were engaged in unit moves. The MAC programmed figure, in actuality, approximates 20 percent. The MAC has programmed 2,600 personnel to satisfy the 9,400 unit move requirement. The remainder of the MAC manpower is programmed for non-unit and resupply requirements at primary and alternate aerial ports of embarkation and debarkation, main and co-located operating bases, and mobile aerial port locations. As indicated by the GAO, the MAC and the Navy also independently programmed manpower for a Navy operated resupply effort. While the Department cannot validate the GAO estimates of these manpower duplications, the DoD agrees with the overall GAO assessment. Consequently, the Department will direct the Air Force to validate the need for

Now on pp 2-3, 15-16  
See p 19

aerial port personnel to support unit, non-unit, and resupply requirements during wartime operations following completion of the Joint study noted in the DoD response to Finding A. The results of the Air Force analysis should be available by the end of FY 1988. Any duplications identified will result in immediate reduction of manpower authorizations. It is important to note that the Air Force has already reduced the funding level for aerial port manpower authorizations by 1,856 effective in FY 1988. A further reduction of 176 authorizations will be completed by FY 1992.

**FINDING C: The MAC Is Uncertain About Service Capabilities.** The GAO found that the MAC does not plan to rely fully on the Services to perform their unit and non-unit move responsibilities during wartime because, in its view, the Services cannot accomplish the task without causing operational delays. According to the GAO, MAC concerns appear to focus on the willingness and capability of the Army to assume its responsibilities. The GAO concluded that some of these concerns may be valid since three of five Army installations did not have unit move organizations. The GAO observed that this may be due, in part, to the Army regulation on unit moves (which also applies to the Navy and the Marine Corps), which does not assign the moving Service the responsibility for loading and unloading themselves. The GAO noted, however, that this is required by Joint Service regulations. The GAO found that even where active units have been established by the Services, the MAC continues to express concern over their capability. The GAO concluded that since the Services have been given much of the responsibility for unit moves, and currently possess substantial capability to do so, the MAC should focus on strengthening the Services' capabilities rather than providing personnel to do it for them. The GAO also concluded that the Army needs to clarify its regulation to make it consistent with the Joint Service regulation. (p. 2, pp. 17-20/GAO Draft Report)

Now on pp 3 16 17

**DOD RESPONSE:** Concur. As stated in the DoD response to Finding A, the Department is concerned about the Services' capabilities to perform their unit and non-unit move responsibilities because of the inconsistency between Joint and implementing Service regulations. Once the JCS, in conjunction with the Services, completes its regulation review (scheduled for the end of FY 1987), capabilities can be determined and responsibilities defined. The Air Force can then size aerial port manpower requirements to unit capabilities. The Department agrees that the MAC should then focus on strengthening the Services' capability to perform their defined requirements through the training process.

RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense assess the Services' capability to perform their unit move and aerial port responsibilities, and, where needed, direct the Services to strengthen their capability. (p. 2, p. 20/GAO Draft Report)

Now on pp 3, 18

DOD RESPONSE: Concur. As stated in the DoD response to Finding A, it is the Department's position that such an assessment and review needs to be accomplished. The DoD is especially concerned that the specific requirements and responsibilities contained in the Joint Service regulations are imprecise and that the full delineation of responsibilities must be reviewed and properly defined. This review should be completed by the end of FY 1987.

RECOMMENDATION 2: The GAO recommended that the Secretary of Defense direct the Air Force to validate the need for the personnel it has programmed to support unit move and aerial port operations and, consistent with the evaluation of the Services' capabilities, reduce the number of personnel the MAC has programmed for functions that are the Services responsibilities. (p. 2, pp. 20-21/GAO Draft Report)

Now on pp 3, 18

DOD RESPONSE: Concur. The Air Force needs to validate its aerial port requirements following the evaluation noted in the DoD response to Recommendation 1. The MAC will be directed to align manpower requirements with responsibilities. All duplicate authorizations will be deleted. The logical timing for this analysis is after the JCS has completed its review of the Joint and Military Service implementing regulations and determined the appropriate division of responsibilities. The results of this analysis should be available by the end of FY 1988.

RECOMMENDATION 3: The GAO recommended that the Secretary of Defense direct the Army to revise its regulations to clearly place the responsibility on the moving Services for the functions outlined in the Joint Service regulation. (p. 2, p. 21/GAO Draft Report)

Now on pp 3, 18

DOD RESPONSE: Concur. There is some confusion created in the report as to what Army regulation(s) is referenced. The Department assumes the GAO referenced FM 55-12, "Movement of Units in Air Force Aircraft," and FORCECOM Regulation, 55-1, "Unit Movement Planning." Notwithstanding, before the Army revises its regulation on unit move responsibilities, the Joint Service regulation must be clarified. This should be accomplished by the end of FY 1987.

**Appendix IV  
Comments From the Deputy Assistant  
Secretary of Defense (Logistics)**

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**RECOMMENDATION 4:** The GAO recommended that the Secretary of Defense periodically evaluate Service and MAC capabilities and revalidate MAC staffing levels. (p. 2, p. 21/GAO Draft Report)

Now on pp 3, 18

See p 19

**DOD RESPONSE:** Concur. The Department, through the Military Services, regularly evaluates its capability to mobilize through a series of Service unique and Joint exercises and inspections. The Air Force annually validates required wartime staffing levels through their computer-generated force sizing and manpower requirements process.

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