

September 1988

AIRCRAFT BASING**Assessment of Navy's
May 1988 Basing
Study for the TACAMO
Aircraft**

5

4

6



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

National Security and
International Affairs Division

September 13, 1988

B-226357

The Honorable Dale Bumpers
The Honorable David Pryor
United States Senate

On May 20, 1988, you asked us to review the Navy's May 19, 1988, cost study supporting its decision to base its new E-6A Take Charge and Move Out (TACAMO) aircraft at Tinker Air Force Base, Oklahoma. Specifically, you asked us to examine the accuracy and reliability of the assumptions and factors the Navy considered. Members of the Oklahoma and Maryland Congressional Delegations also have expressed interest in the Navy's study and the review you requested.

This briefing report summarizes the information we provided to you and members of the Oklahoma Congressional Delegation on August 10, 1988, and includes certain updated information.

SUMMARY OF RESULTS

According to the Navy's life-cycle cost study, basing the E-6A TACAMO aircraft at Tinker Air Force Base is the least costly of the four alternatives examined. The study reported that over a 30-year period, basing at Little Rock Air Force Base, Arkansas, would cost \$20.9 million more than Tinker and that the dual-basing locations of Barbers Point Naval Air Station, Hawaii, and Patuxent River Naval Air Station, Maryland, or Patuxent River and Tinker Air Force Base, would cost \$76.6 million and \$99.5 million, respectively, more than Tinker.

In its study, the Navy projected life-cycle costs using constant fiscal year 1985 dollars; it did not consider the time value of money, which is important because the expenditure rate over the 30-year period varies considerably depending upon the location selected. The Office of Management and Budget recommends using a 10-percent discount rate for making such economic comparisons. Applying the 10-percent discount rate to the Navy's cost estimates reduces the cost advantage of basing TACAMO aircraft at Tinker,

rather than Little Rock, to about \$6.7 million. Similarly, Tinker's cost advantage over the Barbers Point/Patuxent River alternative would be reduced to \$22.1 million, and its cost advantage over the Patuxent River/Tinker alternative would be reduced to \$44.6 million.

We found this study to be more thorough than earlier Navy evaluations of TACAMO basing alternatives. It assesses the proper cost categories where differences could be expected, and with certain exceptions, the assumptions used were generally reasonable. Nonetheless, some imprecision in the Navy's analytic methodology did exist. The Navy assumed, for example, that 24 staff-years of work would be required to provide intermediate level maintenance at all locations and that 7 of these staff-years could be absorbed by the Air Force depot located at Tinker. While this assumption may be reasonable, the Navy did not provide documentation to show how the 7 staff-years, which represent nearly 30 percent of its intermediate level maintenance requirement, could be absorbed by the Air Force without additional cost to the government. These 7 staff-years represent about \$10.5 million of the constant dollar cost difference between Tinker and the other alternatives.

The Navy assumed in the study that the facilities at Little Rock initially identified as available for use by the TACAMO squadrons are still available and will continue to be available in the future. However, we found some uncertainty about this. Two buildings at Little Rock are occupied by the Army's Joint Readiness Training Center (JRTC). Air Force officials told us that the JRTC is temporarily located there and that the Air Force anticipates that the Army will vacate these buildings by 1990 or 1991. Army officials, on the other hand, told us that a decision on whether to move the JRTC to another location will be made during fiscal year 1989 and that the Army currently has no funds or plans to move the JRTC. If Little Rock were to be selected for TACAMO aircraft basing and the Army were to retain occupancy of the two buildings, the added cost to the Navy for the additional military construction would be about \$10 million.

Air Force officials also informed us that Little Rock has been designated as a potential location for an MX (Peacekeeper) rail garrison site. If it is selected as a

site, the principal buildings identified for TACAMO's use would not be available. In that case, the military construction cost at Little Rock would be similar to Tinker which has no facilities available for use by the TACAMO mission.

The Navy's study did not include a cost estimate for increasing the number of military family housing units at any of the alternative locations. An earlier cost comparison between Tinker and Little Rock had included \$18.3 million at Tinker for family housing, but because it is the Department of Defense's policy to rely on off-base community housing, when such housing is adequate and available, construction of new on-base family housing was deleted from the study.

We found that on-base family units at both Little Rock and Tinker are currently fully occupied--without the Navy's TACAMO mission--although the waiting time for on-base housing is shorter at Little Rock than at Tinker. This would be true even if the JRTC were to move from Little Rock. Since military housing is fully used at both locations, any housing cost differences attributed to basing TACAMO aircraft at either alternative would represent the difference in the variable housing allowance rates at these locations. Variable housing allowance rates are currently higher at Tinker than at Little Rock, but rates are adjusted annually based on local surveys and, consequently, any estimate of cost differences cannot be reliably projected into the future.

OVERALL OBSERVATIONS

Although the Navy's life-cycle cost study lacked some precision, it, along with operational and strategic considerations, appears to provide a reasonable basis for deciding on the appropriate basing option for the E-6A TACAMO aircraft. The cost differences between the four alternatives, even considering the imprecision in some estimates, are small relative to a program whose life-cycle costs are expected to exceed \$6 billion over a 30-year period.

The Navy attaches considerable importance to the belief that there is an unquantifiable "synergetic" benefit in basing at

Tinker. Tinker is where the Air Force has aircrews and maintenance technicians experienced with operating and maintaining similar type aircraft and engines. The Navy believes basing the E-6As at Tinker will permit the exchange of experiences between Air Force and Navy aircrews and allow the Navy to draw on the expertise of Air Force maintenance technicians to solve problems. While such benefits are nonquantifiable, based on our observations at Tinker, we believe they are nevertheless real and should be considered in the basing decision.

OBJECTIVE, SCOPE, AND METHODOLOGY

As you requested, we focused our review on the adequacy of the Navy's life-cycle cost study. We did not address the issue of vulnerability to enemy attack or other operational considerations that may have entered into the Navy's decision to base the E-6As in mid-continental United States. In performing our work, we obtained information from officials of the following offices:

- Project Manager, Airborne Strategic Communications, Naval Air Systems Command;
- Assistant Secretary of the Navy (Shipbuilding and Logistics);
- the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence).

We also visited Tinker and Little Rock Air Force Bases to observe and obtain briefings on the facilities available at both locations.

- - - -

As agreed with your Offices we plan no further distribution of this report until 1 day after its issue date. At that time we will send copies to members of the Oklahoma Congressional Delegation; Senators Paul S. Sarbanes, and Barbara A. Mikulski; the Chairman, Subcommittee on Readiness, Sustainability and Support, Senate Committee on Armed Services; and the Secretaries of Defense and the Navy and will make copies available to other interested parties upon request.


Frank C. Conahan
Assistant Comptroller General

CONTENTS

Letter 1

**TACAMO AIRCRAFT
BASING**

Objective, Scope, and Methodology	7
TACAMO Background	11
Mid-CONUS Basing Decision	15
Evaluation of Navy Study	24
Other Factors	29
Family Housing	38

ABBREVIATIONS

AWACS	Airborne Warning and Control System
CONUS	continental United States
FOC	full operational capability
IOC	initial operational capability
JRTC	Joint Readiness Training Center
TACAMO	Take Charge and Move Out

TACAMO Aircraft Basing

GAO Objective, Scope, and
Methodology

- Objective
 - Assess Accuracy and Reliability of Assumptions and Factors Used in Navy's May 1988 Study
- Scope
 - Assessed Cost Factors
 - Examined Assumptions

GAO Objective, Scope, and
Methodology (Con't)

- Did Not Assess
 - Aircraft Procurement Decision
 - Operational and Strategic Issues
- Methodology
 - Evaluated Navy's Analytic Approach

GAO Objective, Scope, and
Methodology (Con't)

- Reviewed Site Selection Documents
- Interviewed Current and Former DOD Officials
- Site Visits to Tinker and Little Rock Air Force Bases

OBJECTIVE, SCOPE, AND METHODOLOGY

On May 20, 1988, Senators Dale Bumpers and David Pryor requested that we assess the accuracy and reliability of the factors and assumptions used in the Navy's May 19, 1988, life-cycle cost study supporting its decision to base its new E-6A Take Charge and Move Out (TACAMO) aircraft at Tinker Air Force Base, Oklahoma.

To assess the accuracy and reliability of the factors and assumptions presented in this study, we reviewed available supporting documentation (e.g., site selection documents); tested the accuracy of the Navy's calculations; evaluated the Navy's analytic methodology; and interviewed Navy, Air Force, Army, and Department of Defense officials and a former Defense official involved with the TACAMO basing issue. We also visited Tinker Air Force Base and Little Rock Air Force Base, Arkansas, to observe and obtain briefings on the availability of facilities at each location.

We did not examine the Navy's decision to replace EC-130 TACAMO aircraft with E-6A aircraft, nor did we address the issue of vulnerability to enemy attack or other operational considerations that may have entered into the Navy's decision to base the E-6A aircraft in the mid-continental United States (CONUS).

Our review was performed from June through August 1988 in accordance with generally accepted government auditing standards.

GAO TACAMO Background

- Emergency Communications with Fleet Ballistic Missile Submarines
- E-6A Decision Tied to Upgrade of Strategic Command, Control, and Communication
- Two Squadrons -- Atlantic and Pacific

GAO TACAMO Background (Con't)

- 15 Operational E-6A Aircraft to Replace 18 EC-130 Aircraft (Plus 1 E-6A for Research and Development and Modification)
- E-6A, a Boeing 707-320 Derivative
- Airframe about 80 Percent Common with Air Force E-3 AWACS and KC-135s

GAO TACAMO Background (Con't)

- CFM-56 Engine Similar to Air Force F-108 Engine
- E-6A IOC - Jan. 1990
FOC - June 1991

TACAMO BACKGROUND

TACAMO aircraft provide emergency communications with ballistic missile firing submarines. At least one aircraft operates over the Atlantic Ocean and another over the Pacific Ocean at all times. Currently, 18 EC-130 TACAMO aircraft are assigned to two squadrons. The Atlantic squadron is based at Patuxent River, Maryland, and the Pacific squadron is based at Barbers Point, Hawaii.

According to officials from the Office of the Assistant Secretary of Defense (Command, Control, Communication, and Intelligence), the Navy's decision to replace the EC-130 TACAMO aircraft with the E-6A aircraft was an outgrowth of a 1981 study of strategic capabilities. These officials stated that the study contained numerous recommendations to strengthen U.S. capabilities in this area, including the need for a better communication link with fleet ballistic missile submarines.

The 18 EC-130 aircraft will be replaced with 15 operational E-6A aircraft; a prototype E-6A was delivered in December 1986, and 14 production aircraft are to be delivered in 1989 and 1990. The E-6A is a derivative of the Boeing 707-320 commercial aircraft and is about 80 percent common with the Air Force's E-3 Airborne Warning and Control System (AWACS) aircraft (also based at Tinker) and the KC-135 aircraft. It will use a version of the commercial CFM-56 jet engine that is about 95 percent common with the Air Force's F-108 engine that is overhauled at Tinker. Most of the EC-130 avionics equipment will be removed, refurbished, and installed aboard the E-6As. In the mid-1990s, this equipment will be upgraded or replaced.

A 16th E-6A will be procured to fulfill pipeline requirements such as depot overhauls, mission equipment updates, and research and development.

The Navy anticipates E-6A TACAMO aircraft will achieve initial operational capability (IOC) in January 1990 and full operational capability (FOC) by June 1991. Initially, the Navy indicated it needed 15 E-6As to replace the 18 EC-130s. It later stated that an additional aircraft was needed--irrespective of the main operating base selected--for test, modification, research and development, and attrition.

GAO MID-CONUS BASING DECISION

- Nov. 1981 - Aircraft Replacement Program Initiated, Plan to Continue Coastal Basing
- Mid-1985 - Navy Began Considering Mid-CONUS Basing for Cost, Not Strategic Reasons--Tinker preferred

**GAO MID-CONUS BASING DECISION
(CON'T)**

- **Oct. 1985 - Navy Directs Investigation of Mid-CONUS Basing**
- **Jan. 1986 - Navy Decision on Mid-CONUS Basing**
- **Mar. 1986 - Air Force Provides list of 20 Sites-- Tinker Not on List**

**GAO MID-CONUS BASING DECISION
(CON'T)**

- April-May 1986 - Survey of 7 Sites-- Little Rock First Choice of 7-- Tinker Still Preferred by Navy
- July 1986 - Preliminary Survey of Tinker--Availability of Land Indicated, but No Excess Facilities

**GAO MID-CONUS BASING DECISION
(CON'T)**

- **Oct. 1986 - Navy Requested Defense Approval to "Beddown" at Tinker**
- **Nov. 1986 - Second site Survey at Tinker--Lack of Excess Facilities Confirmed**
- **Jul. 1987 - Life-Cycle cost study to Congress--Tinker Approved by Defense as Lowest Cost**

**GAO MID-CONUS BASING DECISION
(CON'T)**

- Dec. 1987 - \$11.8 million
Approved, but New Life-Cycle
Cost Study Requested by
Congress

**GAO MID-CONUS BASING DECISION
(CON'T)**

- May 1988 - New Life-Cycle Cost Study
 - Little Rock + \$20.9 million
 - Bar/Pax + \$76.6 million
 - Tink/Pax + \$99.5 million

MID-CONUS BASING DECISION

When the Navy initiated the follow-on TACAMO aircraft replacement program in November 1981, it planned to continue coastal basing. However, according to Navy officials, by about mid-1985, after it became clear that the Congress would approve the procurement of new aircraft, the Navy began considering the possibility of mid-CONUS basing for the new aircraft. Navy officials stated that initially the reason for considering a single, mid-CONUS basing location was to reduce basing costs; however, the Office of the Secretary of Defense considered improved survivability to be the primary factor.

Navy officials stated that even at that time Tinker was considered to be the most appropriate mid-CONUS basing location, but they were aware that Tinker had no excess capacity. In October 1985, the Assistant Secretary of the Navy (Shipbuilding and Logistics) directed that the concept of mid-CONUS basing be more thoroughly investigated.

In January 1986, the Secretary of the Navy directed the Chief of Naval Operations to

"take immediate action to arrange for Air Force to provide required hangars and facilities to support TACAMO Operations from the CONUS. This plan will eliminate the requirement for MILCON [Military Construction] funding and should be no more expensive to operate and maintain than if the Navy was to provide this support."

The Airborne Strategic Communications Project Office in the Naval Air Systems Command was responsible for executing the Secretary's January 1986 guidance. The Office of the Assistant Secretary of the Navy (Shipbuilding and Logistics) directed the project manager to find an Air Force base near the middle of CONUS for both E-6A squadrons. According to the project manager and officials in the Office of the Assistant Secretary, such basing offered various advantages (e.g., reduced vulnerability to enemy attack, reduced family separation, lower cost, and greater operational flexibility.)

According to Navy officials, the Air Force was asked to develop a list of bases with some excess capacity for consideration. The Air Force provided a list of 20 bases, which the Navy narrowed to 7. The Navy said that because Tinker had no excess capacity, it was not on the list. A joint Navy/Air Force team made preliminary site surveys of the seven bases from April 22 through May 9, 1986, to determine which facilities were available (e.g., whether there were spare hangars and space for administrative and training purposes).

The Navy concluded that of these 7 sites, Little Rock was the best candidate for E-6A TACAMO aircraft basing, followed by Dyess Air Force Base, Abilene, Texas. The Navy favored Little Rock because a Titan missile wing at that location was being deactivated. However, none of the bases, including Little Rock, had spare hangars with maintenance facilities.

Although Tinker was not a candidate, officials in the Office of the Assistant Secretary of the Navy (Shipbuilding and Logistics) believed it was logical to use this base and directed the E-6A project manager to make a site survey. These officials told us that Tinker offers operational advantages. The Air Force bases its E-3A AWACS aircraft there, which, like the Navy's E-6As, are derivatives of the Boeing 707. Also, the Air Force performs depot-level maintenance of the E-3A aircraft, the KC-135 aircraft (also a Boeing 707 derivative), and F-108 engines, which are similar to the Navy's CFM-56 engines, at this base.

A site survey team made a preliminary survey from July 15 to 16, 1986, and found that the base had no excess buildings or hangars. It concluded, however, that the Navy could acquire an adjacent tract of land, which would be suitable for hangars and other facilities.

On October 1, 1986, the Secretary of the Navy requested the Secretary of Defense's permission to base the E-6As at Tinker. During the week of November 17, 1986, the Navy made a second, more detailed site survey at Tinker that confirmed that there were no excess facilities.

On October 8, 1986, Senators Bumpers, Pryor, and Sasser asked us to review the Navy's decision to base the new E-6A TACAMO aircraft at Tinker. Our prior report¹ identified several shortcomings in the Navy's analysis supporting its basing decision. As a result, the House and Senate Committees on Appropriations directed the Navy to reexamine its basing decision.

On July 30, 1987, the Secretary of Defense formally submitted a life-cycle cost study to the Congress in support of the Navy's decision to base TACAMO aircraft at Tinker. In December 1987 the Congress appropriated \$11.8 million for TACAMO aircraft basing and directed² the Navy to conduct a second life-cycle cost study before it spent any moneys, this time considering coastal as well as mid-CONUS basing.

¹ Aircraft Basing: Decision to Base Navy TACAMO Aircraft at Tinker Air Force Base, Oklahoma (GAO/NSIAD-87-106FS, April 3, 1987)

² Congressional Record Vol. 133, No. 205 (part III), Dec. 21, 1987, P.H12742

The Navy submitted its new study, which examined four basing alternatives, to the Congress on May 19, 1988. In this study, the Navy reported that Tinker, with a life-cycle cost of \$6.027 billion, was the least costly alternative of the four alternatives examined. Little Rock was second, at about \$6.048 billion for the 30-year period--\$20.9 million more than Tinker. The dual-basing option of Barbers Point/Patuxent River was third at \$6.104 billion -- \$76.6 million more than Tinker--and the Patuxent River/Tinker option was estimated at about \$6.127 billion, or about \$99.5 million more than Tinker as the single basing site.

GAO EVALUATION OF NAVY STUDY

- **Cost Reported in FY 1985
Constant Dollars, Not Present
Value Dollars**
- **Differences in Present Value
Dollars (Millions)**

3% 5% 10%

Litt Rock	\$13.1	\$9.9	\$6.7
Bar/Pax	51.0	39.2	22.1
Tink/Pax	76.1	62.4	44.6

**GAO EVALUATION OF NAVY STUDY
(CON'T)**

- **Strengths and Weaknesses of Study**
 - **Based on More Current Data**
 - **Included Coastal and Mid-CONUS Basing options**
 - **Range of Assumptions and Factors More Detailed Than Previous Study**

**GAO EVALUATION OF NAVY STUDY
(CON'T)**

- **But Some Estimates Imprecise**
 - **Cost to Provide Intermediate and Depot Level Support for Tinker Not Comparable with Other Sites**

EVALUATION OF NAVY STUDY

In its study, the Navy projected life-cycle costs using constant fiscal year 1985 dollars; it did not consider the time value of money, which is important because the expenditure rate over the 30-year period varies considerably depending upon the location selected. For example, military construction costs at Tinker were estimated to be \$71 million, whereas construction costs at Little Rock were about \$49.3 million--\$21.7 million less than Tinker's. These costs would be incurred early in the life of the program. On the other hand, operation and support costs at Tinker were estimated to be \$42.6 million less than those at Little Rock, but these costs would be incurred over the next 30 years. The time-value-of-money concept recognizes that money has earning power and that dollars spent during the early years of a program are worth more today than dollars that will be spent during the final years of the program. To compare two or more cost alternatives on an equal economic basis, it is necessary to consider each cost at its discounted or present value.

The Office of Management and Budget recommends using a 10-percent discount rate for making such economic comparisons. Applying the 10-percent discount rate to the Navy's cost estimates reduces the cost advantage of basing TACAMO aircraft at Tinker, rather than Little Rock, to about \$6.7 million. Similarly, Tinker's cost advantage over the Barbers Point/Patuxent alternative would be reduced to \$22.1 million, and its cost advantage over the Patuxent/Tinker alternative would be reduced to \$44.6 million.

The Navy believed that the Office of Management and Budget's recommended discount rate did not accurately reflect recent interest and inflation rates; therefore, it also calculated the present value of the cost differences using 3 and 5 percent. According to Navy's calculation using a 5-percent rate, Tinker's cost advantage over Little Rock would be \$9.9 million; its advantage over Barbers Point/Patuxent would be \$39.2 million; and its advantage over Patuxent/Tinker would be \$62.4 million. Using a 3-percent rate, Tinker's cost advantage over Little Rock, Barbers Point/Patuxent, and Patuxent/Tinker would be \$13.1 million, \$51 million, and \$76.1 million, respectively.

In our analysis we use a different method than recommended by the Office of Management and Budget for calculating present values. The basis for the discount rate we use is the average yield on outstanding marketable U.S. Treasury obligations with maturities comparable to the period of the analysis, using current rather than constant dollar estimates. Because the Navy study was in constant dollars, we approximated our method by subtracting the current inflation rate (estimated at 4 to 5 percent) from the current long-term Treasury rate (currently about 9 percent) and applied this difference to the Navy's constant dollar estimates. This

methodology results in discounted values similar to those calculated by the Navy using a 5-percent discount rate.

The Navy's May 19, 1988, study was generally more thorough than its earlier evaluations, including its July 1987 study. It was based on more current and accurate cost data, considered coastal as well as mid-CONUS basing alternatives, and included a range of more detailed assumptions and factors. The proper cost categories were assessed, and with certain exceptions, the assumptions were reasonable.

Nonetheless, some imprecision in the Navy's analytic methodology did exist. The Navy assumed, for example, that 24 staff-years of work would be required to provide intermediate level maintenance at all locations, but it assumed that at Tinker 7 of these staff-years could be absorbed by the Air Force depot. While this assumption may be reasonable, the Navy did not provide documentation to show how 7 staff years, which represent nearly 30 percent of its intermediate level maintenance requirements, could be absorbed by the Air Force without additional cost to the government. These 7 staff-years represent about \$10.5 million of the constant dollar cost difference between Tinker and the other alternatives. Thus, the Navy's cost estimate for providing intermediate level maintenance support at Tinker was not comparable with other locations.

GAO OTHER FACTORS

- Rationale for 16th Aircraft
 - Communications with Submarines Do Not Meet Requirements
 - Pre-Planned Product Improvement for Mid-1990s
 - Need 15 Aircraft for Operations
 - Need 1 Aircraft for Research, Development, Testing, and Evaluation and to Keep 15 Operational

OTHER FACTORS

Rationale for 16th Aircraft

The Navy and the Joint Chiefs of Staff have determined that 16 E-6A aircraft are required, regardless of the basing option chosen, to ensure that 15 operational aircraft are available to conduct the TACAMO mission. The 16th aircraft will fulfill pipeline requirements such as depot overhaul, mission equipment updates, and research and development modifications. Mid-CONUS basing adds at the most 6 hours of flight time a month per aircraft. This additional flight time does not justify the procurement of an additional aircraft but, according to the Navy, it is justified by the other requirements.

Since 1982, the Department of Defense has performed numerous strategic studies with regard to communicating with fleet ballistic missile submarines. The two conclusions from these studies are that improved performance from the TACAMO aircraft communications system is necessary to meet operational requirements in a stressed environment and that even with improved communications systems, the current EC-130s cannot operate efficiently in the Trident submarine operating areas.

To alleviate these problems, Defense developed plans for the E-6A aircraft along with a pre-planned product improvement program for improving communications systems. Force size studies for the E-6A aircraft concluded that 15 operational aircraft were required to accomplish the mission. As the communications improvement program became more defined, it became obvious that during the early years of E-6A operations, operating force levels would drop to 14 aircraft for extended periods of time. This would occur because an E-6A aircraft would be required for developmental and operational testing of the improvements, and the installation schedule for these improvements would require an E-6A aircraft be removed from operational service continuously during the period of fleet introduction.

GAO OTHER FACTORS (CON'T)

- Little Rock
 - No Intermediate Maintenance Support Available
 - Army Joint Readiness Training Center Using Some Building Identified by Navy for TACAMO

GAO OTHER FACTORS (CON'T)

- Air Force Says JRTC Temporary--to Move in 1990 or 1991
- Army Says Decision to be made 4th Quarter of FY 1989
- MX Rail Garrison:
- Little Rock Potential Site-- Decision Pending

GAO OTHER FACTORS (CON'T)

- Major Buildings Identified by Navy for TACAMO Also Needed by MX Rail Garrison
- Operations Facilities Scattered
- Base Support Facilities (Clubs, Hospitals, Dining Halls, etc.) Adequate

Little Rock

During the initial site survey phase, the Navy anticipated that some intermediate level maintenance capability supporting the 189th Air Refueling Group's KC-135 aircraft--an airframe similar to the E-6A--would be available to provide support for the E-6A aircraft at the Little Rock base. However, on October 1, 1986, this group was redesignated the 189th Tactical Airlift Group with the mission of providing aircrew training for C-130 aircraft, and the KC-135 aircraft were moved to another location. Consequently, Little Rock currently has no intermediate level maintenance support available for the E-6A.

In June 1987, the Army completed its move of the JRTC to Little Rock. The JRTC, which consists of about 300 personnel, trains nonmechanized infantry units and battalion task forces from the active Army, Army National Guard, and Army Reserve. It is a "joint" training center because the Air Force participates in the deployment of forces with C-130 aircraft and in the support of tactical operations through air resupply and base air support. Training exercises are carried out at Fort Chafee, Arkansas, about 150 land miles and 100 air miles from Little Rock. The JRTC is currently using two buildings that the Navy had identified for TACAMO aircraft use.

The Navy assumed in its study that the facilities at Little Rock Air Force Base initially identified as available for use by the TACAMO squadrons would still be available and would be available in the future. However, there is some uncertainty about this. Air Force officials told us that the JRTC is only temporarily located at Little Rock and that the Air Force anticipates the Army will vacate these buildings by 1990 and 1991. Army officials, on the other hand, told us that while Little Rock may not be ideal for the JRTC, a decision on whether to move the JRTC to another location will not be made until fiscal year 1989 and that the Army currently has no funds or plans to move the JRTC.

If Little Rock were to be selected for TACAMO aircraft basing and the Army were to retain occupancy of the two buildings, the added cost to the Navy for the military construction would be about \$10 million.

Air Force officials also informed us that Little Rock has been designated as a potential location for an MX (Peacekeeper) rail garrison site. If it is selected as one of six sites, the rail garrison will be given priority to use the buildings identified for the TACAMO mission. In that case, the total military construction cost at the Little Rock base would be similar to Tinker's. (Tinker currently has no facilities available for use by the TACAMO mission and will require totally new construction.) The exceptions to this are that government-owned land is available at Little Rock and some costs identified for expanding Tinker's base support activities

might not be required at Little Rock. However, the extent to which Little Rock base support facilities (such as dining halls, dormitories, and recreation facilities) would be adequate for both TACAMO aircraft and the rail garrison missions, without expansion, is unknown at this time.

GAO OTHER FACTORS (CON'T)

- Tinker
 - Need 80 rather than 56 acres - land available
 - Expansion of Base Support Facilities planned, except Officers club

Tinker

The Navy initially stated that it would acquire 56 acres of land at the Tinker base. However, the Navy and Air Force now state that about 80 acres will be acquired--56.60 acres that are privately owned, but which Oklahoma City is holding with an option for the U.S. government; 11.98 acres that are privately owned, but available; and 10.87 acres owned by the county government which would be made available to the U.S. government. The estimated acquisition cost of this land was included in the Navy's life-cycle cost study.

Base support facilities at Tinker, such as the hospital, the enlisted dining hall, enlisted dormitories, the fire station, and gymnasium, are generally inadequate to accommodate the TACAMO mission. The Navy has included funds to expand these facilities in its military construction estimate for Tinker. The Navy had included about \$2 million in an earlier cost study to expand the officers club; however, the Air Force and Navy have concluded that the existing officers club is adequate to accommodate the Navy mission.

GAO FAMILY HOUSING

- Policy to Rely on Surrounding Communities
- Adequate Community Housing Available Both Mid-CONUS Sites

GAO FAMILY HOUSING (CON'T)

- On-Base Waiting Time (months)

Little Rock	Tinker
Officers 1.5	All 9-24
Enlisted 2.2	

FAMILY HOUSING

Because it is Defense policy to rely on off-base community housing, when such housing is adequate and available, the Navy deleted a cost estimate to construct on-base family housing from its 1988 study. An earlier cost comparison between Tinker and Little Rock had included \$18.3 million at Tinker, but did not include an estimate to increase the number of housing units at Little Rock.

We found that on-base family units at both the Little Rock and Tinker bases are fully occupied--without the Navy's TACAMO mission--although the waiting time for on-base housing is shorter at Little Rock than at Tinker. Nevertheless, since military housing is fully occupied, any housing cost differences attributed to basing TACAMO aircraft at either Tinker or Little Rock would represent the difference in the variable housing allowance rates for these locations.

Variable housing allowance rates are currently higher at Tinker than at Little Rock. For example, an officer at the grade O-4 with dependents currently can receive a maximum of \$74.57 a month at Little Rock whereas this officer can receive \$112.10 a month at Oklahoma City. These rates are adjusted annually based on local surveys and, we were told that based on the most recent survey, the variable housing allowance rates are expected to decline at Oklahoma City. Because these rates change frequently, estimated cost differences cannot be reliably projected into the future.

(394273)

Requests for copies of GAO reports should be sent to:

U.S. General Accounting Office
Post Office Box 6015
Gaithersburg, Maryland 20877

Telephone 202-275-6241

The first five copies of each report are free. Additional copies are \$2.00 each.

There is a 25% discount on orders for 100 or more copies mailed to a single address.

Orders must be prepaid by cash or by check or money order made out to the Superintendent of Documents.

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

Official Business
Penalty for Private Use \$300

First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100
