Audit Report

OFFICE OF THE INSPECTOR GENERAL

DEFENSE BASE REALIGNMENT AND CLOSURE BUDGET DATA FOR MCGUIRE AIR FORCE BASE, NEW JERSEY; BARKSDALE AIR FORCE BASE, LOUISIANA; AND FAIRCHILD AIR FORCE BASE, WASHINGTON

Report No. 94-179 August 31, 1994

Department of Defense

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Acronyms

ACC	Air Combat Command
AFB	Air Force Base
AFRES	Air Force Reserve
AMC	Air Mobility Command
BRAC	Base Realignment and Closure
COBRA	Cost of Base Realignment Actions
MILCON	Military Construction

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
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ARLINGTON, VIRGINIA 22202-2884

August 31, 1994

MEMORANDUM FOR COMPTROLLER OF THE DEPARTMENT OF DEFENSE
ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)

SUBJECT: Report on the Audit of Defense Base Realignment and Closure Budget Data for McGuire Air Force Base, New Jersey; Barksdale Air Force Base, Louisiana; and Fairchild Air Force Base, Washington (Report No. 94-179)

We are providing this final report for your review and comments. Comments on a draft report were considered in preparing this final report. This audit was required by Public Law 102-190, "National Defense Authorization Act for Fiscal Years 1992 and 1993," December 5, 1991. The law prescribes that we evaluate significant increases in the cost of military construction projects over the estimated cost provided to the Commission on Base Realignment and Closure. This report is one in a series of reports about the FYs 1994 and 1995 base realignment and closure military construction costs.

DoD Directive 7650.3 requires that all audit recommendations and potential monetary benefits be resolved promptly. The Air Force comments were not fully responsive. In addition, we revised, deleted, and added recommendations to the Comptroller of the Department of Defense and the Air Force. Therefore, we request the Comptroller of the Department of Defense and the Air Force to provide final comments on the unresolved recommendations and potential monetary benefits by October 31, 1994. See each finding and Appendixes D through L for your specific response requirements.

We appreciate the courtesies extended to the audit staff. If you have questions on this audit, please contact Ms. Patricia Brannin, Audit Program Director, at (703) 604-9002 (DSN 664-9002) or Mr. Michael Perkins, Audit Project Manager, at (703) 604-9273 (DSN 664-9273). Appendix O lists the distribution of the report. The audit team members are listed inside the back cover.

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Assistant Inspector General
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Report No. 94-179 **August 31, 1994**
(Project No. 4CG-5008.11)

DEFENSE BASE REALIGNMENT AND CLOSURE BUDGET DATA FOR MCGUIRE AIR FORCE BASE, NEW JERSEY; BARKSDALE AIR FORCE BASE, LOUISIANA; AND FAIRCHILD AIR FORCE BASE, WASHINGTON

EXECUTIVE SUMMARY

Introduction. Public Law 102-190, "National Defense Authorization Act for Fiscal Years 1992 and 1993," December 5, 1991, directs the Secretary of Defense to ensure that the amount of the authorization that DoD requested for each military construction project associated with base realignment and closure does not exceed the original estimated cost provided to the Commission on Defense Base Realignment and Closure. A primary reason for differences is the time constraints imposed on the Military Departments for developing base realignment and closure military construction cost estimates. Tight schedules dictated by the base closure and realignment process made initial requirements determination and the associated cost-estimating process extremely difficult. The Inspector General, DoD, is required to review each base realignment and closure military construction project for which a significant difference exists from the original cost estimate and to provide the results of the review to the congressional Defense committees.

This report is one in a series of reports relating to FYs 1994 and 1995 base realignment and closure military construction costs. We are issuing this as a quick-reaction report because time is limited for adjusting and resubmitting the budget information discussed in this report.

Objectives. The overall audit objective was to determine the accuracy of Defense base realignment and closure military construction budget data. This report provides the results of the audit of 31 military construction projects, valued at $189.4 million, related to the closure of K.I. Sawyer Air Force Base, Michigan. We also reviewed 15 military construction and renovation projects, valued at $82.3 million, for McGuire Air Force Base, New Jersey, that were not funded by the Defense base realignment and closure budget. The audit also evaluated the adequacy of the implementation of the DoD Internal Management Control Program and applicable internal controls.

Audit Results. The Air Combat Command, the Air Mobility Command, and the Air Force Reserve could not support or justify base realignment and closure military construction requirements and costs for 15 of the 31 military construction projects associated with the closure of K.I. Sawyer Air Force Base. As a result, 12 of the 15 projects, valued at $106.7 million, were based on unsupported requirements of $104.7 million, and 3 of the 15 projects, valued at $26.2 million, were completely unsupported (Finding A).

The Air Mobility Command could not justify the requirements for the construction and renovation of dormitories at McGuire Air Force Base. As a result, the Air Mobility Command proposed three military construction projects, valued at $28.8 million, for

dormitories that were not needed. Also, nine renovation projects, valued at $20.2 million, were overstated by $14.7 million, and the remaining $5.5 million was unsupported (Finding B).

The Air Mobility Command lacked adequate data to support two planned family housing projects, valued at $63.6 million. (Finding C).

Internal Controls. Air Force internal controls and the implementation of the DoD Internal Management Control Program were not effective and did not disclose material weaknesses in the validation of the accuracy of base realignment and closure military construction budget estimates. See Part I for details of the internal controls reviewed and Finding A in Part II for details on the material weaknesses identified.

Potential Benefits of Audit. Implementation of the recommendations will allow DoD to put to better use at least $24.7 million of base realignment and closure military construction and $43.5 million of non-base realignment and closure military construction funding. Other, currently undeterminable monetary benefits will occur if the Air Force reevaluates non-base realignment and closure projects, valued at $38.8 million and base realignment and closure projects, valued at $108.2 million. Appendix M summarizes the potential benefits resulting from audit.

Summary of Report Recommendations. We recommend that the Comptroller of the Department of Defense and the Air Force cancel and suspend base realignment and closure projects funding as appropriate. We also recommend that the Air Force implement procedures to adequately validate the base realignment and closure estimates and to consider the validation procedures in its internal management control program. Further, we recommend that the Air Force suspend funding for McGuire Air Force Base dormitories and suspend plans to construct military family housing pending the results of a site survey and economic analysis at McGuire Air Force Base.

Management Comments. For Finding A, the Comptroller of the Department of Defense agreed to reduce funding for base realignment and closure military construction projects with unsupported requirements and agreed that DD Forms 1391 should be revised when warranted. The Air Force agreed to 9 of 32 final report recommendations that resulted in monetary benefits of $3.5 million. For Finding B, the Air Force agreed to prepare a new Dormitory Construction and Renovation Plan. For Finding C, the Air Force met the intent of the report recommendations by agreeing to conduct a housing market analysis and to perform an economic analysis. A summary of management comments is at the end of each finding and in Appendixes D, E, F, and G. The complete text of management comments is in Part IV.

Audit Response. The Air Force comments on Finding A included additional support for the projects recommended for reduction or deletion. However, the additional support did not adequately justify project requirements. For Findings B and C, the Air Force documentation did not fully justify the need for construction of unaccompanied enlisted dormitories or military family housing. As a result, we revised our final report recommendations to require the Air Force to provide adequate justification for project requirements. We request that the Comptroller of the Department of Defense and the Air Force provide final comments on the unresolved recommendations and potential monetary benefits by October 31, 1994.

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This report was prepared by the Contract Management Directorate, Office of the Assistant Inspector General for Auditing, Department of Defense.

Part I - Introduction

Background

Initial Recommendations of the Commission on Defense Base Closure and Realignment. On May 3, 1988, the Secretary of Defense chartered the Commission on Defense Base Realignment and Closure (the Commission) to recommend military installations for realignment and closure. Using cost estimates provided by the Military Departments, the Commission recommended 59 base realignments and 86 base closures. On October 24, 1988, Congress passed, and the President signed, Public Law 100-526, "Defense Authorization Amendments and Base Realignment and Closure Act," which enacted the Commission's recommendations. Public Law 100-526 also establishes the DoD Base Closure Account to fund any necessary facility renovation or military construction (MILCON) projects related to base realignments and closures (BRAC).

Subsequent Commission Requirements and Recommendations. Public Law 101-510, "Defense Base Realignment and Closure Act of 1990," November 5, 1990, reestablished the Commission. Public Law 101-510 chartered the Commission to meet during calendar years 1991, 1993, and 1995 to verify that the process for realigning and closing military installations was timely and independent. The law also stipulated that realignment and closure actions must be completed within 6 years after the President transmits the recommendations to Congress.

The 1991 Commission recommended that 34 bases be closed and 48 bases be realigned, resulting in an estimated net savings of $2.3 billion during FYs 1992 through 1997, after a one-time cost of $4.1 billion. The 1993 Commission recommended that 130 bases be closed and 45 bases be realigned, resulting in an estimated net savings of $3.8 billion during FYs 1994 through 1999, after a one-time cost of $7.4 billion.

Military Department BRAC Cost-Estimating Process. To develop cost estimates for the Commission, the Military Departments used the Cost of Base Realignment Actions computer model (COBRA). COBRA uses standard cost factors to convert the suggested BRAC options into dollar values to provide a way to compare the different options. After the President and Congress approve the BRAC actions, DoD realigning activity officials prepare DD Forms 1391, "FY 1994 Military Construction Project Data," for individual construction projects required to accomplish the realigning actions. COBRA provides cost estimates as a realignment and closure package for a particular realigning or closing base. The DD Forms 1391 provides specific cost estimates for an individual BRAC MILCON project.

Required Defense Reviews of BRAC Estimates. Public Law 102-190, "National Defense Authorization Act for Fiscal Years 1992 and 1993," December 5, 1991, states that the Secretary of Defense shall ensure that the authorization amount that DoD requests for each MILCON project associated with BRAC actions does not exceed the original estimated cost provided to the Commission. If the requested budget amounts exceed the original project cost estimates provided to the Commission, the Secretary of

Defense is required to explain to Congress the reasons for the differences. Also, Public Law 102-190 prescribes that the Inspector General, DoD, must evaluate significant increases in MILCON project costs over the estimated costs provided to the Commission and send a report to the congressional Defense committees.

Objectives

Overall Audit Objectives. The overall audit objective was to determine the accuracy of Defense BRAC MILCON budget data. The specific objectives were to determine whether the proposed projects were valid BRAC requirements, whether the decision for MILCON was supported with required documentation including an economic analysis, and whether the analysis considered existing facilities. The audit also evaluated the adequacy of the implementation of the DoD Internal Management Control Program and applicable internal controls.

Specific Report Objectives. This report provides the results of the audit of 31 BRAC MILCON projects, valued at $189.4 million. These projects were proposed by Air Combat Command (ACC), Air Mobility Command (AMC), and Air Force Reserve (AFRES) to support the closure of K.I. Sawyer Air Force Base (AFB), Michigan. As a result of the closure, 44 B-52H aircraft will be realigned to Barksdale AFB, Louisiana, and 24 KC-10 aircraft will be realigned to McGuire AFB, New Jersey. A cruise missile support equipment facility will be constructed on Fairchild AFB, Washington. Appendix A lists the 31 BRAC MILCON projects.

Expanded Report Objectives. As a result of our review of BRAC MILCON projects at McGuire AFB, we reviewed 15 non-BRAC MILCON and renovation projects, valued at $82.3 million, for dormitories and family housing. Appendix B lists the 15 non-BRAC MILCON and renovation projects at McGuire AFB.

Scope and Methodology

Limitations to Overall Audit Scope. COBRA develops cost estimates as a BRAC package for a particular realigning or closing base and does not develop estimates by individual BRAC MILCON project. Therefore, we were unable to determine the amount of cost increases for each individual MILCON project related to a BRAC.

Overall Audit Selection Process. We compared the total COBRA cost estimates for each BRAC package with the Military Department and DLA FYs 1994 through 1999 BRAC MILCON $2.6 billion budget submission. Based on results from prior Inspector General, DoD, BRAC audits, we selected

BRAC packages for which the submitted FY 1995 budget was more than $21 million or BRAC packages with an increase of more than 10 percent between the total COBRA cost estimates and the current total package budget estimates.

Audit Locations. We conducted the audit at ACC facilities located at Langley AFB, Virginia; K.I. Sawyer AFB; Fairchild AFB; and Barksdale AFB and at AMC facilities located at Scott AFB, Illinois; McGuire AFB; and Barksdale AFB. We also contacted AFRES officials located at Robins AFB, Georgia. Appendix N lists the organizations visited or contacted during the audit.

Data Reviewed. We reviewed the FYs 1994 and 1995 BRAC MILCON budget request and related documentation regarding the closure of K.I. Sawyer AFB. We discussed the budget requests and related documentation with cognizant personnel at the realigning and closing Air Force bases and at the Air Force major commands' headquarters. We reviewed documentation and discussed budget requests and requirements for 15 non-BRAC MILCON and renovation projects. We also reviewed documentation and discussed requirements concerning the realignment and closure of Air Force bases other than K.I. Sawyer AFB that would affect the BRAC MILCON requirements and budgets of Fairchild AFB, Barksdale AFB, and McGuire AFB. The audit did not rely on computer-processed data or statistical sampling procedures. The data reviewed covered the period from April 1990 through July 1994.

Audit Standards and Time Period. This economy and efficiency audit was made from January through July 1994 in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD. Accordingly, we included tests of internal controls considered necessary.

Internal Controls

Internal Controls Reviewed. We evaluated the adequacy of ACC, AMC, and AFRES internal controls for developing and validating BRAC MILCON requirements for 31 BRAC projects to support the closure of K.I. Sawyer AFB, the realignment of B-52H aircraft to Barksdale AFB and KC-10 aircraft to McGuire AFB, and the construction of a cruise missile support equipment facility on Fairchild AFB. We also evaluated the internal controls for validating MILCON construction requirements for 15 non-BRAC MILCON and renovation projects.

Adequacy of Implementation of the DoD Internal Management Control Program. We reviewed the Air Force's implementation of the DoD Internal Management Control Program applicable to the development and validation of BRAC MILCON requirements for 31 BRAC projects. The Air Force major commands' implementation of the DoD Internal Management Control Program was not effective because management at AMC, ACC, and AFRES did not

assess the risk inherent in the validation process for BRAC MILCON and non-BRAC MILCON and renovation requirements. Therefore, the Air Force's program did not identify material internal control weaknesses that could occur in the validation process or did not prevent the failure to validate the accuracy of the BRAC MILCON and non-BRAC MILCON and renovation requirements.

Adequacy of Internal Controls. The audit identified material internal control weaknesses as defined by DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987. The Air Force did not validate the accuracy of the BRAC MILCON and non-BRAC MILCON and renovation requirements. Management implementation of Recommendations A.2. and A.6. will correct the internal control weaknesses; however, the potential monetary benefits are undeterminable. See Appendix M for a summary of the potential benefits resulting from the audit. A copy of the report will be provided to the senior official in charge of internal controls for the Department of the Air Force.

Prior Audits and Other Reviews

Since 1991, 47 audit reports have addressed DoD BRAC issues. Appendix C lists selected Inspector General, DoD, and Navy BRAC reports.

Part II - Findings and Recommendations

Finding A. Base Realignment and Closure Military Construction Requirements and Costs

The Air Force did not fully justify 15 of 31 BRAC MILCON projects resulting from the closure of K.I. Sawyer AFB. This condition occurred because the Air Force did not properly develop and document project requirements and cost estimates in accordance with instructions issued by the Deputy Assistant Secretary of the Air Force (Installations) and approved Air Force criteria. Additionally, the Air Force did not validate the BRAC requirements and cost estimates. The haste in which the project requirements and cost had to be determined was a contributing factor. As a result, 12 of the 15 projects, valued at $106.7 million, had unsupported requirements of $104.7 million, including $24.7 million of overstated requirements, and 3 of the 15 projects, valued at $26.2 million, were completely unsupported.

Criteria for Supporting BRAC MILCON Projects

The following criteria provide instructions and guidelines for developing BRAC MILCON project requirements and cost estimates.

o Air Force Regulation 86-1, "Programming Civil Engineering and Appropriated Fund Resources," September 26, 1986, prescribes methods for documenting and justifying project requirements and associated costs. This regulation requires a cost estimate to be prepared in conjunction with the DD Form 1391 in sufficient detail to permit cost validation.

o Air Force Manual 86-2, "Civil Engineering, Programming, Standard Facility Requirements," May 4, 1987, establishes the criteria for estimating and documenting standard facility mission-essential requirements.

o In April 1993, the Deputy Assistant Secretary of the Air Force (Installations) and the Chairman of the Air Force Base Closure Executive Group issued instructions for preparing FY 1993 BRAC MILCON cost estimates. The instructions provided a standard approach that Air Force activities were to use to develop and support BRAC MILCON projects. If Air Force activities used the standard approach, projects would be valid and would contain the level of detail required to justify budget requests. The instructions require all BRAC MILCON cost estimates to be supported with sufficient information for someone unfamiliar with the subject area to be able to reconstruct each step of the cost estimate.

Development and Documentation of Project Requirements

The Air Force could not fully justify $104.7 million of the requirements for 12 BRAC MILCON projects, valued at $106.7 million, as identified in Table 1.

Table 1. Unsupported Project Costs Associated With Unjustified Requirements

Basis	Number of Projects	Project Cost	Unsupported Cost
Documentation Not Adequate	6	$65,633,000	$63,683,000
Existing Facilities Not Considered	4	26,050,000	26,050,000
Approved Criteria Not Used	2	15,000,000	15,000,000
Total	12	$106,683,000	$104,733,000

The requirements for the 12 projects were not justified because the Air Force either:

- did not have adequate documentation,
- did not consider existing facilities, or
- used draft, not approved, criteria to develop the requirements.

Adequacy of Documentation. Of the 12 projects, AMC did not fully support or accurately state the requirements for 6 projects, valued at $65.6 million. Of the $65.6 million, $63.7 million could not be supported. Documentation detailing the methodology used to develop the requirement was either nonexistent or incomplete. In some cases, the requirement shown on the DD Form 1391 was inconsistent with the established Air Force criteria for developing facilities requirements. Table 2 shows the six projects with requirements that could not be justified because supporting documentation was inadequate or incorrect. Details of the inadequate documentation to support requirements are in Appendix D.

Table 2. Projects Without Supporting Documentation

Project Title	Project	Project Cost	Unsupported Cost
McGuire AFB			
Refueling Operations Facility	PTFL943128	$ 3,300,000	$ 3,300,000
Upgrade Roads	PTFL943167	1,400,000	1,400,000
Add to Base Supply	PTFL943168	300,000	300,000
Aeromedical Services Clinic[1]	PTFL943174	5,100,000	3,150,000
Enlisted Dormitory[2]	PTFL943176R3	6,000,000	6,000,000
Family Housing[2]	PTFL943179	49,533,000	49,533,000
Total		$65,633,000	$63,683,000

[1]AMC concurred with our conclusions concerning the clinic and agreed to reduce the project by $3,150,000.
[2]The specific details on BRAC projects for Enlisted Dormitory and Family Housing are discussed in Findings B and C, respectively.

Consideration of Existing Facilities. Of the 12 projects, ACC and AMC did not consider the use of existing facilities for 4 projects, valued at $26.1 million. The projects are identified in Table 3 and details are discussed in Appendix E.

Table 3. Projects Developed Without Considering Existing Facilities

Project Title	Project	Project Cost	Unsupported Cost
Fairchild AFB			
Inert Support Equipment Storage	GJKZ940057	$ 1,050,000	$ 1,050,000
McGuire AFB			
KC-10 Contractor Operated and Maintained Base Supply Facility	PTFL943113	6,400,000	6,400,000
Add to Parking Ramp	PTFL943150	16,500,000	16,500,000
Add to and Alter Child Development Center	PTFL943172	2,100,000	2,100,000
Total		$26,050,000	$26,050,000

Use of Draft, Not Approved, Criteria. Of the 12 projects, AMC and AFRES developed the requirements for 2 projects, valued at $15 million, based on the draft criteria intended to replace Air Force Manual 86-2. AMC and AFRES were unable to provide any insight on the status of the draft criteria within the Air Force. Headquarters, Air Force, officials were unable to provide any

evidence that AMC and AFRES were authorized to use the draft criteria. Table 4 identifies the two projects, and the specific details regarding the two projects are in Appendix F.

Table 4. Projects Developed Using Unapproved Draft Criteria

Project Title	Project	Project Cost	Unsupported Cost
McGuire AFB			
KC-10 Squadron Operations/ Aircraft Maintenance Unit Facility	PTFL943100	$ 8,100,000	$ 8,100,000
KC-10 Squadron Operations/ and Aircraft Maintenance Unit Facility (AFRES)	PTFL943102	6,900,000	6,900,000
Total		$15,000,000	$15,000,000

Development and Documentation of Project Cost Estimates

AMC could not justify the cost estimates for 3 of the 15 BRAC MILCON projects, valued at $26.2 million. Inconsistencies in the supporting documentation prevented us from reconciling the costs on the DD Form 1391 to the supporting documentation. Table 5 shows the projects with questionable cost estimates because of inconsistent support, and Appendix G provides specific details on projects with inconsistent cost support. The Air Force should reevaluate and resubmit DD Forms 1391 for the three projects before providing funding.

Table 5. Projects With Cost Estimate Inconsistencies

Project Title	Project	Project Cost
McGuire AFB		
Hydrant Fueling System	PTFL943151	$22,000,000
Communication Ducts	PTFL943157	1,000,000
Control Tower	PTFL943165	3,200,000
Total		$26,200,000

Internal Controls

Air Force Validation Process for MILCON Projects. The three Air Force major commands responsible for the BRAC MILCON projects we reviewed did not completely validate the BRAC MILCON requirements and costs. The time constraints, the magnitude, and the sensitivity to changes in numerous planning factors create high risk for BRAC MILCON projects and require greater oversight by management.

ACC Validation. ACC BRAC officials stated that they validated the BRAC MILCON requirements and costs. However, they admitted that they did not perform a detailed review of projects and that they did not maintain the supporting documentation. ACC had to reconstruct the supporting documentation for all eight BRAC MILCON projects. ACC BRAC officials claimed that no specific procedures or guidance detailed how the validation process should be executed. However, Air Force Regulation 86-1 requires that the budget requests for MILCON projects be documented with clear and detailed supporting data. Further, ACC understated requirements and overstated the cost estimate for project GJKZ940057, Inert Support Equipment Storage Facility. We believe that the ACC validation process was either nonexistent or inadequate because ACC issued inaccurate BRAC MILCON requirements and costs without the mandatory supporting documentation.

AMC Validation. AMC officials admitted that, because of time constraints, they did not use the Deputy Assistant Secretary of the Air Force (Installations) instructions as a guideline for validating project requirements and costs. AMC officials stated that they relied on the words of the functional managers who developed the requirements as support for validating the requirements. The instructions by the Deputy Assistant Secretary of the Air Force (Installations) provide a standardized approach to validating programs with the level of detail required to support budget requests and to support execution management.

AFRES Validation. AFRES officials had validation procedures in place. However, they used unapproved draft criteria to develop BRAC MILCON project space requirements. An adequate validation process by AFRES should have ensured that only approved Air Force criteria were used when developing MILCON project requirements and cost estimates.

Air Force Implementation of DoD Internal Management Control Program. The Air Force Internal Management Control Program did not address the internal controls for validating BRAC MILCON requirements and cost estimates. The Air Force performed vulnerability assessments of the Directorates of Plans and Programs, the base organizations responsible for validating the BRAC estimates. However, Air Force officials did not include the BRAC MILCON validation procedures in their assessments. As a result, the Air Force's annual statement of assurance did not report the level of risk associated with the BRAC MILCON programming and funding procedures.

Prior BRAC MILCON audits performed by all DoD internal audit organizations had revealed significant problems with requirements and cost estimate justification. Our current audit identified significant deficiencies in the development and support of BRAC MILCON projects. The deficiencies indicate that Air Force internal controls either are not being followed or are not adequate to validate BRAC MILCON requirements and cost estimates. Because of the demonstrated high risk, BRAC MILCON planning should be specifically addressed in the Air Force Internal Management Control Program.

Potential Monetary Benefits

The Air Force can put $24.7 million to better use by reducing funding for unsupported requirements on 6 projects. Of the $24.7 million, McGuire AFB has already adjusted the DD Form 1391 for the aeromedical services clinic by $3.1 million. Additional, but as yet undetermined, monetary benefits could occur if the Air Force recalculates the DD Forms 1391 line items for each of the 15 BRAC MILCON projects not supported or justified. Appendix H summarizes, for each project, the amount that we are recommending be either reduced or suspended. Appendix M summarizes all of the benefits resulting from the audit.

Conclusion

ACC, AMC, and AFRES noncompliance with instructions provided by the Deputy Assistant Secretary of the Air Force (Installations) and noncompliance with approved Air Force criteria resulted in unjustified requirements and questionable cost estimates. Implementation of the recommendations would result in more accurate BRAC MILCON project requirements and cost estimates and stronger internal controls.

Funds in the amount of $24.7 million should be deleted and an additional $108.2 million should be suspended until the Air Force sufficiently justifies and documents the 15 projects. Appendix H summarizes the recommended budget reductions and suspensions.

Recommendations, Management Comments, and Audit Response

Deleted, Revised, Added, and Renumbered Recommendations. As a result of management comments, we deleted 2 recommendations, revised 12 recommendations, and added 10 recommendations. We renumbered the

draft recommendations accordingly. Table 6 summarizes the changes to the recommendations. Appendixes D, E, F, and G contain specific information about the projects, detailed management comments, and our audit response to the comments. Appendixes K and L list management's position on Recommendations A.1. and A.4., the Inspector General, DoD, response to management's comments, and the requirement for additional management comments or support needed. For a complete text of management comments, see Part IV.

Table 6. Summary of Changes to Draft Recommendations

Draft Recommendation	Deleted	Revised	Added	Final Recommendation
A.1.a.(1)		X		A.1.b.(4)
A.1.a.(2)		X		A.1.b.(5)
A.1.a.(3)				A.1.a.(1)
A.1.a.(4)				A.1.a.(2)
A.1.a.(5)				A.1.a.(3)
A.1.a.(6)		X		A.1.b.(6)
A.1.a.(7)		X		A.1.a.(4)
			X	A.1.b.(7)
A.1.a.(8)		X		A.1.b.(8)
A.1.a.(9)	X			
A.1.a.(10)		X		A.1.a.(7)
			X	A.1.b.(9)
A.1.a.(11)		X		A.1.b.(10)
A.1.a.(12)		X		A.1.a.(5)
A.1.a.(13)		X		A.1.a.(6)
A.4.b.	X			
A.4.e.		X		A.4.e.
A.4.f.		X		A.4.f.
A.4.g.		X		A.4.g.
			X	A.1.b.(11)
			X	A.1.b.(12)
			X	A.1.b.(13)
			X	A.4.b.*
			X	A.4.h.*
			X	A.4.i.*
			X	A.4.j.*
			X	A.4.k.*

*Based on revisions to the draft recommendations to the Comptroller of the Department of Defense, we added recommendations to the Air Force.

1. We recommend that the Comptroller of the Department of Defense:

a. Adjust the funding in the Air Force FYs 1994 and 1995 base realignment and closure budget for K.I. Sawyer Air Force Base as follows:

(1) Delete project PTFL943168, Add to Base Supply, in the amount of $300,000.

(2) Reduce project PTFL943174, Aeromedical Services Clinic, by $3,150,000 based on the Air Force's revised DD Form 1391.

(3) Delete project PTFL943176R3, Enlisted Dormitory, in the amount of $6,000,000.

(4) Reduce project GJKZ940057, Inert Support Equipment Storage, by $40,000.

(5) Reduce project PTFL943100, KC-10 Squadron Operations/Aircraft Maintenance Unit Facility, by $3,010,500.

(6) Reduce project PTFL943102, KC-10 Squadron Operations/Aircraft Maintenance Unit Facility (Air Force Reserve), by $2,119,500.

(7) Reduce project PTFL943150, Add to Parking Ramp, by $10,000,000.

(8) Reduce project PTFL943128, Refueling Operations Facility, by $72,000.

b. Suspend the funding in the Air Force FYs 1994 and 1995 base realignment and closure budget for K.I. Sawyer Air Force Base for the following:

(1) Project PTFL943151, Hydrant Fueling System, in the amount of $22,000,000 until the Air Mobility Command provides sufficient supporting documentation that can be reconciled to the cost estimate shown on the DD Form 1391.

(2) Project PTFL943157, Communication Ducts, in the amount of $1,000,000 until the Air Mobility Command provides sufficient supporting documentation that can be reconciled to the cost estimate shown on the DD Form 1391.

(3) Project PTFL943165, Control Tower, in the amount of $3,200,000 until the Air Mobility Command revises the estimated project cost shown on the DD Form 1391.

(4) Project PTFL943128, Refueling Operations Facility, in the amount of $3,228,000 until the Air Mobility Command provides adequate documentation to support space requirements and cost estimates.

(5) Project PTFL943167, Upgrade Roads, in the amount of $1,400,000 until Air Mobility Command provides supporting documentation detailing the sharing of cost attributable to damage to roads caused by base realignment and closure military construction, regular military construction, and normal use.

(6) Project PTFL943179, Family Housing, in the amount of $49,533,000 until Air Mobility Command provides us with the results of the planned housing market analysis, to include all supporting documentation, with consideration given to the February 28, 1994, force structure change at McGuire Air Force Base.

(7) Project GJKZ940057, Inert Support Equipment Storage, in the amount of $1,010,000 until Air Combat Command provides us with the current cost estimate and other supporting documentation that substantiate the project requirements and costs.

(8) Project PTFL943113, KC-10 Contractor Operated and Maintained Base Supply Facility, in the amount of $6,400,000 until Air Mobility Command considers alternative options for the project and provides us with all supporting documentation.

(9) Project PTFL943150, Add to Parking Ramp, in the amount of $6,500,000 until Air Mobility Command provides us with documentation to support square yardage calculations for the taxiway.

(10) Project PTFL943172, Add to and Alter Child Development Center, in the amount of $2,100,000 until Air Mobility Command provides us with documentation to support actual use of all child care facilities at McGuire Air Force Base to include capacity levels of these child care facilities.

(11) Project PTFL943174, Aeromedical Services Clinic, in the amount of $1,950,000, until the Air Mobility Command revises the estimated project cost and submits to us an approved DD Form 1391.

(12) Project PTFL943100, KC-10 Squadron Operations\Aircraft Maintenance Unit Facility, in the amount of $5,089,500, until the Air Mobility Command provides to us a revised DD Form 1391, supported by adequate documentation using approved Air Force regulations.

(13) Project PTFL943102, KC-10 Squadron Operations\Aircraft Maintenance Unit Facility (Air Force Reserve), in the amount of $4,780,500, until the Air Force Reserve provides to us a revised DD Form 1391 with adequate supporting documentation.

c. Adjust the Air Force FYs 1994 and 1995 base realignment and closure budget for K.I. Sawyer Air Force Base as appropriate based on the revised DD Forms 1391 submitted by Air Combat Command, Air Mobility Command, and Air Force Reserve as directed in Recommendations A.3., A.4., and A.5. using approved Air Force regulations.

Comptroller of the Department of Defense Comments. The Comptroller of the Department of Defense agreed to place funds for the projects in Recommendation A.1. on administrative hold pending resolution of the issues.

Air Force Comments. Although not required to comment, the Air Force concurred with $3.45 million of the recommended $24.6 million reductions.

Audit Response. The actions proposed by the Comptroller met the intent of our recommendations. However, we revised the recommendations as a result of additional information provided by the Air Force in response to the draft report. Therefore, in his response to the final report, we request that the Comptroller provide comments on the revised recommendations to delete and reduce funding of $24.7 million for 8 projects and suspend $108.2 million for 13 projects.

2. We recommend that the Assistant Secretary of the Air Force (Financial Management and Comptroller) require Air Force major commands to include the development and validation procedures of base realignment and closure requirements and cost estimates in their Internal Management Control Programs.

Air Force Comments. The Air Force concurred with the recommendation but did not specify what actions would be taken.

Audit Response. The Air Force comments are partially responsive to the recommendation. We request the Air Force to describe a proposed action plan and provide a completion date for the planned action in its response to the final report.

3. We recommend that the Commander, Air Combat Command, prepare a revised DD Form 1391 with adequate supporting documentation for project GJKZ940057, Inert Support Equipment Storage, excluding unsupported requirements, accounting for the use of existing facilities, and reflecting the budget reduction in Recommendations A.1.a.(4) and A.1.b.(7).

Air Force Comments. The Air Force nonconcurred with draft Recommendation A.1.a.(7) (now Recommendation A.1.a.[4]), to reduce costs for project GJKZ940057 by $259,500. The Air Force stated that the project requirements were reexamined, resulting in a current cost estimate of $1.01 million to construct the Inert Support Equipment Storage facility. The Air Force stated that, if the project funding is reduced to $790,500, the Air Force will not be able to execute the project requirements. The Air Force recommended the original programmed amount of $1.05 million remain unchanged based on their current cost estimate and unforeseen conditions.

Audit Response. We consider the Air Force comments to be unresponsive. However, in recognition of the Air Force's new cost estimate for the project, we have revised our recommendation to reduce program funding by $40,000 instead of $259,500, to achieve the Air Force's $1.01 million estimate. We also recommend that the estimated project funds ($1.01 million) be suspended until we further examine the Air Force claims (Recommendation A.1.b.[7]). In response to the final report, the Air Force should provide us with the current cost estimate and other necessary supporting documentation to substantiate the project requirements and costs.

4. We recommend that the Commander, Air Mobility Command:

a. Prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL943128, Refueling Operations Facility, that supports the space requirement and cost estimate.

b. Prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL943172, Add to and Alter Child Development Center, accounting for the use of existing facilities, and reflecting the budget reduction in Recommendation A.1.b (10).

c. Provide supporting cost estimate documentation that can be reconciled to the DD Form 1391 for project PTFL943150, Add to Parking Ramp, and revise the DD Form 1391 accordingly.

d. Prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL943100, KC-10 Squadron Operations/Aircraft Maintenance Unit Facility, using approved Air Force criteria to develop requirements and reflecting the budget reduction in Recommendation A.1.a.(5).

e. Provide documentation used to develop cost estimate worksheet for project PTFL1943151, Hydrant Fueling System,, explaining how the Air Force priced out all the components using the Automated Air Force Programming, Design, and Construction System Pricing Guide and revise the DD Form 1391 accordingly.

f. Prepare a revised DD Form 1391 for unsupported cost estimates for project PTFL943157, Communication Ducts.

g. Prepare a revised DD Form 1391 for unsupported cost estimates for project PTFL943165, Control Tower.

h. Prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL943179, Family Housing, and reflecting the budget reduction in Recommendation A.1.b.(6).

i. Prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL943113, KC-10 Contractor Operated and Maintained Base Supply Facility, accounting for the use of existing facilities, and reflecting the budget reduction in Recommendation A.1.b.(8).

j. Prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL943167, Upgrade Roads, and reflecting the budget reduction in Recommendation A.1.b.(5).

k. Prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL943174, Aeromedical Services Clinic, and reflecting the budget reduction in Recommendation A.1.a.(2).

Air Force Comments. Air Force partially concurred with the recommendations. Appendixes D through G contain a detailed summary of management comments and audit response. Appendix L is a quick reference to determine in which appendix the detailed summaries are found.

Audit Response. We consider the Air Force comments to be partially responsive.

o Based on documentation provided by the Air Force, we deleted draft Recommendation A.4.b. to revise the DD Form 1391 for the Add to and Alter Vehicle Maintenance Complex project.

o The documentation provided by Air Force for the projects Refueling Operations Facility, Hydrant Fueling System, Communication Ducts, and Control Tower does not meet the intent of draft Recommendations A.4.a., A.4.e., A.4.f., and A.4.g.

o We consider the Air Force comments to be unresponsive to Recommendations A.4.c. and A.4.d. to revise the DD Forms 1391 for the projects Add to Parking Ramp and the KC-10 Squadron Operations/Aircraft Maintenance Unit Facility.

o We added Recommendations A.4.b., A.4.h., A.4.i., A.4.j., and A.4.k. to the final report for the projects Add to and Alter Child Development Center, Family Housing, KC-10 Contractor and Operated and Maintained Base Supply Facility, Upgrade Roads, and Aeromedical Services Clinic.

For a detailed summary of management comments and responses, see Appendix L. We request the Air Force to provide additional support in its response to the final report.

5. We recommend that the Commander, Air Force Reserve, prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL943102, KC-10 Squadron Operations/Aircraft Maintenance Unit Facility (Air Force Reserve), using approved Air Force criteria to develop requirements and reflecting the budget reduction in Recommendation A.1.a.(6).

Air Force Comments. The Air Force nonconcurred with the recommendation. Air Force recommended the project be maintained at the existing scope and cost.

Audit Response. The Air Force comments are not responsive. For details, see Appendix F. We request the Air Force to reconsider its position and provide additional comments and support in its response to the final report.

6. We recommend that the Commanders, Air Combat Command, Air Mobility Command, and Air Force Reserve include the validation procedures for base realignment and closure requirements and cost estimates in risk assessments and internal management control reviews.

Air Force Comments. The Air Force concurred with the recommendation.

Audit Response. The Air Force comments are partially responsive. In response to the final report, the Air Force should provide details of the action to be taken to include validation procedures and a completion date.

Finding B. Construction and Renovation of Enlisted Dormitories

AMC could not justify the requirements to construct and renovate dormitories at McGuire AFB. This inadequate justification occurred because AMC used obsolete data to support planned MILCON projects and underestimated the availability of bedspaces at McGuire AFB. Also, AMC did not consider previous dormitory renovations when developing future dormitory renovation requirements and costs. As a result, three MILCON projects, valued at $28.8 million, and one BRAC MILCON project, valued at $6 million, to build new dormitories were not needed. In addition, 9 Operation and Maintenance, Real Property and Maintenance, projects, valued at $20.2 million, to renovate 10 existing dormitories were overstated by $14.7 million, while the remaining $5.5 million is unsupported.

Background

McGuire AFB planned to construct 8 dormitories between FYs 1995 and 1999 and to renovate 10 dormitories between FYs 1995 and 2002. In addition, McGuire AFB planned to construct one dormitory to accommodate the realignment of personnel from Barksdale AFB to McGuire AFB. The dormitories were for unaccompanied enlisted personnel, E-1 through E-9. Table 7 summarizes the planned dormitory projects at McGuire AFB. See Appendix I for a list of the individual dormitory projects and their values.

Table 7. Dormitory Projects at McGuire AFB

Funding Source	Number of Projects	Estimated Project Cost
MILCON	5[1]	$48,000,000
BRAC MILCON	1	6,000,000
Operation and Maintenance Real Property and Maintenance	9[2]	20,200,000

[1]To build a total of eight dormitories.
[2]To renovate a total of 10 dormitories.

New Dormitory Construction

AMC used obsolete data to support the planned dormitory MILCON projects and underestimated the available bedspaces at McGuire AFB.

Obsolete Data. AMC based its dormitory MILCON projects on the AMC 1993 Dormitory Construction and Renovation Plan. This plan, developed by AMC with FY 1992 data, supported a need for 531 additional bedspaces at McGuire AFB. AMC did not revise its 1993 Dormitory Construction and Renovation Plan to reflect the most recent figures on the number of enlisted personnel using dormitories at McGuire AFB. In our opinion, AMC should have used the most current data disclosed by the DD Form 2085, "Unaccompanied Personnel Housing Inventory and Utilization Data," for the fiscal year ending September 30, 1993. Air Force Regulation 90-9, "Unaccompanied Personnel Housing and Temporary Lodging Facilities," states that DD Form 2085 is used to justify the distribution of assets, the construction of new quarters, and the issuance of certificates of non-availability of quarters.

In addition, the 1993 AMC Dormitory Construction and Renovation Plan did not include the dormitory subsequently leased from the Army at Fort Dix, New Jersey. The dormitory can accommodate 111 enlisted personnel. McGuire AFB housing officials told us that 68 of the 111 bedspaces were occupied.

Substantiation of Bedspace. In determining the need for a new dormitory to support the realignment of unaccompanied enlisted personnel from Barksdale AFB, AMC did not reassess the need for the dormitories at McGuire AFB. Instead, AMC relied on the FY 1992 data used in its 1993 Dormitory Construction and Renovation Plan.

Computation of Available Bedspace. We determined that the 187 unaccompanied enlisted personnel realigning from Barksdale AFB and a projected increase of 310 unaccompanied enlisted personnel at McGuire AFB can be accommodated with the dormitories already at McGuire AFB.

We recalculated the dormitory requirements at McGuire AFB based on the data disclosed on the DD Form 2085, as of September 30, 1993. We computed 202 available bedspaces by subtracting the personnel housed (1,161) from the occupant capacity (1,363). The DD Form 2085 also indicated that 861 bedspaces would be available in FYs 1994 and 1995. As a result, 1,063 bedspaces (202 plus 861) would be available as of FY 1995.

Our calculation shows that McGuire AFB has sufficient space to accommodate not only the personnel realigning from Barksdale AFB, but also the projected increase in unaccompanied enlisted personnel at McGuire AFB. We calculated a surplus of 291 bedspaces at McGuire AFB. Table 8 summarizes our calculation of surplus bedspace. Appendix J gives the details of how we calculated the projected dormitory bedspace requirement (772 bedspaces).

Table 8. Calculation of Surplus Bedspace at McGuire AFB

	Bedspaces
Spaces available as of September 30, 1993	202
Spaces that will be available in FYs 1994 and 1995	861
Total	1,063
Projected bedspace requirement	772
Surplus	291

Consideration of Previous Dormitory Renovations

AMC did not consider previous dormitory renovations when developing future dormitory renovation requirements and costs. According to McGuire AFB housing officials, the 10 dormitories were renovated between FYs 1988 and 1992. McGuire AFB housing officials stated that they could only justify $5.5 million in additional renovation. As a result, the estimated cost of $20.2 million for the 9 projects to renovate the 10 existing dormitories was overstated by at least $14.7 million. At the conclusion of our audit, McGuire AFB housing officials were revalidating the requirements and costs to renovate the dormitories.

Changed Enlisted Dormitory Bedspace Requirements

After our field work, the Air Force reassessed projected bedspace requirements for unaccompanied enlisted personnel at McGuire AFB. In addition to the closure of K.I. Sawyer AFB, the reassessment included other force structure changes by the Air Force to achieve budget constraints and efficiencies. The force structure changes included realignment of personnel to McGuire AFB for the Air Mobility Operations Group, the Air Mobility Warfare Center, and the realignment of KC-10s from Seymour Johnson AFB, North Carolina. The reassessment also included the force structure change for military personnel leaving McGuire AFB as a result of the realignment of C-141 aircraft to other installations.

Result of Air Force Reassessment of Bedspace Deficit. As a result of the reassessment, the Air Force revised its projected bedspace deficit from 531 bedspaces to 268 bedspaces. When asked to provide the supporting documentation for the 268 deficit, the Air Force provided documentation indicating a deficit of 365 bedspaces.

Auditor Calculation of Enlisted Dormitory Bedspaces. Based on the revised data provided by the Air Force, we calculated a surplus of 301 bedspaces instead of the deficit of 365 bedspaces calculated by the Air Force. Table 9 summarizes the difference.

The Air Force did not include in its calculation an additional 284 bedspaces from the construction of two dormitories to replace six demolished dormitories. The Air Force has three projects to demolish six dormitories. Only two of the six dormitories will be replaced. The Air Force no longer plans to rebuild four of the six dormitories but plans to build a picnic area and parking lot in the place of the four dormitories. The Air Force should cancel the two projects to rebuild the four dormitories and resubmit projects to build the planned picnic area and parking lot.

In addition, the Air Force did not include in its calculation the estimated 267 bedspaces that would be available when the C-141 aircraft left McGuire AFB.

Also, the Air Force subtracted 115 bedspaces for unaccompanied enlisted personnel living off-base. The Air Force has not furnished any support for the unavailability of the 115 bedspaces off-base. Further, the Air Force did not indicate that unaccompanied enlisted personnel would not be allowed to live off-base. We believe these 115 bedspaces should not be subtracted in calculating the bedspace requirement.

Table 9. Bedspace Surplus Calculated by the Inspector General

Bedspace Deficit Calculated by the Air Force	(365)
Bedspace for Dormitories that will be Demolished and Replaced (two dormitories)	284
Bedspace that will be Available after the Realignment of C-141 Aircraft	267
Bedspace for Unaccompanied Enlisted Personnel Living Off-base	115
Bedspace Surplus Calculated by the Inspector General	301

Conclusion

We determined that McGuire AFB does not need two military construction projects to build two new dormitories. We calculated a bedspace surplus of 301 at McGuire AFB when we used the new data the Air Force provided in response to the draft report.

In addition, the Air Force should cancel projects PTFL933002, valued at $13,400,000, and PTFL933003, valued at $13,800,000, to demolish and replace four dormitories. The Air Force should develop new projects supporting the requirement and cost for the picnic area and parking lot.

Also, based upon the results of our audit, McGuire AFB is revalidating the requirements and costs associated with renovating 10 dormitories, valued at $20.2 million. The renovations were overstated by $14.7 million, and the remaining $5.5 million is unsupported.

The recommendation to delete the one BRAC MILCON project PTFL943176R3 to build a dormitory, valued at $6 million, is discussed in Finding A and is referred to in Recommendation A.1.a.(3)

Management Comments on the Finding

Air Force Comments. The Air Force stated that in our draft report we used incorrect procedures to calculate the 291-bedspace surplus. DD Form 2085, "Unaccompanied Personnel Housing Inventory and Utilization Data," was not appropriate for calculating projected bedspace surpluses or deficits. The DD Form 2085 is used to show the current inventory and use of dormitory facilities. The Air Force stated it followed the procedures outlined in DoD 4165.63-M, "DoD Housing Management," to calculate a dormitory bedspace deficit of 531 in FY 1997.

Audit Response. We stand by our calculation method and results. We used DD Form 2085 to show that bedspace is currently available and that additional bedspace will be available in FYs 1994 and 1995 to accommodate the projected increase and the realignment of unaccompanied enlisted personnel to McGuire AFB. Air Force Regulation 90-9, "Unaccompanied Personnel Housing and Temporary Lodging Facilities," states that DD Form 2085 is used to justify the distribution of assets and construction of new quarters.

We did not question the methodology the Air Force used. We questioned the data the Air Force used to calculate the 531-bedspace deficit. The data did not accurately reflect the number of unaccompanied enlisted personnel currently at McGuire AFB. For example, the Air Force used 1,926 in its Dormitory Construction and Renovation Plan as the number of unaccompanied enlisted

personnel needing dormitories at McGuire AFB, when DD Form 2085 for the period ending September 30, 1993, only shows 1,161 unaccompanied enlisted personnel using dormitories at McGuire AFB.

Recommendations, Management Comments, and Audit Response

Deleted, Revised, and Renumbered Recommendations. As a result of management comments, we deleted, revised, and renumbered several recommendations as indicated in Table 10.

Table 10. Summary of Changes to Draft Recommendations

Draft Recommendation	Deleted	Revised	Renumbered
B.1.a		X	
B.2.a.(3)	X		
B.2.a.(4)		X	B.2.c.
B.2.b.			B.2.d.
B.2.c.			B.2.e.
B.2.d.			B.2.f.

1. We recommend the Comptroller of the Department of Defense adjust the FY 1995 budget for dormitory military construction at McGuire Air Force Base as follows:

a. Suspend project PTFL923001, New Dormitory Construction, valued at $8,700,000.

Comptroller of the Department of Defense Comments. The Comptroller of the Department of Defense agreed to administratively withhold the funds until the issues are resolved.

Air Force Comments. Although not required to comment, the Air Force nonconcurred with the recommendation to delete the project. The Air Force stated that this project will construct a facility to replace two dormitories that are not economical to renovate. The project was not to provide additional bedspace. The Air Force also commented that it would reassess the need for these two dormitories based on the results of new housing market analysis.

Audit Response. We consider the Comptroller comments to withhold funds responsive to our recommendation. Based on the Air Force comments, we revised the finding and the recommendation to suspend, rather than delete, the funding. This project will not construct additional bedspaces, it will replace

two dormitories that are scheduled to be demolished. The Air Force determined it is more economical to replace these dormitories than renovate them. This project will be cancelled, if necessary, based upon the new AMC military housing market analysis and reassessment of projected bedspace requirements. This project should be suspended until the need is revalidated. No further comments are required from the Comptroller. We request the Air Force to provide to us a copy of the new housing market analysis and a reassessment of bedspace requirements in its response to the final report.

b. Delete project PTFL943191, New Dormitory Construction, valued at $1,600,000.

Comptroller of the Department of Defense Comments. The Comptroller agreed to administratively withhold the funds until the issues are resolved.

Air Force Comments. Although not required to comment, the Air Force nonconcurred with the recommendation. The Air Force stated that the project is to build a dormitory needed to support the realignment of 191 military personnel to McGuire AFB.

Audit Response. We consider the Comptroller comments to withhold funds responsive to our recommendation. We stand by our recommendation to delete the project because we disagree with the Air Force that this dormitory needs to be built. Based upon our analysis, we believe sufficient bedspace is available for the unaccompanied enlisted personnel realigning to McGuire AFB. Using the new data the Air Force provided, including additional force structure changes, we still calculated a bedspace surplus. The surplus of more than 300 bedspaces eliminates the need for a new unaccompanied enlisted dormitory. No further comments are required from the Comptroller.

2. We recommend that the Commander, Air Mobility Command, adjust the following projects as indicated:

a. Cancel project PTFL933002, New Dormitory Construction, valued at $13,400,000.

b. Cancel project PTFL933003, New Dormitory Construction, valued at $13,800,000.

c. Suspend project PTFL983003, New Dormitory Construction, valued at $10,500,000.

Air Force Comments. The Air Force nonconcurred with the draft report recommendation to cancel dormitory construction at McGuire AFB for projects PTFL933002, PTFL933003, PTFL953176 and PTFL953012, and PTFL983003 because the projects are not in the Program Objective Memorandum. Also, the Air Force will conduct an economic analysis as part of the project justifications when the projects are included in the normal budget process.

Audit Response. The Air Force comments are not fully responsive for the following reasons:

o Recommendations B.2.a. and B.2.b. to cancel projects PTFL933002 and PTFL933003 are logical because the scope of the projects has changed. According to the Air Force, the projects will now demolish four dormitories and replace the dormitories with a common area (picnic area and parking lot). The Air Force should cancel the projects and develop a new project number and cost estimate that reflects the new scope of work. We acknowledge that the projects are not yet programmed.

o We revised Recommendation B.2.c. to recommend that the project be suspended rather than cancelled to allow the Air Force to reevaluate the project based on the new housing market analysis, the revised Dormitory Construction and Renovation Plan that will be updated semi-annually, and the assessment of the need for the dormitories based on the bedspace surplus or deficit.

o As a result of Air Force comments, we deleted draft Recommendation B.2.a.(3). The projects listed in the draft recommendation had been renumbered and were addressed under the new numbers elsewhere in the report. Recommendation A.1.a.(3) and Recommendation B.1.b. refer to the revised project numbers.

d. Cancel $14,700,000 of the planned $20,200,000 in funding for the renovation of dormitories at McGuire Air Force Base.

e. Suspend the remaining $5,500,000 in funding for the renovation of dormitories until housing officials have completed their revalidation of the requirements and costs for the nine renovation projects.

Air Force Comments. The Air Force nonconcurred with Recommendations B.2.d. and B.2.e. The Air Force stated that the renovations between FYs 1988 and 1992 were to reconfigure the dormitories from a central latrine to a "room-bath-room" configuration. The planned renovations between FYs 1995 and 2002 are to repair the roofs, repair the exterior finishes, renovate the mechanical systems, renovate the electrical systems, renovate the plumbing systems, add kitchenettes, add storage lockers, and repair the interior finishes for the 10 dormitories.

Audit Response. The Air Force comments are not responsive. The documentation provided by the Air Force to support the dormitory renovations was not complete. For example, the documentation did not identify the Air Force standards used for determining whether the existing unaccompanied enlisted dormitories are adequate. Also, the Air Force did not provide documentation to support the $20.2 million cost estimate for the dormitory renovations. We request the Air Force to provide the standards used and for documentation to support the cost estimate in its response to the final report.

f. Prepare a new Dormitory Construction and Renovation Plan based on the most current data on enlisted personnel dormitory use and projected manpower at McGuire Air Force Base.

Air Force Comments. The Air Force concurred with the recommendation. AMC initiated a revision to the Dormitory Construction and Renovation Plan on March 2, 1994. The revision will be based on the new housing market analysis that was scheduled for completion by June 30, 1994. As of August 8, 1994, the Air Force had not completed the housing market analysis. AMC will restructure the dormitory MILCON and the Operation and Maintenance projects as necessary. AMC plans to update the Dormitory Construction and Renovation Plan twice a year to ensure the most accurate and current data are used to developing dormitory requirements.

Audit Response. The Air Force comments were responsive. The Air Force should provide us a copy of the revised Dormitory Construction and Renovation Plan and market analysis. Because of the continuing discrepancy between our calculation and the Air Force calculation of a bedspace surplus or deficit, we want to review the plan and any supporting documentation before projects are approved and funded based on this plan. We request the Air Force to provide a copy of the housing market analysis and the plan, if they are completed, in response to the final report. If they are not completed, we request the Air Force to indicate when completion is expected and to forward the data as soon as they become available.

Finding C. Planned Housing Facilities

AMC did not have reliable estimates of the requirements for military family housing units at McGuire AFB. AMC was unable to justify requirements because AMC did not conduct a site survey on the availability of housing at McGuire AFB, did not consider existing tri-Service agreements, and did not perform an economic analysis of the local housing market. As a result, AMC may overbuild at McGuire AFB and waste scarce BRAC MILCON or MILCON resources.

Background

Housing Plans. AMC planned to construct 502 military family housing units for McGuire AFB personnel. The 502 military family housing units, valued at $63.6 million, were to be constructed at the Fort Dix-Sheridanville housing community, which is adjacent to McGuire AFB. Table 11 shows that both BRAC MILCON and MILCON funding were planned for the military family housing projects.

Table 11. Planned Military Family Housing Projects

Funding Source	Project	Project Amount	Number of Units
BRAC MILCON	PTFL943179	$49,533,000	391
MILCON	*	14,100,000	111
Total		$63,600,000	502

*Project is planned for FY 1997 but has not been funded.

Guidance For Developing Housing Requirements And Cost. The following criteria provide guidance for planning, programming, and developing requirements and cost estimates for both BRAC MILCON and MILCON family housing projects.

o DoD Manual 4165.63-M, chapter 2, "Guidelines for Management of Family Housing," June 1988, states that the responsibilities of a family housing office should include, but should not be limited to, preparation and analysis of family housing surveys, management reports, and studies and planning and programming for acquisition and improvement of family housing.

o DoD Instruction 7041.3, "Economic Analysis and Program Evaluation for Resource Management," states that the concepts of economic analysis and program evaluation constitute an integral part of the DoD planning, programming, and budgeting system.

Conducting a Site Survey

AMC did not conduct a site survey of the local housing market in communities adjacent to McGuire AFB. DoD Manual 4165.63-M requires that the construction of new military family housing units shall be based on the current military family housing situation and the projected long-range military family housing requirements.

On July 29, 1993, the Air Force Base Closure Executive Group directed AMC to conduct a site survey to validate the total housing deficit at McGuire AFB. In response to the direction, AMC submitted a February 1992 DD Form 1523, "Military Family Housing Justification." The DD Form 1523 is used to justify military family housing construction to DoD and to Congress. The February 1992 form identified a 242-unit deficit in military family housing at McGuire AFB, but the Air Force did not have support for that figure. The February 1992 DD Form 1523 projects an additional deficit of four military family housing units in FY 1996, for a total projected military family-housing-unit deficit of 246 military family housing units (242 plus 4). At the time of our audit, AMC had still not conducted a military family housing site survey as directed by the Air Force Base Closure Executive Group. AMC planned to perform a military family housing site survey in April 1994. As of August 16, 1994, AMC had not provided us the results of the family housing site survey.

Considering Tri-Service Housing Agreements

AMC did not consider tri-Service housing agreements between Army and Air Force officials to resolve the FY 1992 military family housing deficit at McGuire AFB. Air Force requested and received approval to occupy 300 military family housing units under Army management located in the Garden Terrace housing area of Fort Dix, an Army installation adjacent to McGuire AFB. The 300 military family housing units were intended to satisfy the FY 1992 projected 246-family-housing-unit deficit at McGuire AFB and the 54-family-housing-unit requirement to accommodate the realignment of KC-10s to McGuire AFB. We determined that the February 1992 DD Form 1523 did not include the additional 300 family housing units located in the Garden Terrace housing area of Fort Dix. AMC officials stated they were aware of the omission, and stated that the planned April 1994 family housing survey would correct this oversight.

Performing an Economic Analysis

AMC did not perform an economic analysis for constructing the 391 BRAC MILCON and 111 MILCON military family housing units at the Fort Dix-Sheridanville housing community. AMC officials stated that, because of time constraints, the economic analysis could not be performed. Although the BRAC process operates under stringent time constraints, the August 2, 1991, memorandum from the Comptroller of the Department of Defense requires that an economic analysis be performed on all MILCON projects in excess of $2 million. The memorandum does not exclude BRAC MILCON. Also, although the BRAC MILCON project for 391 units may have had time constraints, the MILCON project for 111 units did not have any time constraints.

Changed McGuire Air Force Base Military Family Housing Requirements

After our field work, AMC changed its military family housing deficit from 502 units to 670 units. The 670-unit deficit was calculated by adding the realignment of personnel to McGuire AFB for BRAC, for the Air Mobility Operations Group, for the Air Mobility Warfare Center, and for the realignment of KC-10s from Seymour Johnson AFB to the 246-unit deficit identified on the February 1992 DD Form 1523. AMC also factored in partial offsets to reflect the realignment of C-141 aircraft from McGuire AFB to other installations, resulting in the 670-unit deficit figure.

AMC Projected Military Family Housing Deficit Calculation. Despite our repeated efforts to obtain the data, AMC was not able to provide support to us for its projected 670-unit deficit calculation. Further, AMC did not consider in its calculations the 300 housing units available at Fort Dix.

Inspector General, DoD, Projected Military Family Housing Deficit Calculation. Because AMC was unable to provide us any documentation to support the 670-unit deficit, we were unable to confirm a surplus or a deficit in military family housing at McGuire AFB. However, when we used their unsupported data, we were still unable to arrive at the 670-unit figure. According to our calculations, using the AMC unsupported data and considering the 300 units at Fort Dix, we calculated a 253-unit deficit. The main difference between our calculation and the Air Force calculation is the number of family-housing-units available at McGuire AFB and Fort Dix, prior to Air Force realignments. The Air Force believes there is a 246 unit deficit, and we believe there is a 136 unit surplus.

We disagree with the Air Force because the Air Force used a projected 246 unit deficit which was shown on a DD Form 1523, issued February 1992, as their starting point. We disagree because the 246 unit deficit was based on obsolete

data and does not include any family housing units available at Fort Dix, New Jersey. The obsolete DD Form 1523 was generated with data collected prior to February 1992. The Air Force did not include the 300 Army family housing units available to the Air Force at Fort Dix, New Jersey in their calculation of a 670 family housing unit deficit at McGuire AFB. In addition, the Air Force calculation did not include an additional 78 family housing units available at Fort Dix, New Jersey as of July 5, 1994. We determined that the Air Force will have a 136 (242 minus 300 minus 78) family housing unit surplus instead of a 246 family housing unit deficit at McGuire AFB before any consideration is given to the Air Force realignments. However, neither the Air Force calculations, nor our calculations can be given full credence in the absence of current data.

Table 12 shows how we arrived at the 253-unit deficit.

Table 12. Military Family Housing Deficit Calculation

Requirements for Units	Units
Surplus units as of July 1994	136
Units available after move of C-141 aircraft	515
Housing units available	651
Units needed for:	
Air Mobility Operations Group	268
Air Mobility Warfare Center	123
Realignment of KC-10s from Seymour Johnson AFB	122
Realignment of KC-10s from Barksdale AFB	391
Additional housing units needed	904
Net Housing unit deficit	253

Recommendations, Management Comments, and Audit Response

We recommend that the Commander, Air Mobility Command, defer planned funding for 111 military family housing units at McGuire Air Force Base until Air Mobility Command officials:

1. Conduct a site survey to validate the family housing deficits at McGuire Air Force Base as requested by the Air Force Base Closure Executive Group.

Management Comments. The Air Force nonconcurred with the recommendation but stated that the Air Force would adjust the military family housing projects as necessary based on a new family housing market analysis expected to be done by June 30, 1994.

Audit Response. The actions proposed by the Air Force are responsive to the recommendation except that the analysis was still not completed as of August 26, 1994. We request the Air Force to complete the family housing market analysis and include the housing availability at Fort Dix, which the Air Force had not previously considered. We request the Air Force to provide the results of the housing market analysis in its comments on the final report.

2. Conduct an economic analysis of the Fort Dix-Sheridanville housing community to determine whether renovating the housing units to meet the housing deficits is cost-effective.

Management Comments. The Air Force partially concurred with the recommendation. The Air Force will do an economic analysis for 111 MILCON family housing units when the project is submitted to Congress for approval. The Air Force had done a comparative economic analysis based on in-house estimates of the work required to renovate the Fort Dix housing. A formal analysis was not done because of time constraints.

Audit Response. The Air Force proposed action meets the intent of our recommendation. However, the comparative economic analysis done by AMC was for Garden Terrace at Fort Dix, not Sheridanville. Also, we question the reasonableness of the economic analysis. For example, AMC estimated $69,500 per unit to bring the Fort Dix housing up to the Air Force standards. The $69,500 included $4,000 to relocate a washer and dryer, $8,000 for a patio/privacy fence, $5,500 to remodel a kitchen, and $9,200 to add additional space. However, based on a joint visit to McGuire AFB, we determined that the family housing units at the Fort Dix Garden Terrace housing community are in excellent condition. The Deputy Assistant Secretary of the Air Force (Installations) and other Air Force personnel accompanied our staff (July 16, 1994) to inspect a Fort Dix Garden Terrace housing unit, and found the unit freshly painted and spotless. We request that the Air Force conduct a formal economic analysis of the Fort Dix Sheridanville housing community. The economic analysis should be for the total (BRAC and non-BRAC MILCON) family housing requirements at McGuire AFB. We request the Air Force to provide a copy of the economic analysis in its response to the final report.

3. Revise the planned $14.1 million military construction family housing project estimate to reflect the results of the site survey and the economic analysis.

Management Comments. The Air Force nonconcurred with the recommendation. The Air Force recommended withholding funds for the military family housing until the housing market analysis and economic analysis were completed. The housing market analysis will include known force structure changes and realignment such as those announced in February 1994.

Audit Response. The proposed Air Force action meets the intent of the recommendation. We request that the Air Force provide us with its revised MILCON and BRAC MILCON family housing plans, along with supporting documentation, after considering the new housing market analysis and the economic analysis. The Air Force should also provide the time when the actions will be completed. The housing market analysis was not done as of August 26, 1994. We request the Air Force to provide the information in its response to the final report.

Part III - Additional Information

Appendix A. Projects to Support the Base Realignment and Closure of K.I. Sawyer Air Force Base

Project Title	Project	Project Cost
Air Combat Command		
Barksdale AFB		
Large Aircraft Maintenance Dock*	AWUB962301	$ 9,200,000
Alter Supply and Equipment Warehouse*	AWUB962302	780,000
Add/Alter General Purpose Aircraft Maintenance*	AWUB962303	330,000
Conventional Maintenance Unit/ Operations Facility*	AWUB962304	1,600,000
Inert/Support Equipment Storage Facilities*	AWUB962305	2,500,000
Munitions Assembly Facility*	AWUB962306	470,000
Above Ground Magazine Storage*	AWUB962307	1,400,000
Fairchild AFB		
Inert Support Equipment Storage	GJKZ940057	1,050,000
Air Combat Command Total		$17,330,000
Air Mobility Command		
McGuire AFB		
KC-10 Squadron Operations/Aircraft Maintenance Unit Facility	PTFL943100	$8,100,000
Alter Interim Facilities*	PTFL943104	560,000
Fuel Systems Maintenance Dock*	PTFL943110	9,400,000
Corrosion Control Facility*	PTFL943111	9,200,000
KC-10 Maintenance Hangar*	PTFL943112	11,400,000
KC-10 Contractor Operated and Maintained Base Supply Facility*	PTFL943113	6,400,000
KC-10 Flight Simulator*	PTFL943114	4,350,000
Add to and Alter Vehicle Maintenance Complex	PTFL943121	2,000,000
Refueling Operations Facility	PTFL943128	3,300,000
Add to Parking Ramp	PTFL943150	$ 16,500,000

*Project was adequately supported.

Project Title	Project	Project Cost
Hydrant Fueling System	PTFL943151	22,000,000
Extend Hot Water Distribution System*	PTFL943155	400,000
Communication Ducts*	PTFL943157	1,000,000
Contingency Communication Element*	PTFL943160	1,950,000
Cryogenic Storage Area*	PTFL943161	930,000
Control Tower	PTFL943165	3,200,000
Upgrade Roads	PTFL943167	1,400,000
Add to Base Supply	PTFL943168	300,000
Add to and Alter Child Development Center	PTFL943172	2,100,000
Aeromedical Services Clinic	PTFL943174	5,100,000
Enlisted Dormitory	PTFL943176R3	6,000,000
Family Housing	PTFL943179	49,533,000
Air Mobility Command Total		$165,123,000
Air Force Reserve		
McGuire AFB		
KC-10 Squadron Operations/Aircraft Maintenance Unit Facility (AFRES)	PTFL943102	6,900,000
Air Force Reserve Total		6,900,000
BRAC MILCON Total		$189,353,000

*Projects was adequately supported.

Appendix B. Military Construction and Renovation Projects for McGuire Air Force Base

Project Title	Project	Project Cost
New Dormitory Construction	PTFL923001	$ 8,700,000[1]
New Dormitory Construction	PTFL933002	13,400,000[2]
New Dormitory Construction	PTFL933003	13,800,000[2]
New Dormitory Construction	PTFL943191	1,600,000[2]
New Dormitory Construction	PTFL983003	10,500,000[1]
Family Housing		14,100,000[1,3]
MILCON Funding Total		$62,100,000
Dormitory Renovations	PTFL951006	$ 2,100,000
Dormitory Renovations	PTFL961002	2,200,000
Dormitory Renovations	PTFL971001	2,300,000
Dormitory Renovations	PTFL981001	2,300,000
Dormitory Renovations	PTFL991001	1,100,000
Dormitory Renovations	PTFL991002	2,400,000
Dormitory Renovations	PTFL001001	2,500,000
Dormitory Renovations	PTFL011001	2,600,000
Dormitory Renovations	PTFL021001	2,700,000
Real Property and Maintenance Total		$20,200,000[4]
Total		$82,300,000

[1]Part of the total $33.3 million in dormitory and family housing to be suspended.
[2]Part of the total $28.8 million in dormitory construction to be cancelled.
[3]Project is planned for FY 1997 but has not been funded.
[4]Of this amount, $14.7 million is to be cancelled and $5.5 million is to be suspended for dormitory renovations.

Appendix C. Summary of Prior Audits and Other Reviews

Inspector General, DoD

Report No.	Report Title	Date
94-146	Defense Base Realignment and Closure Budget Data for Closing Naval Air Station Cecil Field, Florida, and Realigning Projects To Various Sites	June 21, 1994
94-141	Defense Base Realignment and Closure Budget Data for the Realignment for Naval Air Station Dallas, Texas, and Memphis, Tennessee, Realigning to Carswell Air Reserve Base, Texas	June 17, 1994
94-127	Defense Base Realignment and Closure Budget Data for the Realignment of the Defense Personnel Support Center to the Naval Aviation Supply Compound in North Philadelphia, Pennsylvania	June 10, 1994
94-126	Defense Base Realignment and Closure Budget Data for the Closure of Naval Air Station Glenview, Illinois, and Realignment Projects at Fort McCoy, Wisconsin, and Carswell Air Reserve Base, Texas	June 10, 1994
94-125	Defense Base Realignment and Closure Budget Data for the Naval Medical Center Portsmouth, Virginia	June 8, 1994
94-121	Defense Base Realignment and Closure Budget Data for Naval Air Technical Training Center, Naval Air Station, Pensacola, Florida	June 7, 1994
94-109	Quick-Reaction Report on the Audit of Defense Base Realignment and Closure Budget Data for Naval Training Center Great Lakes, Illinois	May 19, 1994

Inspector General, DoD (cont'd)

94-108	Quick-Reaction Report on the Audit of Defense Base Realignment and Closure Budget Data for Naval Station Treasure Island, California	May 19, 1994
94-107	Griffiss Air Force Base, New York, Defense Base Realignment and Closure Budget Data for Military Construction at Other Sites	May 19, 1994
94-105	Defense Base Realignment and Closure Budget Data for a Tactical Support Center at Naval Air Station Whidbey Island, Washington	May 18, 1994
94-104	Defense Base Realignment and Closure Budget Data for the Defense Contract Management District-West	May 18, 1994
94-103	Air Force Reserve 301st Fighter Wing Covered Aircraft Washrack Project, Carswell Air Reserve Base, Texas	May 18, 1994
94-040	Summary Report on the Audit of Defense Base Closure and Realignment Budget Data for Fiscal Years 1993 and 1994	February 14, 1994
93-100	Summary Report on the Audit of Defense Base Closure and Realignment Budget Data for Fiscal Years 1992 and 1993	May 25, 1993

Naval Audit Service

023-S-94	Military Construction Projects Budgeted and Programmed for bases Identified for Closure or Realignment	January 14, 1994
023-C-93	Implementation of the 1993 Base Closure and Realignment Process	March 15, 1993

Appendix D. Description of Projects With Inadequate Documentation to Support Requirements

D.1. Project PTFL943128, Refueling Operations Facility, Valued at $3,300,000

Refueling Operations Facility. AMC planned to demolish the existing petroleum operations building and maintenance building at McGuire AFB to make space available for the realignment of KC-10s from Barksdale AFB. The two new buildings to be constructed will be:

o a petroleum operations building, to provide a centralized building for the management and control of all base functions related to the handling of petroleum products and

o a five-bay maintenance building that includes two bays for daily vehicle inspection and service and three bays for repair of fuel trucks and hydrant hose trucks.

Requirement for Refueling Operations Facility. AMC overstated the space requirements for the petroleum operations building and five-bay maintenance building by 4,050 square feet (11,500 minus 7,450). AMC programmed 11,500 square feet for the two buildings. However, Air Force Manual 86-2 only allows a total of 7,450 square feet. As a result, the refueling operations facility is overstated by $373,500 as shown in Table D-1 on the following page.

Additional Consideration. The space requirement for the refueling operations facility may be even further reduced when the planned hydrant fueling system, project PTFL943151, is completed. Once the hydrant fueling system is completed, McGuire AFB will need less administrative space and fewer maintenance bays because the number of personnel and refueling trucks assigned to this function will be reduced. The KC-10s will be refueled using the hydrant fueling system, which requires fewer personnel and refueling vehicles.

Appendix D. Description of Projects With Inadequate Documentation to Support Requirements

D-1. Overstated Requirement and Costs for the Refueling Operations Facility

Facility Element	Air Force Estimated Requirement[1] (square feet)	Inspector General Estimated Requirement[2] (square feet)	Overstated Requirement[3] (square feet)	Cost Per Square Foot[4]	Overstated Cost[5]
Petroleum Operations Building	4,000	3,850	150	$150	$22,500
Five-Bay Preventive Maintenance Building					
Two-Bay	3,100	0[6]	3,100	90	279,000
Three-Bay	4,400	3,600	800	90	72,000
Five-Bay Subtotal	7,500	3,600	3,900		$351,000
Total	11,500	7,450	4,050		$373,500

[1]As shown on the Air Force DD Form 1391.
[2]The square feet allowed by Air Force Manual 86-2.
[3]Calculated by subtracting the Air Force estimated requirement from the Inspector General estimated requirement.
[4]As shown on the Air Force DD Form 1391.
[5]Calculated by multiplying the overstated requirement by the cost per square foot.
[6]The square feet for daily inspection and service are included in the 3,850-square-foot requirement for the petroleum operations building as required by Air Force Manual 86-2.

Air Force Comments. The Air Force partially concurred with draft Recommendation A.1.a.(1) and agreed to reduce the project by $72,000. The Air Force concurred with draft Recommendation A.4.a. to revise the DD Form 1391 to better clarify project requirements. This DD Form 1391 will also reflect the cost reduction of $72,000. The Air Force stated that the auditors misinterpreted the existing DD Form 1391. The 4,000 square feet on the DD Form 1391 was for the three-bay vehicle repair shop and not the petroleum operations function as interpreted by the auditors. The 7,500 square feet on the DD Form 1391 included 4,100 square feet for the petroleum operations and 3,400 square feet for the preventive maintenance function (the two bays for the daily vehicle inspection).

Three-Bay Vehicle Repair Shop. The Air Force stated that an additional 400 square feet is needed for the three-bay vehicle repair shop to accommodate the R-11 refueling trucks. The 3,600 square feet allowed by Air Force Manual 86-2 is programmed for the smaller R-9 refueling truck.

Petroleum Operations Building. The Air Force partially concurred with the recommendation to reduce the 4,100 square feet for the petroleum operations building by 250 square feet to meet the 3,850 square feet allowed by Air Force Manual 86-2. Accordingly, the DD Form 1391 will be reduced by $72,000.

Two-Bay Preventive Maintenance. The Air Force supports the 3,400 square feet for the preventive maintenance function. Air Force Regulation 144-1 allows a covered shelter for the preventive maintenance function when inclement weather poses a hazard to personnel.

Table D-2. summarizes the Air Force new square footage requirements for the refueling operations facility.

Table D-2. New Square Footage Requirements for the Refueling Operations Facility

Facility Element	Air Force Estimated Requirement (square feet)
Three-Bay Vehicle Repair Shop	4,000
Preventive Maintenance and Petroleum Operations Building	
Two-Bay Preventive Maintenance	3,400
Petroleum Operations Building	4,100
Subtotal	7,500
Total	11,500

Audit Response. We partially agree with the Air Force's comments to our draft Recommendation A.1.a.(1) to reduce project funding and with our draft Recommendation A.4.a. to resubmit a revised DD Form 1391 reflecting the reduction of $72,000. However, the Air Force comments conflict with AMC supporting documentation provided during our audit field work. We conducted our analysis using the information provided by the AMC designated point of contact for the refueling operations facility and not on our interpretation of the DD Form 1391. We determined from the interviews with AMC personnel and from reviewing building diagrams that the refueling operations facility consisted of a 4,000-square-foot petroleum operations building and a 7,500-square-foot maintenance building. The maintenance building consisted of five bays: 3,100 square feet for two bays for preventive maintenance and 4,400 square feet for three bays for repair of fuel trucks. In addition, the unit costs on the DD Form 1391 were programmed for these square feet. For example, the

Air Force programmed 4,000 square feet for the petroleum operations building with a unit cost of $150 (rounded). This $150 amount agrees with the Historical Air Force Construction Cost Handbook.

The space requirements the Air Force submitted in response to our draft report are unsupported and still exceed the space allowances in Air Force Manual 86-2. The following describes the Air Force's overstatement of the requirement for each facility element.

Three-Bay Vehicle Repair Shop. The Air Force computation of the extra 400 square feet for the vehicle repair shop is questionable. We estimated a need for 111.25 square feet instead of 400 square feet. We calculated the estimated need for 111.25 square feet by multiplying the additional length and width of the R-11 refueling truck by three for the three bays (4.125 square feet x 8.83 square feet x 3).

Preventive Maintenance. We disagree with the Air Force contention that a covered 3,400-square-foot preventive maintenance facility is needed. Air Force Manual 86-2 only allows 250 square feet for a preventive maintenance area.

In addition, Air Force officials have not shown that the weather conditions in New Jersey pose a hazard to personnel. Air Force Regulation 144-1, states that only vehicles needed to support daily mission requirements must be inspected. An inspection consists only of the following: a check of the lights and turn signals, a check of the tires, a draining of the sump and filter separator if needed, and cleaning the cab interior.

However, if a covered shelter is necessary, we estimate a need of only 2,010 square feet for the preventive maintenance function. This requirement is based on square footage from the original building diagrams. The original building diagrams depict a maintenance bay that is 55 feet long and 16 feet wide. Multiplying 880 square feet (55 times 16) by 2 and adding the 250 square feet allowed by Air Force Manual 86-2 equates to 2,010 square feet.

Petroleum Operations Building. The Air Force overstated the petroleum operations building requirement by 500 square feet. The Air Force agreed to reduce the requirement by 250 square feet to meet Air Force Manual 86-2 requirements (4,100 minus 250 equals 3,850). However, the Air Force should reduce the requirement by an additional 250 square feet because 250 square feet for preventive maintenance was already included in the total 3,850 square feet requirement.

Additional Review. In addition, after a further review of DD Form 1391, we questioned the $900,000 cost for pavement for parking spaces for the 29 refueling trucks (9 R-9s, 18 R-11s, 1 gasoline and 1 diesel truck) at McGuire AFB. We estimate a requirement of 2,836 square yards at a cost of $394,204. We calculated the square feet by multiplying 880 square feet (55 feet long by 16 feet wide) by 29 vehicles and dividing the result by 9. We estimated the cost by multiplying the 2,836 square yards by $139 based on the highest unit costs from the Historical Air Force Construction Cost Handbook

for airfield site clear and excavate ($14 per square yard), airfield base for concrete ($51 per square yard) and 24-inch jointed concrete ($74 per square yard).

We revised our recommendation to reduce project funding by $72,000 instead of $373,000 (final report Recommendation A.1.a.[8]). Further, we have added Recommendation A.1.b.(4) to suspend $3,228,000 until AMC can provide adequate documentation to support the space requirements and cost estimate. AMC should submit to us a revised DD Form 1391 and appropriate supporting documentation in its response to the final report.

D.2. Project PTFL943167, Upgrade Roads, Valued at $1,400,000

AMC planned to upgrade the roads on McGuire AFB because of presumed damage to the roads that would occur during construction of the realignment projects. During the week of January 24, 1994, AMC officials told us that the basis for estimating the requirement and cost was conjecture with no support. Subsequently, AMC provided documentation they used to develop the requirement. However, the documentation did not provide any objective support for the need to upgrade the roads. For example, AMC had nothing to support how much road would need repairing, the degree of repair needed, and the "normal" road repair that would share the repair cost with BRAC.

Air Force Comments. The Air Force nonconcurred with the draft Recommendation A.1.a.(2) to delete the project. Air Force stated that the existing roads along the haul route for construction at McGuire are in good condition and that construction equipment would damage the roads. The $1.4 million is a worst-case estimate for damage to the 12,860 linear feet along the haul route. The actual extent of the road damage will depend on the road conditions at the time of construction and the exact loads, the duration, the types of vehicles traveling on the roads, and the weather preceding and during construction. The Air Force will keep this project intact at $1.4 million, but withhold the funds until the extent of damage is known along the haul route after construction is completed.

Audit Response. The Air Force comments are partially responsive to the recommendation. Based on documentation provided by the Air Force, we agree that damage to the roads may occur as a result of BRAC MILCON projects; however, Air Force has not clarified the sharing of costs associated with road damages for planned MILCON projects as well as for normal vehicle travel. We revised our recommendation to suspend instead of delete the $1.4 million (final report Recommendation A.1.b.[5]) and we added Recommendation A.4.j., requiring the Air Force to resubmit a revised DD Form 1391 with adequate supporting documentation detailing the sharing of costs attributable to damages to roads due to BRAC MILCON, regular MILCON, and normal use.

D.3. Project PTFL943168, Add to Base Supply, Valued at $300,000

This project was to construct a 2,000-square-foot weapons storage vault in the main base warehouse, building 3101, to support the realignment of the KC-10 aircraft to McGuire AFB. The realignment will require an additional 600-plus pistols and 2,400-plus mobility bags to be stored at McGuire AFB to support troop mobilizations.

AMC Plans for Storage. The existing inventory of mobility bags and pistols is stored in building 3423. AMC planned to put the existing inventory of pistols and the additional 600-plus pistols in the newly constructed weapons storage area in building 3101 and the existing mobility bags and the additional 2,400-plus bags in building 3423.

AMC Support for Storage Plans. AMC officials stated that the current base supply mobility storage vault did not have the proper capacity to accommodate the additional 600-plus weapons. This conclusion was based on observation and personal judgment. AMC did not assess the total number of mobility bags and pistols to be stored and the square feet needed to store this amount of equipment. Further, the BRAC MILCON should not absorb 100 percent of the cost of the new vault because existing weapons will also be stored in the new vault. AMC is using BRAC funding to build a new, upgraded weapons vault at McGuire AFB rather than just building what is necessary to support the additional weapons from the realignment.

Air Force Comments. The Air Force concurred with our draft Recommendation A.1.a.(3) and planned to cancel the project.

Audit Response. We consider the Air Force comments responsive. We consider the Air Mobility Command comments to be responsive. However, we request the Air Force to provide to us a proposed completion date and documentation to support the cancellation of project PTFL943168 in its response to the final report.

D.4. Project PTFL943174, Aeromedical Services Clinic, Valued at $5,100,000

Clinic Requirement. The Air Force occupied the existing medical facility at McGuire AFB in October 1992 as an interim health care facility until a replacement facility could be constructed. Construction of the Aeromedical Services Clinic, which is a stand-alone facility, is the first phase of a plan to replace the inadequate and unsafe existing hospital. AMC will fund the replacement medical facility at McGuire AFB from two medical MILCON projects, BRAC MILCON project PTFL943174, valued at $5.1 million, and a

non-BRAC MILCON project, "Ambulatory Health Care Center," valued at $44 million. The Aeromedical Services Clinic is an addition to the ambulatory health care center.

BRAC Share of Clinic Cost. The BRAC project should only fund the prorated share of the total clinic cost based on the increase in patient workload caused by the closure of K.I. Sawyer AFB and realignment of troops to McGuire AFB. The methodology used by AMC to estimate the BRAC associated cost for the clinic understated the patient-load for the clinic and overstated the BRAC-associated costs for the clinic.

Original Estimated BRAC Share. AMC only considered an increase of 668 active-duty Air Force personnel in the space calculations for the clinic. They did not consider non-Air Force active-duty personnel, dependents, retirees, and other eligible beneficiaries in developing the BRAC project requirements. As a result of the incorrect methodology, the Air Force calculated that BRAC-associated patients represented 11.7 percent of the patient load for the clinic. This patient load equated to 23,400 square feet of clinic space as the BRAC fair share of the total Ambulatory Health Care Center space requirement.

Revised Estimated BRAC Share. A more accurate estimate of the BRAC prorated share of the clinic is 4.8 percent, which equates to 9,135 square feet. Table D-2 shows the recalculation of the Aeromedical Services Clinic space and cost estimate based on the total users of the clinic.

Table D-2. Revised Calculation for Aeromedical Services Clinic Space Requirement and Cost Estimate

	Prorated Percent	Square Feet	Projected Cost
Original Estimate	11.7	23,400	$5,100,000
Revised Estimate	4.8	9,135	$1,950,000
Difference	6.9	14,265	$3,150,000

Air Force Actions. Based on our discussions with AMC personnel about the incorrect methodology, AMC decreased the estimated cost of the Aeromedical Services Clinic from $5.1 million to $1.95 million. In addition, AMC revised its total space requirement for Ambulatory Health Care Center from 200,000 square feet to 190,321 square feet to reflect a comparison with a similar clinic at Maxwell AFB, Alabama.

Air Force Comments. The Air Force concurred with our draft Recommendation A.1.a.(4) to reduce the project funding by $3,150,000.

Audit Response. We consider the Air Force comments to be responsive to our recommendation to reduce project funding. However, we have added Recommendations A.1.b.(11) and A.4.k. to suspend the remaining $1,950,000 in project funding until AMC revises and resubmits to us an approved DD Form 1391 reflecting the reduction in project funding. AMC should provide a completion date for its proposed action.

Appendix E. Description of Projects That Did Not Consider Existing Facilities

E.1. Project GJKZ940057, Inert Support Equipment Storage, Valued at $1,050,000

Requirement for Inert Support Equipment Storage. The primary purpose of this project is to construct a storage facility at Fairchild AFB to accommodate existing and incoming air-launched cruise missile support equipment. The support equipment includes launch load adapters and munitions haul trailers, which are stored together as a single package. Each package requires 912 square feet of storage space.

ACC Estimate of Project Requirement. ACC officials requested construction of a 7,000-square-foot facility at a cost of $1,050,000 based on the original contractor-facility design criteria and a "tabletop" analysis of how much additional space would be required to store additional missiles and equipment. According to ACC officials, ACC did not perform a site survey at Fairchild AFB to assess existing conditions because there was not enough time to do so. Also, ACC did not contact the civil engineering personnel at Fairchild AFB to obtain information on existing conditions in the absence of a site survey.

Fairchild AFB Estimate of Project Requirement. Officials from the 92nd Civil Engineering Squadron at Fairchild AFB stated that the 7,000-square-foot facility was inadequate because the size of the facility would not meet the storage needs required for the air-launched cruise missile support equipment. The planned 7,000-square-foot facility would only accommodate about seven complete equipment packages (7,000 divided by 912). However, more than seven packages require storage.

Fairchild AFB Action. The 92nd Civil Engineering Squadron resolved the deficiency by making the inert support equipment storage facility an addition to an existing facility. The siting of the inert support equipment storage facility as an addition to building 1414 was supported by the close proximity to maintenance facilities, the accessibility for mission operations, the decreased necessity for concrete pavement and utilities construction, and the increased storage flexibility.

Adjustment to Estimate. Based on information provided by the 92nd Civil Engineering Squadron, the project cost can be reduced by $259,500 because of actions already taken ($120,000) and the prudent selection of a contractor ($139,500).

Adjustment for Actions Already Taken. According to 92nd Civil Engineering Squadron officials, adding to the existing facility minimized the need for new construction of supporting facilities, such as concrete pavement and utilities construction. The 92nd Civil Engineering Squadron officials estimated the reductions in project cost resulting from the reduced need for new supporting facilities construction to be $120,000.

Contractor Selection. The 92nd Civil Engineering Squadron estimated further cost reduction of $139,500, 15 percent of the $1,050,000 estimated project cost less $120,000 reduced need for supporting facilities, could be realized by awarding the storage facility contract to a contractor who performs both the design and construction functions.

Air Force Comments. The Air Force nonconcurred with draft Recommendation A.1.a.(7) (now Recommendation A.1.a.[4]), to reduce the project cost by $259,500. The Air Force stated that the project requirements were reexamined, resulting in a current cost estimate of $1.01 million to construct this facility. The Air Force stated that, if the project funding is reduced to $790,500, the Air Force will not be able to execute the project requirements. The Air Force nonconcurred with draft Recommendation A.3. and recommended the original programmed amount of $1.05 million remain unchanged based on their current cost estimate and unforeseen conditions.

Audit Response. We consider the Air Force comments to be unresponsive. Although the Air Force's reexamination of the project requirements indicated a $40,000 reduced cost, the Air Force disagreed with any funding reduction to the project. Based on the Air Force's current cost estimate of $1.01 million, we have revised our Recommendation A.1.a.(4) to reduce project funding by $40,000 and added Recommendation A.1.b.(7) to suspend funding in the amount of $1,010,000 until ACC provides us with the current cost estimate and other necessary supporting documentation that substantiate the project requirements and costs.

E.2. Project PTFL943113, KC-10 Contractor Operated and Maintained Base Supply Facility, Valued at $6,400,000

According to a contract with Lockheed Aero Mod Centers, Incorporated, McGuire AFB must provide a 45,200-square-foot maintenance and aircraft parts supply facility for the KC-10 aircraft realigning from Barksdale AFB. Existing facilities at McGuire AFB could support this BRAC project for the KC-10 Contractor Operated and Maintained Base Supply Facility. According to McGuire AFB officials, buildings 1809 and 1811, which are occupied by the Air National Guard, could be used to support the requirement. The Air National Guard can be relocated to building 3207 temporarily until a $30 million MILCON project to consolidate operations of the Air National

Guard on McGuire AFB is completed. AMC officials were unable to determine the status of the $30 million project to construct the new Air National Guard facilities at McGuire AFB.

Air Force Comments. The Air Force nonconcurred with draft Recommendation A.1.a.(8.) to delete the funding for this project. The Air Force stated that the Air National Guard occupies building 1811, which is 6,000 square feet smaller than the required 42,600 square feet needed for the KC-10 contractor operated and maintained base supply facility. The Air Force stated that building 1809 is Air Force-owned; however, building 1809 is also 6,000 square feet smaller than the needed space for the KC-10 contractor operated and maintained base supply facility.

Audit Response. We partially agree with the Air Force comments. Building 1811 is owned by the National Guard and is 6,000 square feet smaller than the 42,600 square feet needed for the KC-10 Contractor Operated and Maintained Base Supply Facility, however building 1809 is not 6,000 square feet smaller as suggested by the Air Force. Building 1809 is 50,487 square feet, which exceeds the Air Force requirements by 7,887 square feet. Further, Air Force intends to use building 1809 for the KC-10 Contractor Operated and Maintained Base Supply and Dash-21 Facility temporarily. The Air Force statement that building 1809 would cost $3.4 million to bring up to the standards required for the Contractor Operated and Maintained Base Supply Facility contract is not accurate because the 50,487 square feet exceeds the contractor needs by 7,887 square feet. Furthermore, Air Force alternatives to construct a $1.2 million addition to building 1809 for the dash-21 facility is less than the $6.4 million planned for the new Contractor Operated and Maintained Base Supply Facility.

Therefore, we have revised draft Recommendation A.1.a.(8) to suspend $6.4 million (final report Recommendation A.1.b.[8]) and require that the Air Force reassess existing facilities. Further we have added Recommendation A.4.i., requiring the Air Force to provide us with a revised DD Form 1391 with adequate supporting documentation.

E.3. Project PTFL943121, Add to and Alter Vehicle Maintenance Complex, Valued at $2,000,000

AMC officials overstated this project by $925,000 by overestimating McGuire AFB actual needs as shown in Table E-1.

Table E-1. Cost for Vehicle Maintenance Complex

	AMC Cost	Allowable Cost	Overstated Cost
Square Feet	8,600	1,485	7,115
Cost per Square Foot	x $130	x $130	x $130
Total	$1,118,000	$193,050	$924,950

AMC officials estimated the need for an 8,600-square-foot facility based on 50 equivalent vehicles. However, McGuire AFB officials told us that the space for the facility should be based on 20 equivalent vehicles rather than 50 equivalent vehicles. Air Force Manual 86-2 (category code 214-425), allows 74.25 square feet per equivalent vehicle. Therefore, the allowable requirements for equivalent vehicle space is 1,485 square feet for the Vehicle Maintenance Complex. We used the unit facility cost from the DD Form 1391 at $130 per square foot.

Air Force Comments. The Air Force nonconcurred with draft Recommendation A.1.a.(9), stating that Air Force Manual 86-2 specifies that the facility requirements for vehicles be based on vehicle equivalents and that Air Force Manual 77-310 provides the conversion factors/tables used to determine vehicle equivalents.

Audit Response. We agree with the actions taken by the Air Force to satisfy the requirements needed for the Vehicle Maintenance Complex and have deleted the recommendation to reduce the project funding from the final report. We require no further comments from the Air Force on project PTFL943121.

E.4. Project PTFL943150, Add to Parking Ramp, Valued at $16,500,000

Need for Parking Ramp Addition. The parking ramp project extends the existing ramp facilities to accommodate 19 KC-10 aircraft realigning from Barksdale AFB to McGuire AFB. Additional space is needed for 7 of the 19 realigning aircraft.

Parking Ramp Space Requirement. AMC estimated the parking ramp requirement at McGuire AFB to be 146,000 square yards. Based on the criteria in Air Force Regulation 86-2, we estimated that AMC overstated the ramp requirements by 75,931 square yards. AMC either included space not used by KC-10 aircraft realigning from Barksdale AFB or did not compute the space correctly. Table E-2 shows how we calculated the overstated parking ramp requirement.

Parking Ramp Cost Estimate. AMC overstated the project cost estimate for the additional ramp space by $6,719,811 ($6,150,411 based on the overstated ramp space cost plus $569,400 for BRAC share of related construction).

Table E-2. Calculation of Parking Ramp Requirement

Ramp Sector[1]	AMC Ramp Calculation (square yards)	Number of KC-10s	Allowable Ramp Calculation[2] (square yards)	Overstated Ramp Calculation (square yards)
A	12,500	1	5,839[3]	6,661
B	35,666	1	11,678	23,988
C	2,670	0	0	2,670
D	11,560	1	5,839[3]	5,721
E	64,600	4	46,713	17,887
F	18,577	0	0	18,577
Total	145,573[4]	7	70,069	75,931[5]

[1]Ramp sector identifies areas of parking ramp used for square yard calculations.
[2]Formula for computing square yard parking requirement:
square yard space for one KC-10 aircraft multiplied by the number of KC-10 aircraft.
Formula for square yard space per aircraft:
165 feet x 182 feet x 3.5 / 9. The 165 and 182 feet are the length and width of the KC-10 aircraft, 3.5 is the factor that provides clearance between aircraft, 9 is the conversion factor from square feet to square yards.
[3]0.5 was multiplied by the formula for square yard space per aircraft, because half of the plane will be parked on the existing ramp.
[4]AMC rounded ramp space requirement to 146,000 square yards on the DD Form 1391.
[5]The column will not add because the total is based on the difference between the 146,000 square yards shown on the DD Form 1391 and our calculated allowable ramp space of 70,069 square yards.

Cost Estimate for Overstated Ramp Space. Based on $81 per square foot, as used by AMC on the DD Form 1391, we determined that AMC overestimated the additional ramp space by $6,150,411 ($81 x 75,931 square yards).

BRAC Share of Related Construction. AMC overstated the DD Form 1391 by an additional $569,400 by not allocating cost construction for a storm water retention pond between BRAC MILCON and MILCON projects. The storm water pond supported not only the BRAC MILCON project but also supported two MILCON projects. The MILCON projects were for 54,000 square yards of ramp and were valued at $5.8 million. Therefore, the BRAC MILCON project cost for the storm water retention pond should be shared by all the projects.

Air Force Comments. The Air Force nonconcurred with draft Recommendations A.1.a.(10) and A.4.c, stating that the Air Force selected the least expensive option for the aircraft parking plan. The Air Force stated that our calculations failed to consider a new parameter taxiway located outside the parking ramp that is needed to replace the existing taxiway required for parking KC-10 aircraft. Air Force Manual 86-2 allowed certain wing-tip clearance criteria based on the largest aircraft to use the ramp, the C-5. Air Force computed 78.963 square yards needed for the taxiway pavement and the cargo aircraft clearance requirement.

Storm Water Retention Pond. The Air Force stated that the storm water retention pond is required solely for the 146,000 square yards of new BRAC MILCON pavement.

Revisions to the Parking Ramp. Air Force stated that the public announcement dated February 28, 1994, would relook at the BRAC parking ramp requirements.

Audit Response. We consider the Air Force comments to be partially responsive. The Air Force provided us with a diagram of the McGuire AFB airfield that indicated a need for additional square footage that was necessary for a taxiway, however based on the public announcement dated February 28, 1994, Air Force officials stated that the parking ramp is no longer needed. Air Force officials resubmitted a revised DD Form 1391 for $6.5 million for the taxiway, however the revised DD Form 1391 was in error because the Air Force improperly cited AFM 86-2, Category 113-321 which is used for parking ramp requirements and not AFM 86-2, Category 112-211 which is used for determining taxiway clearances. Further, Air Force officials did not provide us with the supporting documentation used in developing the new taxiway requirement.

Air Force comments that the storm water retention pond was used strictly for the BRAC MILCON parking ramp project could not be substantiated because the DD Form 1391 for the MILCON parking ramp project did not allow for a storm water retention pond.

Therefore, we have revised and renumbered draft Recommendation A.1.a.(10) (now final Recommendation A.1.a.[7]) to reduce the parking ramp project to $10 million and added final report Recommendation A.1.b.(9) to suspend $6.5 million until AMC provides us with documentation to support square yardage calculations for the taxiway. Further, based on final report Recommendation A.4.(c) the Air Force should provide supporting cost estimate documentation that can be reconciled to the DD Form 1391 and revise the DD Form 1391 accordingly.

E.5. Project PTFL943172, Add to and Alter Child Development Center, Valued at $2,100,000

AMC estimated the need for a 7,800-square-foot addition to the existing child development center to accommodate an estimated 145 children realigning from Barksdale AFB. However, documentation received from McGuire AFB showed that the existing child care facilities could accommodate the 145 children from Barksdale AFB.

Based on the documentation obtained from McGuire AFB, the 7,800-square-foot addition would provide a total of 305 spaces for children, 6 weeks to 5 years of age. The existing facilities have 135 slots available and an anticipated additional 24 spaces from children leaving the child development center. As a result, 159 spaces (135 plus 24) will be available for 145 children from Barksdale AFB.

Air Force Comments. The Air Force nonconcurred with the Recommendation A.1.a.(11), stating that the current child care facilities at McGuire AFB are filled to capacity. The Air Force identified draft Air Force Instruction 32-1024, section L, paragraph 17-15, "Youth Facilities", which designated Air Force Procedure 88-38, "Design Guide for Child Development Centers," as the source for establishing the requirement.

Audit Response. We consider the Air Force comments to be unresponsive. The Air Force provided no documentation to support current use of the child care facilities. Further, the Air Force used unapproved draft Air Force Instruction 32-1024 for establishing the requirement. Air Force comments are flawed because the capacity of the child care facility is based on estimates and not historical data experiences. Although we did not receive documentation to support the need for the child care facilities at McGuire AFB, we have revised and renumbered draft Recommendation A.1.a.(11) (now Recommendation A.1.b.[10]) to suspend the project until the Air Force provides the documentation necessary to support actual use of all child care facilities at McGuire AFB to include capacity levels of the child care facilities and bases the requirement on approved, not draft Air Force regulations. We request Air Force to provide us with a revised DD Form 1391 reflecting the budget reductions in response to final report Recommendation A.4.b.

Appendix F. Description of Projects Using Unapproved Draft Criteria

F.1. Project PTFL943100, KC-10 Squadron Operations/Aircraft Maintenance Unit Facility, Valued at $8,100,000

AMC estimated 43,600 square feet for the maintenance unit facility using draft Air Force Instruction 32-1024 to implement the AMC Consolidated Squadron Operations/Aircraft Maintenance Unit Design Guide. However, the approved Air Force Manual 86-2 (category 141-753), "Squadron Operations," allows only 12,900 square feet. We calculated the maintenance unit facility cost at $135 per square foot as used by AMC on the DD Form 1391 as shown in Table F-1.

Table F-1. Cost of KC-10 Squadron Operations/Aircraft Maintenance Unit Facility

	AMC Cost	Allowable Cost	Overstated Cost
Square Feet	43,600	12,900	30,700
Cost per Square Foot	x $135	x $135	x $135
Total	$5,886,000	$1,741,500	$4,144,500

Air Force Comments. The Air Force nonconcurred with draft Recommendations A.1.a.(12) (now Recommendations A.1.a.[5] and A.4.d.), stating that Air Force Manual 86-2 provided no guidance for the new Chief of Staff of the Air Force Objective Wing that places flight line maintenance in the operational squadron. The Air Force stated that Air Force Manual 86-2 permits exceeding the maximum building allowances when the need can be shown (Air Force Manual 86-2, chapter 2, section 2-2). The Air Force stated that the AMC Consolidated Squadron Operations/Aircraft Maintenance Unit Facility design guide provided the project requirements and are mirrored in the new draft Air Force Instruction 32-1024.

Audit Response. We consider the Air Force comments to be unresponsive to our draft Recommendations A.1.a.(12) and A.4.d. The DD Form 1391 submitted by the Air Force did not provide aircraft maintenance space needed for the KC-10 aircraft. The facility is being designed to consolidate operations and maintenance for 1 squadron of 19 KC-10 aircraft from Barksdale AFB. Currently, Barksdale AFB operations and maintenance are housed in two separate facilities. We do not agree with AMC officials statement that Air Force Manual 86-2 provides incomplete data for the facility

because category 211-154 allocates 8,400 square feet for the maintenance of a KC-10 aircraft squadron. Air Force Manual 86-2 allows 21,300 square feet (8,400 plus 12,900) for the facility, not the 43,600 square feet identified on the DD Form 1391. The excess 22,300 square feet, based on the draft Consolidated Squadron Operations/Aircraft Maintenance Unit Design Guide, was additional square feet for a physical fitness room for training on static aerobic equipment such as exercise bikes, rowing machines and stair steps, and for lounge spaces, etc. See Table F-2 for calculations.

Table F-2. Cost of KC-10 Squadron Operations/Aircraft Maintenance Unit Facility

	AMC Cost	Allowable Cost	Overstated Cost
Square Feet	43,600	21,300	22,300
Cost per Square Foot	x $135	x $135	x $135
Total	$5,886,000	$2,875,500	$3,010,500

We disagree with the Air Force contention that the use of draft Air Force Instruction 32-1024, which implements the Consolidated Squadron Operations/Aircraft Maintenance Unit Design Guide, is proper. Further, the Air Force statement that draft Air Force Instruction 32-1024 was taken from the Consolidated Squadron Operations/Aircraft Maintenance Unit Design Guide needs to be supported by AMC. AMC officials told us that documentation used in developing the Consolidated Squadron Operations/Aircraft Maintenance Unit Facility Design Guide was inadvertently destroyed. As a result of this inadvertent destruction, we could not, and can not, determine whether the requirements for the Consolidated Squadron Operation/Aircraft Maintenance Unit Design Guide are valid. Although Air Force Manual 86-2 allows the maximum 21,300 square feet for this facility, AMC officials did not provide to us documentation to support requirements and estimated costs other than providing draft regulations during our audit.

Therefore, we have revised our final report Recommendation A.1.a.(5), to reduce the project funding for the KC-10 Squadron Operations/Aircraft Maintenance Unit Facility by $3,010,500 ($135 times 22,300 square feet), using approved Air Force criteria to develop the requirements. We added Recommendation A.1.b.(12) to request the Comptroller of the Department of Defense to suspend $5,089,500 ($8,100,000 minus $3,010,500) in addition to reducing $3,010,500 (Recommendation A.1.a.[5]) for this project until receipt of supporting documentation using approved Air Force regulations. We also request the Air Force to prepare a revised DD Form 1391 by using approved Air Force criteria to develop requirements reflecting the budget reduction in its comments to the final report (now Recommendation A.4.d).

F.2. Project PTFL943102, KC-10 Squadron Operations/Aircraft Maintenance Unit Facility (Air Force Reserve), Valued at $6,900,000

AFRES estimated 37,000 square feet was needed for the AFRES operations and maintenance unit facility based on draft AFRES Regulation 86-2. The cost per square foot, $135, was obtained from the DD Form 1391. Approved Air Force Manual 86-2 only allows 12,900 square feet for this type of facility instead of 37,000 square feet. Therefore, the cost for the AFRES operations and maintenance unit facility was overstated by $3.3 million as shown in Table F-3.

Table F-3. Cost of the KC-10 Squadron Operations/Aircraft Maintenance Unit Facility (Air Force Reserve)

	AMC Cost	Allowable Cost	Overstated Cost
Square Feet	37,000	12,900	24,100
Cost per Square Foot	x $135	x $135	x $135
Total	$4,995,000	$1,741,500	$3,253,500

We asked AFRES personnel to justify the use of the unapproved draft regulation. AFRES personnel stated that Headquarters Air Force authorized its field offices to use AFRES Regulation 86-2 about a year ago. However, we were not able to obtain any documentation to substantiate the statement.

Air Force Comments. The Air Force nonconcurred with draft Recommendation A.1.a.(13) (now Recommendations A.1.a.[6] and A.5.) to reduce the project funding. The Air Force comments to KC-10 Squadron Operations/Aircraft Maintenance Unit Facility (draft Recommendation A.1.a.[12]) are in Appendix F.1.

Audit Response. We consider the Air Force comments to be unresponsive to our draft Recommendations A.1.a.(13) and A.5. Our square footage computations did not consider the 8,400 square feet needed for the maintenance facility. The Air Force Manual 86-2, category 211-154 allows an additional 8,400 square feet for maintenance and 12,900 square feet for operations (Air Force Manual 86-2, category 141-753). Using our recalculated requirements, we determined that the Air Force overstated the requirement by 15,700 square feet based on the difference between the DD Form 1391 (37,000 square feet) and the allowable 21,300 square feet (12,900 square feet plus 8,400 square feet). Using the $135 per square foot allowed on the DD Form 1391, we revised the final report Recommendation A.1.a.(6), to reduce $2,119,500 ($135 times 15,700 square feet) for the project. We added Recommendation A.1.b.(13) to request the Comptroller of the Department of Defense to suspend $4,780,500, for this project until receipt of supporting documentation using approved Air Force regulations. See Table F-4 for calculations.

Table F-4. Cost of KC-10 Squadron Operations/Aircraft Maintenance Unit Facility

	AMC Cost	Allowable Cost	Overstated Cost
Square Feet	37,000	21,300	15,700
Cost per Square Foot	x $135	x $135	x $135
Total	$4,995,000	$2,875,500	$2,119,500

We request the Air Force Reserve to provide us with a revised DD Form 1391 reflecting the budget reductions in its response to the final report. For additional details, see the discussion of project PTFL943100 under Appendix F.1.

Appendix G. Description of Projects with Inconsistent Cost Support

G.1. Project PTFL943151, Hydrant Fueling System, Valued at $22,000,000

AMC was not able to support the cost figures used on the cost estimate worksheet that is the backup to the DD Form 1391. Also, only a few line items from the cost estimate worksheet could be identified on the DD Form 1391. Furthermore, the line items that could be identified on the DD Form 1391 were lower than the line items on the cost estimate worksheet. For example, DD Form 1391 showed a cost of $1,850,000 for a pumphouse and fill stand. However, the cost estimate worksheet showed a cost of $5,405,000 for a pumphouse and fill stand, a difference of $3,555,000.

Air Force Comments. The Air Force nonconcurred with draft Recommendation A.1.b.(1) to suspend the funds for the project, but agreed with Recommendation A.4.e. to provide supporting cost estimate documentation. The Air Force stated that differences between the cost estimate worksheet and the DD Form 1391 occurred because two different cost models were used. The cost estimate worksheet derived from the Means Building Construction Cost Data is the foundation for the development of the DD Form 1391. The line items from the cost estimate worksheet (field estimate) were grouped on the DD Form 1391 and priced out using the Automated Air Force Programming, Design, and Construction System Pricing Guide. The DD Form 1391 reflects a further refinement of the field estimate. Furthermore, the project is currently 65 percent designed, with a construction cost of $19.6 million.

Audit Response. The Air Force comments are not responsive to draft Recommendation A.1.b.(1) to suspend the project funding. The Air Force documentation provided to us does not support earlier discussions with Air Force personnel. The Air Force stated that the cost estimate worksheet in attachment 3 (field estimate) of the management comments were handwritten cost estimates based on judgment and experience. The Air Force took the cost estimate and incorporated it into the DD Form 1391. The Air Force never mentioned that they used the Means Building Construction Cost Data for developing the cost estimates. Furthermore, the Air Force did not provide documentation to support the cost estimate worksheet developed from the Means Building Construction Cost Data. In addition, how the Air Force priced out the line items that were grouped together on the DD Form 1391 from the field cost estimate is unclear. The Automated Air Force Programming, Design, and Construction System Pricing Guide did not identify a category code that covers all the individual components on the DD Form 1391 for the Hydrant Fueling System. Our review of the Historical Air Force Construction Cost Handbook, which is the printout of the Automated Air Force Programming, Design, and

Construction System Pricing Guide, found no category code that includes all of the following components: pumphouse, fill stand, piping, fuel pits, bulk storage and other supporting facilities. Also, the cost estimate worksheet shows a cost figure of $5,175,000 for the pumphouse, when the contractor cost estimate is $2,977,949, a difference of $2,197,051 ($5,175,000 minus $2,977,949). The contractor estimate only provided six line items to support this $22,000,000 project. The six line items did not have any supporting detail.

We agree with the Air Force comments to draft Recommendation A.4.e.; however, the documentation was not sufficiently detailed for cost estimate determinations. Therefore, we request the Air Force respond to final report Recommendation A.4.e., providing documentation used to develop cost estimate worksheet and explain how the Air Force priced out all the components using the Automated Air Force Programming, Design, and Construction System Pricing Guide.

We request that the Air Force provide the documentation used to develop the cost estimate worksheet and explain how the Air Force priced out all of the components using the Automated Air Force Programming, Design, and Construction System Pricing Guide. Also, we request that the Air Force explain the large difference in the cost estimate for the pumphouse.

G.2. Project PTFL943157, Communication Ducts, Valued at $1,000,000

Initially, AMC was not able to provide documentation to support the $1,000,000 cost estimate for the communication ducts. McGuire AFB volunteered to reconstruct supporting documentation. However, the cost documentation subsequently provided by McGuire AFB, with the assistance of the 438th Communications Group at Griffiss AFB, was inconsistent and did not provide supporting documentation for the unit prices used.

For example, McGuire AFB provided unit prices for material and labor for 1993 and 1994. Based on the unit prices, we calculated an estimated cost of $853,000 using 1993 prices and $1,210,000 using 1994 prices. The calculations resulted in a difference of $357,000 ($1,210,000 minus $853,000). Both of these estimates are more than 10 percent different than the estimated cost of $1,000,000. AMC and McGuire AFB have not been able to show that the estimated cost of $1,000,000 is reasonable.

Air Force Comments. The Air Force nonconcurred with draft Recommendation A.1.b.(2) to suspend the funds for the project, but agreed with draft Recommendation A.4.f. and provided supporting cost estimate documentation.

Audit Response. The Air Force comments are partially responsive to draft Recommendation A.1.b.(2). However, the revised cost estimate documentation provided by the Air Force appears to be incomplete. It is unclear whether certain costs were included in the cost documentation provided to support the cost estimate for the communication ducts. It appears that the Air Force may have underestimated the cost of the project. For example, it is not clear whether the contractor cost estimate includes $108,000 for manholes; $12,000 for facility connections; and 6 percent for supervision, inspection, and overhead. The estimated costs for the manholes and the facility connections were taken from the 1994 Systems Telecommunications Engineering Manager Model. The 6 percent is a standard line item on the DD Form 1391. If we add these costs to the $1,032,716 cost estimate provided by the Air Force in its comments to the draft report, we get a cost estimate of $1,221,879 ($1,032,716 plus $108,000 plus $12,000 times 1.06 equals $1,221,879). This is $221,879 more than the $1,000,000 estimate shown on the DD Form 1391. We request the Air Force to state whether the costs of the manholes; facility connections; and supervision, inspection, and overhead are included in the $1,032,716 cost estimate in its response to the final report. We are recommending that the funds be suspended until the Air Force provides the supporting documentation.

G.3. Project PTFL943165, Control Tower, Valued at $3,200,000

AMC completed a cost estimate without knowing the siting and design of the control tower. In addition, the estimated cost was not based on historical costs and was not based on a control tower of equivalent height and square feet. Also, AMC could not explain why the initial cost estimate of $5,500,000 was reduced to $3,200,000.

A July 1993 AMC site survey determined that the construction of maintenance hangars at the end of the south parking ramp would obstruct a portion of the main runway. Therefore, a new control tower was needed to provide a clear view of the taxiway and runway.

However, AMC did not perform a site survey for the control tower until October 1993. The October 1993 site survey determined that 2,500 feet of runway would be obstructed. In December 1993, based upon the October 1993 site survey, AMC determined the site of the control tower and decided to use the design of the control tower at Shaw AFB, South Carolina. The cost documentation provided to support the control tower used estimated costs and was based on the control tower at Malmstrom AFB, Montana. The control tower at Malmstrom AFB is taller and has more square feet than the control tower at Shaw AFB.

Air Force Comments. The Air Force nonconcurred with draft Recommendation A.1.b.(3) to suspend the funds for the project, but agreed with draft Recommendation A.4.g. to provide supporting cost estimate

documentation. The initial cost estimate of $5.5 million was based on an initial estimate to demolish the existing tower and construct a new 120 to 140 foot control tower in its place. To save money, the Air Force relocated the control tower next to the new KC-10 corrosion control facility with a cab floor height of 84 feet. The cab floor height is the height of the control tower from the ground to the floor of the observation window. However, upon examination it was determined that a cab floor height of 140 feet would be required at this location to maintain full view of the airfield because of the 110-foot-high three-bay hangar. The Malmstrom AFB control tower served as a model to develop the costs for this location because the Malmstrom AFB control tower was attached to a facility and was in the design stage. In October 1993, the proposed control tower site was changed. After the tower site was changed, AMC made the decision to adapt the site to be the same as the Shaw AFB control tower, which is being designed by the architect/engineering firm designing the McGuire AFB control tower.

Although programmed using the Malmstrom AFB tower as a model, AMC determined the cost difference between the Malmstrom AFB and Shaw AFB control tower to be insignificant and determined that a revised DD Form 1391 was not necessary. The $3.2 million for the control tower project is for the current location and is based on the Shaw AFB control tower cost estimates. The McGuire AFB control tower project is 35 percent designed, with a cost estimate of $3.03 million. Because the current design cost estimate validates the project costs reflected on the DD Form 1391, the Air Force does not recommend revising the DD Form 1391.

Audit Response. The Air Force comments are not responsive. The $3.03 million cost estimate developed for the McGuire AFB control tower is based on a cost estimate developed for the Shaw AFB control tower. In our opinion, the cost estimate for the McGuire AFB control tower should be based on the actual costs incurred for the construction of the Shaw AFB control tower. At the time of our review, the Shaw AFB control tower was approximately 95 percent constructed. We request the Air Force estimate the cost using the actual construction costs of the Shaw AFB control tower and provide the results of the revised estimate to us in its response to the final report.

Appendix H. Recommended Budget Reductions and Suspensions

Project Title	Project	Project Cost	Recommended Budget Reductions	Recommended Funding Suspensions	Final Report Recommendations		
					Reduce	Suspend	Revise DD1391
Projects with Unsupported Requirements							
Refueling Operations Facility	PTFL943128	$ 3,300,000	$ 72,000	$ 3,228,000	A.1.a.(8)	A.1.b.(4)	A.4.a.
Upgrade Roads	PTFL943167	1,400,000		1,400,000		A.1.b.(5)	A.4.j.
Add to Base Supply	PTFL943168	300,000	300,000		A.1.a.(1)		
Aeromedical Services Clinic	PTFL943174	5,100,000	3,150,000	1,950,000[1]	A.1.a.(2)	A.1.b.(11)	A.4.k.
Enlisted Dormitory	FTFL943176	6,000,000	6,000,000		A.1.a.(3)		
Family Housing	FTFL943179	49,533,000		49,533,000		A.1.b.(6)	A.4.h.
Subtotal		65,633,000	9,522,000	56,111,000			
Inert Support Equipment Storage	GJKZ940057	1,050,000	40,000	1,010,000	A.1.a.(4)	A.1.b.(7)	A.3.
KC-10 COMBS* Facility	PTFL943113	6,400,000		6,400,000		A.1.b.(8)	A.4.i.
Parking Ramp	PTFL943150	16,500,000	10,000,000	6,500,000	A.1.a.(7)	A.1.b.(9)	A.4.c.
Add to and Alter Add to Child Development Center	FTFL943172	2,100,000		2,100,000		A.1.b.(10)	A.4.b.
Subtotal		26,050,000	10,040,000	16,010,000			
KC-10 Squadron Operations/AMU	PTFL943100	8,100,000	3,010,500	5,089,500	A.1.a.(5)	A.1.b.(12)	A.4.d.
KC-10 Squadron Operations/AMU Facility (AFRES)	FTFL943102	6,900,000	2,119,500	4,780,500	A.1.a.(6)	A.1.b.(13)	A.5.
Subtotal		15,000,000	5,130,000	9,870,000			
Total		106,683,000	24,692,000	81,991,000			
Projects with Unsupported Cost Estimates							
Hydrant Fueling System	PTFL943151	22,000,000		22,000,000		A.1.b.(1)	A.4.e.
Communication Ducts	PTFL943157	1,000,000		1,000,000		A.1.b.(2)	A.4.f.
Control Tower	FTFL943165	3,200,000		3,200,000		A.1.b.(3)	A.4.g.
Total		26,200,000	0	26,200,000[2]			
Grand Total		$132,883,000	$24,692,000	$108,191,000			

AMU Aircraft Maintenance Unit

COMBS Contractor Operation and Maintained Base Supply Facility

[1]We are recommending that $1,950,000 be suspended until AMC provides us a revised DD Form 1391, reflecting budget reductions of $3,150,000.

[2]We recommended the total $26.2 million in funding for these three projects to be suspended because the Air Force did not adequately support the costs.

Appendix I. Dormitory Construction and Renovation Projects

Funding Source	Project	Construction Cost
MILCON		
	PTFL923001	$ 8,700,000
	PTFL933002	13,400,000
	PTFL933003	13,800,000
	PTFL943191	1,600,000
	PTFL983003	10,500,000
Subtotal		$48,000,000
BRAC MILCON	PTFL943176R3	$ 6,000,000
Operation and Maintenance		Renovation Cost
Real Property and Maintenance		
	PTFL951006	$ 2,100,000
	PTFL961002	2,200,000
	PTFL971001	2,300,000
	PTFL981001	2,300,000
	PTFL991001	1,100,000
	PTFL991002	2,400,000
	PTFL001001	2,500,000
	PTFL011001	2,600,000
	PTFL021001	2,700,000
Subtotal		20,200,000
Total		$74,200,000

Appendix J. Calculation of Dormitory Bedspace Requirement

	Enlisted Rank				
	E-1 through E-4	E-5 and E-6	E-7 through E-9	Total	Notes
Projected increase in unaccompanied enlisted personnel at McGuire AFB	201	78	31	310	1.,2.
Increase in unaccompanied enlisted personnel at McGuire AFB caused by realignment from Barksdale AFB	121	47	19	187	2.,3.
Total	322	125	50	497	
Equivalent Factor	x1	x2	x4		4.
Total Bedspace Requirement	322	250	200	772	

1. In its Dormitory Construction and Renovation Plan, AMC estimated a 310-person increase in unaccompanied enlisted personnel at McGuire AFB.

2. To calculate the number of personnel within the enlisted ranks, we applied the following factors recommended by the Air Force Base Closure Executive Group: an estimated 65 percent for ranks E-1 through E-4, 25 percent for E-5 and E-6, 10 percent for E-7 through E-9.

3. A total of 668 personnel will realign from Barksdale AFB to McGuire AFB. Using factors provided by the Air Force Base Closure Executive Group, 234 (35 percent of the 668) will be unaccompanied and 187 (80 percent of the 234) unaccompanied personnel will be enlisted personnel.

4. Equivalent factors are the number of bedspaces (a bedspace is equal to 90 square feet) to which the various enlisted ranks are entitled. Military Handbook 1190, "Facility Planning and Design Guide," states that E-1 through E-4 are allowed one bedspace (90 square feet); E-5 and E-6 are allowed two bedspaces (180 square feet); and E-7 through E-9 are allowed four bedspaces (360 square feet).

Appendix K. Summary of Management Comments and Audit Responses for Recommendation A.1.

Project Name	Final Report Recommendation	Draft Report Management Comment			Draft Report Audit Response			Final Report Response Should Cover:			Remark[1]
		Concur	Partially Concur	Non Concur	Agree	Partially Agree	Disagree	Proposed Action	Completion Date	Additional Support	
Refueling Operations Facility	A.1.a.(8)/A.1.b.(4)[2]		X			X				X	Appendix D.1.
Upgrade Roads	A.1.b.(5)			X		X				X	Appendix D.2.
Add to Base Supply	A.1.a.(1)	X			X			X	X		Appendix D.3.
Aeromedical Services Clinic	A.1.a.(2)	X			X			X	X	X	Appendix D.4.
Enlisted Dormitory	A.1.a.(3)[3]			X			X			X	Finding B
Family Housing	A.1.b.(6)			X		X				X	Finding C
Inert Support Equipment Storage	A.1.a.(4)/A.1.b.(7)			X			X	X		X	Appendix E.1.
COMBS Facility	A.1.b.(8)			X		X				X	Appendix E.2.
Add to and Alter Vehicle Maintenance Complex	Deleted			X	X						Appendix E.3.
Parking Ramp	A.1.a.(7)/A.1.b.(9)			X		X				X	Appendix E.4.
Child Develop. Center	A.1.b.(10)			X			X			X	Appendix E.5.
KC-10 Squadron Operations/ AMU	A.1.a.(5)			X			X			X	Appendix F.1.
KC-10 Squadron Operations/ AMU (AFRES)	A.1.a.(6)			X			X			X	Appendix F.2
Hydrant Fueling System	A.1.b.(1)			X			X			X	Appendix G.1
Communications Ducts	A.1.b.(2)			X		X				X	Appendix G.2
Control Tower	A.1.b.(3)			X			X			X	Appendix G.3
[4]	A.1.c.	X			X						

See footnotes at end of appendix.

Appendix K. Summary of Management Comments and Audit Responses for Recommendation A.1.

[1]For detailed management comments and audit responses, refer to appendix indicated in the remark column.
[2]Changed requirements since our audit.
[3]Changed requirements a third time.
[4]Projects mentioned in Recommendations A.1., A.3., A.4., and A.5.

Appendix L. Summary of Management Comments and Audit Responses for Recommendations A.2. through A.6.

Project Name	Final Report Recommendation	Draft Report Management Comment: Concur	Draft Report Management Comment: Partially Concur	Draft Report Management Comment: Non Concur	Draft Report Audit Response: Agree	Draft Report Audit Response: Partially Agree	Draft Report Audit Response: Disagree	Final Report Response Should Cover: Proposed Action	Final Report Response Should Cover: Completion Date	Final Report Response Should Cover: Additional Support	Remark[1]
	A.2.	X				X		X	X		Internal Controls
Inert Support Equipment Storage	A.3.			X			X			X	Appendix E.1.
Refueling Operations Facility	A.4.a.	X				X				X	Appendix D.1..
Add to and Alter Vehicle Maintenance Complex	Deleted			X	X						Appendix E.3.
Add to Parking Ramp	A.4.c.			X		X				X	Appendix E.4.
KC-10 Squadron Operations/AMU Facility	A.4.d.			X			X			X	Appendix F.1.
Hydrant Fueling System	A.4.e.	X					X			X	Appendix G.1.
Communication Ducts	A.4.f.	X				X				X	Appendix G.2.
Control Tower	A.4.g.	X					X			X	Appendix G.3.
KC-10 Squadron Operations AMU(AFRES)	A.5.			X			X			X	Appendix F.2.
	A.6.[2]	X				X		X	X		

[1]For detailed management comments and audit responses, refer to appendix indicated under remark column.

[2]Recommendation A.6. is for the Air Force to include the validation procedures for BRAC requirements and cost estimates in risk assessments and internal management control reviews.

Appendix M. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Amount and/or Type of Benefit[1]
A.1.a.	Economy and Efficiency. Adjusts funding for projects to reflect justifiable requirements and costs, and deletes unnecessary projects.	$24.7 million of funds put to better use in the Air Force FYs 1994 and 1995 Base Closure Account.
A.1.b.	Economy and Efficiency. Suspends funding for BRAC MILCON projects until adequately supported.	Undeterminable.[2]
A.1.c.	Economy and Efficiency. Adjusts funding for BRAC MILCON projects to reflect revised requirements and costs.	Undeterminable.[2]
A.2.	Internal Controls. Results in properly developed and documented project requirements and cost estimates.	Nonmonetary.
A.3., A.4., A.5.	Economy and Efficiency. Revises BRAC MILCON estimates to reflect justifiable requirements and costs.	Undeterminable.[2]
A.6.	Internal Controls. Properly develops and documents project requirements and cost estimates.	Nonmonetary.
B.1.	Economy and Efficiency. Suspends funding for one project until supported and reduces funding for dormitory MILCON by deleting a project that is not needed.	At least $1.6 million FY 1995 MILCON funds put to better use.

See footnotes at end of appendix.

Recommendation Reference	Description of Benefit	Amount and/or Type of Benefit
B.2.a., 2.b.	Economy and Efficiency. Cancels planned funding for dormitory MILCON projects.	Undeterminable.[2]
B.2.c.	Economy and Efficiency. Suspends planned funding for dormitory MILCON projects.	$27.2 million of MILCON funds put to better use.
B.2.d.	Economy and Efficiency. Cancels planned funding for dormitory renovation costs that are overstated.	$14.7 million of Operation and Maintenance, Real Property and Maintenance, funds put to better use.
B.2.e.	Economy and Efficiency. Suspends planned funding for dormitory renovation costs that are not supported.	Undeterminable.[2]
B.2.f.	Economy and Efficiency. Results in valid real property maintenance requirements and costs.	Undeterminable.[2]
C.1.	Economy and Efficiency. Conducts a site survey to determine the most economical alternative to satisfy a military family housing deficiency at McGuire AFB.	Undeterminable.[2]
C.2.	Economy and Efficiency. Determines whether Fort Dix-Sheridanville military family housing requires renovation.	Undeterminable.[2]
C.3.	Economy and Efficiency.	Undeterminable.[2]

[1]Funds put to better use total $68.2 million of BRAC and non-BRAC MILCON funding.
[2]Benefits realized during future budget decisions and budget requests.

Appendix N. Organizations Visited or Contacted

Office of the Secretary of Defense

Office of the Under Secretary of Defense for Acquisition and Technology, Washington, DC
Comptroller of the Department of Defense, Washington, DC

Department of the Air Force

Deputy Assistant Secretary of the Air Force (Installations), Washington, DC
Headquarters Air Force Reserve, Robins Air Force Base, GA
Air Combat Command, Langley Air Force Base, VA
- 410th Bombardment Wing, K.I. Sawyer Air Force Base, MI
- 2nd Bombardment Wing, Barksdale Air Force Base, LA
- 92nd Civil Engineering Squadron, Fairchild Air Force Base, WA

Air Mobility Command, Scott Air Force Base, IL
- 438th Airlift Wing, McGuire Air Force Base, NJ
- 458th Operations Group, Barksdale Air Force Base, LA

Appendix O. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
Under Secretary of Defense for Personnel and Readiness
Comptroller of the Department of Defense
Assistant Secretary of Defense (Economic Security)
Assistant to the Secretary of Defense (Public Affairs)
Deputy Assistant Secretary of Defense (Economic Reinvestment and Base Realignment and Closure)

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Auditor General, Department of the Navy

Department of the Air Force

Secretary of the Air Force
Under Secretary of the Air Force
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Deputy Assistant Secretary of the Air Force (Installations)
Commander, Air Combat Command
  Commander, Barksdale Air Force Base
  Commander, Fairchild Air Force Base
  Commander, K.I. Sawyer Air Force Base
Commander, Air Mobility Command
  Commander, McGuire Air Force Base
Commander, Headquarters Air Force Reserve
Auditor General, Department of the Air Force

Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, National Security Agency
Inspector General, Central Imagery Office
Inspector General, Defense Intelligence Agency
Inspector General, National Security Agency
Director, Defense Logistics Studies Information Exchange

Non-Defense Federal Organizations and Individuals

Office of Management and Budget
Technical Information Center, National Security and International Affairs Division, General Accounting Office

Chairman and Ranking Minority Member of Each of the Following Congressional Committees and Subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Operations
House Subcommittee on Legislation and National Security, Committee on Government Operations

Senator Bill Bradley, U.S. Senate
Senator John Breaux, U.S. Senate
Senator Slade Gorton, U.S. Senate
Senator J. Bennett Johnston, U.S. Senate
Senator Frank R. Lautenberg, U.S. Senate
Senator Patty Murray, U.S. Senate
Congressman Thomas S. Foley, U.S. House of Representatives
Congressman Jim McCrery, U.S. House of Representatives
Congressman Jim Saxton, U.S. House of Representatives
Congressman Christopher H. Smith, U.S. House of Representatives

Part IV - Management Comments

Comptroller of the Department of Defense Comments

OFFICE OF THE COMPTROLLER OF THE DEPARTMENT OF DEFENSE

WASHINGTON, DC 20301-1100

JUN 1 1994

(Program/Budget)

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING, DOD IG

SUBJECT: Quick-Reaction Report on the Audit of Defense Base Closure and Realignment Budget Data for the McGuire Air Force Base, New Jersey; Barksdale Air Force Base, Louisiana; and Fairchild Air Force Base, Washington (Project No. 4CG-5008.11)

This responds to your April 29, 1994 memorandum requesting our comments on the subject report.

The audit recommends that the DoD Comptroller reduce funding by $169.0 million for various military construction projects associated with the base closure of K.I. Sawyer AFB, Michigan and revise the DD 1391 forms, accordingly.

We agree that funding for these projects should be reduced and DD 1391 forms revised where warranted; however, the issues raised by the audit for many of the projects have not yet been resolved. We have placed the funds in question on administrative withhold pending resolution of the issues.

Bruce A. Dauer

BRUCE A. DAUER
ASSISTANT DEPUTY COMPTROLLER
(PROGRAM/BUDGET)

Department of the Air Force Comments

DEPARTMENT OF THE AIR FORCE
WASHINGTON DC

OFFICE OF THE ASSISTANT SECRETARY

MEMORANDUM FOR SAF/FMPF

MAY 25 1994

FROM: SAF/MII

SUBJECT: DoDIG Quick-Reaction Report on Defense Base Realignment and Closure Budget Data for McGuire Air Force Base, New Jersey; Barksdale Air Force Base, Louisiana; and Fairchild Air Force Base, Washington, (Project No. 4CG-5008.11) - INFORMATION MEMORANDUM

We have reviewed the Draft DoDIG Quick-Reaction Report on the Audit of Defense Base Realignment and Closure Budget Data for McGuire Air Force Base, New Jersey; Barksdale Air Force Base, Louisiana; and Fairchild Air Force Base, Washington, (Project No. 4CG5008.11). Our comments are at Attachment 1 with supporting documentation.

We have not included a complete documentation package that supports the Air Force position because of its size. However, we will gladly furnish any backup documentation to the DoDIG in order to resolve the recommendations in this Draft Audit.

JAMES F BOATRIGHT
Deputy Assistant Secretary of the Air Force
(Installations)

1 Atch
Air Force Response to Project No. 4CG-5008.11
w/supporting documentation

Final Report Reference

Finding A

Recommendation: A.1.a.(1)- Reduce project PTFL943128, Refueling Operations Facility, by $375,500

Revised and renumbered as A.1.b.(4)

Response: The Air Force partially concurs with this recommendation. The Air Force agrees to reduce this project by 250 square feet, which equates to a $72,000 reduction. It appears the auditors misinterpreted the existing DD Form 1391. The first line item "vehicle refueling shop" actually represents the 3-bay vehicle repair shop and not the petroleum operations function as interpreted by the auditors. The line item labeled "vehicle refueling shop bays" at 7,500 square feet included 4,100 square feet for the petroleum operations and 3,400 square feet for the preventive maintenance requirements. AFM 86-2 states 3,600 square feet is authorized for a refueling vehicle repair shop for a base with 26-50 assigned vehicles. The requirement of 3,600 square feet for a 3-bay maintenance/repair shop in AFM 86-2 is based on R-9 refueling vehicles. McGuire has both R-9 and R-11 refueling vehicles. The R-11 refueling vehicle is four feet-two inches longer and one foot higher than the R-9 vehicle. Since AFM 86-2 was based on R-9 vehicles (3,600 square feet), an additional 400 square feet is required to accommodate the longer R-11 vehicles. The DD Form 1391 allows for 4,100 square feet for the petroleum operations function. The Air Force concurs that this requirement was overstated by 250 square feet, which equates to the $72,000 reduction. The DD Form 1391 also allows 3,400 square feet for the two-bay preventive maintenance function. AFM 86-2, Chapter 8, Section I, paragraph 8-17d, states that the refueling vehicles cannot be maintained/repaired in the same areas as other base vehicles and therefore a separate facility must be provided to perform preventative maintenance functions. AFM 77-310 specifies the requirements for organizational maintenance which includes cleaning vehicles, changing tires, routine inspections as well as other minor maintenance activities. AFR 144-1 covers preventative maintenance requirements for mobile fueling equipment and states that a special purpose vehicle checkpoint must be established and a covered shelter is required at locations where inclement weather poses a hazard to personnel. Because of inclement weather at McGuire, preventative maintenance functions cannot be performed outside during the winter months and a covered, environmentally controlled facility is required. The Air Force supports the requirement for a 3400 square foot preventative maintenance facility. AMC will revise the DD Form 1391 to clearly reflect the three separate functions and reduce the project cost by $72,000.

Recommendation: A.1.a.(2)- Delete project PTFL943167, Upgrade Roads, in the amount of $1,400,000.

Revised and renumbered as A.1.b.(5)

Response: The Air Force does not concur with the recommendation to delete this project. The existing roads along the haul route for construction at McGuire are in good condition. There will be damage to these roads due to the construction equipment using them. The $1.4 million is a worst case estimate for damage to the 12,860 Linear Feet of two lane road along the haul route. The actual extent of the road damage will depend on the road conditions at the time of construction and the exact loads, duration and types of vehicles traveling on the roads and weather preceding and during construction. The Air Force will

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keep this project intact at $1.4 million, but withhold the funds until the extent of damage is known along the haul route after construction is completed..

Renumbered as A.1.a.(1)

Recommendation: A.1.a.(3)- Delete project PTFL943168, Add to Base Supply, in the amount of $300,000.

Response: The Air Force concurs. Project PTFL943168 will be cancelled.

Renumbered as A.1.a.(2)

Recommendation: A.1.a.(4)- Reduce Project PTFL943174, Aeromedical Services Clinic, by $3,150,000 based on the Air Forces's revised DD Form 1391.

Response: The Air Force concurs. The scope of Project PTFL943174 will be reduced by $3,150,000 to $1,950,000.

Renumbered as A.1.a.(3)

Recommendation: A.1.a(5)- Delete project PTFL943176R3, Enlisted Dormitory, in the amount of $6,000,000.

Response: The Air Force does not concur. This project will construct a 168-person dormitory to house the unaccompanied enlisted personnel assigned to the KC-10 units relocating to McGuire AFB. The formula used to determine these requirements was approved by the BCEG. Since McGuire has a FY 97/4 projected 531-bed space deficit, AMC established a project to support the BRAC requirement. It appears the auditors used the wrong procedures to calculate dormitory bed space requirements and disregarded the DOD-approved process as outlined in DOD 4165-63-M, DOD Housing Management, Chapter 5. This resulted in an incorrect conclusion that McGuire had a 291 bed space surplus. Because of the 28 Feb 94 Public Announcement, SAF/MII directed a relook at the BRAC dormitory requirements to account for force structure changes at McGuire AFB. A new DD Form 1391 will be accomplished to reflect these changes and the scope revised accordingly.

Revised and renumbered as A.1.b.(6)

Recommendation: A.1.a.(6)- Delete Project PTFL943179, Family Housing, in the amount of $49,533,000.

Response: The Air Force does not concur. AMC did conduct a site survey and used the current housing market analysis, which is conducted every 3 years, to assess housing availability and deficits as directed by the BCEG. AMC is currently conducting a new housing market analysis and expects to have the results by 30 Jun 94. This analysis will be used to determine the final BRAC Family Housing requirements. The Air Force will not spend any BRAC construction funds until a new DD Form 1391 is prepared with the revised BRAC Family Housing requirements which will be based on the new housing market analysis. Additionally, because of the 28 Feb 94 Public Announcement, SAF/MII directed a relook at the BRAC family housing requirements to account for force structure changes at McGuire AFB. A new DD Form 1391 will be accomplished to reflect these changes as well as changes resulting from the new housing market analysis.

Revised and renumbered as A.1.a.(4) and A.1.b.(7)

Recommendation: A.1.a.(7)- Reduce project GJKZ940057, Inert Support Equipment Storage, by $259,500.

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Response: The Air Force does not concur with this recommendation. During BRAC 93, a table top estimate was accomplished to determine the facility costs to support the relocation of 6-9 ALCM equipment support packages to Fairchild AFB. It was determined that 7,000 square feet (SF) of facility space would be required to house the equipment. From this requirement a Rough Order of Magnitude (ROM) estimate was developed by HQ ACC to construct a stand alone facility. The estimated cost for this facility was $1.05 million. This estimate was based upon the best available data at the time. The overall facility requirement to provide 7,000 SF has not changed. A formal Facility Site Survey was not accomplished to verify and validate the table top estimate. Subsequent review of the project has determined the original table top estimate is fair and reasonable and captures the basic intent and costs to support the beddown of this new mission.

While the audit was taking place, Fairchild AFB personnel expressed concern that a stand alone facility may not be the best option and may not meet all requirements at the estimated cost. As an alternative, base personnel proposed to construct a 7,000 SF addition to building 1414 (same type facility) in the Weapons Storage Area (WSA). This proposal would support the mission more efficiently by consolidating the function in one facility in lieu of having a split operation. Facility support type costs (pavements, utilities, grading, etc.) could possibly be reduced as much as $120 thousand. Additionally, it was stated that a cost savings of up to 10% could also be obtained by awarding this project as a design/build type contract.

The potential cost savings data provided to the auditor was not comprehensive and based on historical data. At the time of the audit the project was still in the conceptual stage and a detailed cost estimate was not available. Having since reviewed all project requirements the current parametric estimate indicates the cost to construct this facility is approximately $1.01 million.

Based on current cost estimates and unforeseen conditions, recommend the original programmed amount of $1.050 million remain unchanged in order to adequately support the relocation of ALCM support equipment to Fairchild AFB. It the project cost is reduced to $790.5 thousand as recommended in the audit report, HQ ACC will be unable to execute and construct this facility.

Recommendation: A.1.a.(8)- Delete Project PTFL943113, KC-10 Contractor Operated and Maintained Base Supply Facility, in the amount of $6,400,000.

Revised and renumbered as A.1.b.(8)

Response: The Air Force does not concur with this recommendation. Building 1811 and 1809 were considered for a Contractor Operated and Maintained Base Supply (COMBS) facility during the AMC site visit. The current COMBS contract requires a 42,600 square foot facility. Building 1811 is owned by the Air National Guard, is unavailable, and is 6,000 square feet too small to satisfy the COMBS contract. Building 1809 is Air Force owned, but is also 6,000 square feet too small to satisfy the COMBS contract. It would require approximately $3.4 million to bring building 1809 up to the standard required by the COMBS contract and an additional $2.1 million to build a new Dash-21 facility which would be displaced from building 1809. Additionally, if building 1809 were used as a permanent COMBS facility, additional interim facility costs (approximately $1.2M) would be

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required for the Dash-21 facility. AMC also investigated other facilities to beddown the COMBS function. All options considered were either the same cost as a new facility or exceeded the cost of a new building. The Air Force concurs with AMC's analysis that a new facility for the COMBS function is the best solution.

Deleted

Recommendation: A.1.a.(9)- Reduce Project PTFL943121, Add to and Alter Vehicle Maintenance Complex, by $924,950.

Response: The Air Force does not concur with this recommendation. AFM 86-2 specifies that the facility requirements for vehicles be based on vehicle equivalents. AFM 77-310 provides the conversion factors/tables that are to be used to determine vehicle equivalents. It appears the auditors used the number of vehicles instead of vehicle equivalents in the calculations supporting their finding. It also appears the auditors did not apply AFM 86-2 correctly. Their method understates the true requirements for a Vehicle Maintenance Complex by 7,115 square feet. Attachment 1 provides the justification for the required 70.5 vehicle equivalents.

Revised and renumbered as A.1.a.(7) and A.1.b.(9)

Recommendation: A.1.a.(10)- Reduce Project PTFL 94-3150, Add to Parking Ramp, by $6,719,811.00.

Response: The Air Force does not concur with this recommendation. It appears the auditors did not properly apply AFM 86-2 to determine this requirement. A number of options to park the KC-10 aircraft were considered. The least expensive solution was to rearrange the aircraft parking plan, consolidating the C-141's to the north half of the ramp and the KC-10's to the south half, and extend the apron incrementally as needed along the parking ramp length. It appears the auditors calculations failed to consider a new perimeter taxiway, outside the parking ramp, that is needed to replace the existing taxiway required for parking KC-10s. AFM 86-2 requires certain wing-tip clearance criteria based on the largest aircraft to use the ramp, the C-5. The taxiway pavements plus the clearance requirement is 78,963 square yards (SY). This storm water retention pond is required solely for the 146,000 SY of new BRAC pavement. Any other project adding pavement for the ALT Z-1 aircraft will also need to have its own storm water retention pond. Attachment 2 is provided to clarify the relationship between the existing and new taxiway. Additionally, because of the 28 Feb 94 Public Announcement, SAF/MII directed a relook at the BRAC Parking ramp requirements to account for force structure changes at McGuire AFB. A new DD Form 1391 will be accomplished to reflect these changes.

Revised and renumbered as A.1.b.(10)

Recommendation: A.1.a.(11)- Delete Project PTFL 943172, Add to and Alter Child Development Center, in the amount of $2,100,000.

Response: The Air Force does not concur with this recommendation. The current child care facilities are filled to capacity. It also appears that the auditors misinterpreted the information received at McGuire concerning the capacity at the child care center. The capacity indicated on the McGuire document mentioned in the audit is not excess capacity. AMC used the draft AFI 32-1024, Section L, para 17-15, Youth Facilities, which states AFP 88-38, Design Guide for Child Development Centers, should be used to

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establish requirements. In addition, MIL-HDBK 1190, Chapter 4, also validates the computations used in determining the allowable size of the requirement. The authorized users for a child development center are children of assigned military families, single parent military families, and civilian employees. The total projected authorized McGuire children, based on formulas described in above regulations, computes to a total requirement of 1,056 children, of which 113 are associated with the BRAC KC-10 beddown. A separate MILCON project will be required for the ALT Z-1 child care requirements. Child development requirements are constantly being updated due to federal regulations; therefore, the Air Force must use the most recent criteria available when programming requirements. Although AMC justified the requirements using a draft Air Force Instruction, Air Force agrees with AMC that this is the most recent criteria available.

Recommendation: A.1.a.(12)- Reduce project PTFL 943100, KC-10 Squadron Operations/Aircraft Maintenance Unit Facility by $4,144,500.

Revised and renumbered as A.1.b.(5)

Response: The Air Force does not concur with this recommendation. AFM 86-2 does not provide guidance for the new Chief of Staff United States Air Force Objective Wing that places flight line maintenance in the operational squadrons. AFM 86-2 does permit exceeding the maximum building allowances where the need can be shown (AFM 86-2, Chapter 2, Section 2-2). The AMC Consolidated Squadron Operations/Aircraft Maintenance Unit Facility design guide provides these requirements and they are also mirrored in the new draft AFI 32-1024. The Air Force agrees with AMC's approach to establishing the requirements for this project using the draft AFI 32-1024 and the AMC developed Squadron Operations/Aircraft Maintenance Unit Facility design guide.

Recommendation: A.1.a.(13)- Reduce project PTFL 943102, KC-10 Squadron Operations/Aircraft Maintenance Unit Facility (Air Force Reserve) by $3,253,500.

Revised and renumbered as A.1.a.(6)

Response: See recommendation A.1.a.(12) for response.

Recommendation: A.1.b.(1)- Suspend funding for project PTFL 94-3151, Hydrant Fueling System in the amount of $22,000,000 until AMC provides supporting documentation to reconcile the cost shown of the DD Form 1391.

Response: The Air Force does not concur with suspending the funds for this project. The Air Force will provide documentation to support the cost estimate of providing supporting documentation to the DD Form 1391. The field estimate (Atch 3) derived from the Means' Building Construction Cost Data (MEANS) provided the foundation for the development of the DD Form 1391. The line items from the field estimate were grouped on the DD Form 1391 and priced out using the Automated Air Force Pricing Guide (AAFPG). The numbers circled on the field estimate correspond to the circled numbers on the DD Form 1391 (Atch 4). There are differences between the MEANS estimate and the AAFPG estimate on the DD Form 1391 because two different costing models were used. The DD Form 1391 reflects a further

refinement of the field estimate. This project is currently 65% designed and the construction cost estimate is $19.6 million (Atch 5). This construction cost estimate supports the DD Form 1391. Tabs 3-5 are presented as additional documentation to verify the DD Form 1391. Although, the current construction cost estimate reflects a cost of $19.6 million versus $22 million on the DD Form 1391, the Air Force does not recommend reducing the project at this time because the project is only 65% designed and subject to additional changes between now and design completion.

Recommendation: A.1.b.(2)- Suspend funding for project PTFL943157, Communications Ducts, in the amount of $1,000,000 until Air Mobility Command provides sufficient supporting documentation that can be reconciled to the cost estimate shown on the DD Form 1391.

Response: The Air Force does not concur on suspending funds for this project. The Air Force does concur with providing supporting documentation to clarify the DD Form 1391. The supporting documentation from McGuire referenced in the report used the communications' Systems Telecommunications Engineering Manager (STEM) model to provide a cost estimate. The STEM model is the communication equivalent to the engineering AAFPG. However, the STEM model does not consider "allied support costs," which usually entail site support work such as pavement work and resodding. The DD Form 1391 does include these additional costs. The communication ducts project is currently 35% designed and the construction cost estimate is $1.03 million. The Air Force submits the 35% design cost estimate as sufficient documentation to support the costs on the DD Form 1391 (Atch 6).

Recommendation: A.1.b.(3)- Suspend funding for project PTFL 943165, Control Tower, in the amount of $3,200,000 until AMC revises the estimated project cost shown on the DD Form 1391.

Response: The Air Force does not concur with this recommendation. The initial cost estimate of $5.5 million was based on an initial estimate to demolish the existing tower and construct a new 120 - 140 foot tower in its place. To save money, AMC in consultation with the BCEG, located the control tower next to the new KC-10 corrosion control facility with a cab floor height of 84 feet (which was the height of the existing tower at McGuire. However, upon further examination it was determined that a cab floor height of 140 feet would be required at this location to maintain full view of the airfield because of the 110 foot high 3-bay hangar. The Malmstrom control tower served as a model to develop the costs for this location because it was attached to a facility and was in the design stage. In Oct 93, the control tower site was changed to its current location in a clear area in the triangle of the runway, taxiway and alternate runway with a cab floor height of 102 feet. After the tower was resited, AMC made the decision to adapt the site to be the same as the Shaw AFB control tower which is being designed by the same architect/engineering firm designing the McGuire control tower. Although programmed using the Malmstrom tower as a model, AMC determined the cost differences between the Malmstrom and

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Shaw Control Towers to be insignificant and determined that a revised DD Form 1391 was not necessary. The $3.2 million for the Control Tower project is for the current location and is based on the Shaw AFB tower. The McGuire Control Tower project is 35% designed with a cost estimate of $3.03 million (Atch 7). Since the current design cost estimate validates the project costs reflected on the DD Form 1391, the Air Force does not recommend revising the DD Form 1391.

Recommendation: A.1.c- Adjust the Air Force FY94 and FY95 BRAC budget for K.I. Sawyer AFB as appropriate based on the revised DD Form 1391 submitted by Air Combat Command, Air Mobility Command and Air Force Reserve as directed in recommendation A.3, A.4, A.5.

Response: The Air Force concurs with adjusting the K.I. Sawyer BRAC budget for project PTFL 943174, Aeromedical Services Clinic ($-3.15M); project PTFL 943168, Add to Base Supply ($-.3M); and project PTFL 943128, Refueling Operations ($-.072M).

Recommendation: A.2.- We recommend that the Assistant Secretary of the Air Force (Financial Management and Comptroller) require the Air Force major commands to include the development and validation procedures of base realignment and closure requirements and cost estimates in their Internal Management Control Plans.

Response: The Air Force concurs with the suggestion that validation procedures for determining BRAC project requirements and cost estimates need to be included as part of the major command's Internal Management Control Plan.

Recommendation: A.3- We recommend that the Commander, Air Combat Command, prepare a revised DD Form 1391 with adequate supporting documentation for project GJKZ940057, Inert Support Equipment Storage, excluding unsupported requirements, accounting for the use of existing facilities, and reflecting the budget reduction in Recommendation A.1.a.(7).

Response: The Air Force partially concurs. See response for recommendation A.1.a.(7).

Recommendation: A.4.a.- Prepare a revise DD Form 1391 with adequate supporting documentation for project PTFL9431218, Refueling Operations Facility, excluding unsupported requirements and reflecting the budget reduction in Recommendation A.1.a.(1).

Response: The Air Force concurs with the recommendation to revise the DD Form 1391 to better clarify project requirements. This DD Form 1391 will also reflect a cost reduction of $72,000. See discussion under Recommendation A.1.a.(1).

Recommendation: A.4.b.- Prepare a revised DD Form 1391 with adequate

Deleted

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supporting documentation for project PTFL943121, Add to and Alter Vehicle Maintenance Complex, excluding unsupported requirements, account for the use of existing facilities and reflecting the budget reduction in Recommendation A.1.a.(9).

Response: The Air Force does not concur with this recommendation to revise the DD Form 1391. The Air Force recommends this project be maintained at the existing scope and cost for the reasons cited in the Air Force response to Recommendation A.1.a.(9).

Recommendation: A.4.c- Prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL 94-3150. Add to parking ramp, excluding unsupported BRAC requirements and non-BRAC requirements, accounting for the use of existing facilities, and reflecting the budget reduction in Recommendation A.1.a.(10).

Response: The Air Force does not concur with this recommendation. The Air Force recommends this project be maintained at the existing scope and cost for the reasons cited in the Air Force response to Recommendation A.1.a.(10). AMC will revalidate this project as a result of the 28 Feb 94 Force Structure Public Announcement as directed by SAF/MII (7 Mar 94 letter). AMC will reduce this project according to the results of the revalidation, pending approval of the BCEG. AMC will make necessary revisions to the DD Form 1391 based on these results.

Recommendation: A.4.d- Prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL 943100, KC-10 Squadron Operations, Aircraft Maintenance Unit Facility, using approved Air Force criteria to develop requirements and reflecting the budget reduction in recommendation A.1.a(12).

Response: The Air Force does not concur with this recommendation. The Air Force recommends this project be maintained at the existing scope and cost for the reasons cited in the response to Recommendation A.1.a.(12).

Revised

Recommendation: A.4.e- Provide supporting cost estimate documentation that can be reconciled to the DD Form 1391 for the project PTFL 943151, Hydrant Fueling Systems, and revise the DD Form 1391 accordingly.

Response: The Air Force concurs with the recommendation to provide supporting cost estimate documentation for the DD Form 1391 for the project PTFL 94351, Hydrant Fueling Systems. This information is at Attachments 3-5. The current DD Form 1391 represents an accurate scope for this project.

Revised

Recommendation: A.4.f.- Provide supporting cost estimate documentation that can be reconciled to the DD Form 1391 for project PTFL 943157, Communication Ducts, and revise the DD Form 1391 accordingly.

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Response: The Air Force concurs with providing supporting cost estimate documentation to clarify the DD Form 1391 for the project PTFL 943157. This information is at Attachment 6. The current DD Form 1391 is accurate.

Recommendation: A.4.g- Prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL 943165, Control Tower, identifying the square footage requirements and developing the cost estimate based on historical costs and the results of the October 1993 site survey for McGuire AFB.

Revised

Response: The Air Force concurs with providing supporting cost estimate documentation to clarify the DD Form 1391. Attachment 7 provides supporting documentation to verify the DD Form 1391. It is the Air Force position that the DD Form 1391 is accurate.

Recommendation: A.5- We recommend that the Commander, Air Force Reserve, prepare a revised DD Form 1391 with adequate supporting documentation for project PTFL943102, Operations/Aircraft Maintenance Unit Facility (Air Reserve Squadron) KC-10 Squadron, using approved Air Force criteria to develop requirements and to reflect the budget reduction in Recommendation A.1.a.(13).

Recommendation A.1.a.(13) revised and renumbered as Recommendation A.1.a.(6)

Response: The Air Force does not concur with this recommendation. The Air Force recommends this project be maintained at the existing scope and cost for the reasons cited in the response to Recommendation A.1.a.(13) and A.4.d.

Recommendation: A.6- We recommend that the Commanders, Air Combat Command, Air Mobility Command, and Air Force Reserve include the validation procedures for base realignment and closure requirements and cost estimates in risk assessments and internal management control reviews.

Response: The Air Force concurs with the suggestion that validation procedures for determining BRAC project requirements and cost estimates need to be included as part of the Air Force's internal management control programs.

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Finding B

General Response to Finding B: The Air Force does not concur with recommended deletions and reductions to the McGuire dormitory upgrade and military construction (MILCON) programs. The auditors apparently used incorrect procedures to calculate the 291 bed space surplus cited in the audit report. The auditors used the DD Form 2085 to calculate this surplus. This form is used to show current inventory and utilization of dormitory facilities. The DD Form 2085 is not the appropriate form for calculating projected bed space deficits/surpluses. The current procedures for calculating projected bed space requirements are outlined in DOD 4165.63-M, DOD Housing Management, Chapter 5, Section B. Although this document was published in Sep 93, Section B describes the same calculation methodology used on the now obsolete DD Form 1657. AMC used the DD Form 1657 to calculate a projected bed space deficit of 531. The Air Force agrees with AMC's methodology (i.e., use of the DD Form 1657) to calculate the projected 531 bed space deficit in FY 97/4. Based on this projected deficit, AMC established the BRAC and Alt Z-1 MILCON projects to provide housing to unaccompanied enlisted personnel relocating to McGuire as a result of the KC-10 realignment.

The remaining dormitory MILCON projects will replace existing dormitories that are no longer economically feasible to renovate (i.e., renovation cost exceeds 70% of replacement cost). Currently, there are six dormitories (2412, 2413, 2614, 2615, 2616, and 2618) that fit into this category. These dormitories are scheduled to be demolished after replacement dormitories are constructed. AMC is currently conducting a Housing Market Analysis (scheduled completion date of 30 Jun 94) that will assess McGuire's projected bed space requirements considering available private sector housing. AMC will remove planned dormitory construction projects from their program, as necessary, based on the new Housing Market Analysis and reassessment of projected bed space requirements.

Revised

Recommendation: B.1.a- We recommend the Comptroller of the Department of Defense Reduce the FY 1995 budget for dormitory military construction at McGuire Air Force Base by: Deleting project PTFL923001, valued at $8,700,000.

Response: The Air Force non-concurs with this recommendation. The AMC Dormitory Construction and Renovation Plan identified the requirement to renovate or replace substandard dormitories at McGuire and construct an additional 531 bed spaces to meet the projected FY 97/4 bed space requirement. This project will construct a facility to replace two dormitories (2412 and 2413) that are not economical to renovate and are scheduled for demolition in FY94. An economic analysis to validate replacement versus renovation of these facilities is at Attachment 8. Since the renovation cost estimate exceeded 70% of the replacement cost, AF policy directs replacement rather than renovation.

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Recommendation: B.1.b- We recommend the Comptroller of the Department of Defense Reduce the FY 1995 budget for dormitory military construction at McGuire Air Force Base by: Deleting project PTFL943191, valued at $1,600,000.

Response: The Air Force does not concur with this recommendation. This project will construct a 60 person dormitory required to meet the requirements of Air Force structure realignments. HQ AMC/XPM and HQ USAF/XOOR determined 191 military will relocate to McGuire to support this force structure realignment. There will be 63 bed spaces required which rounds down to the 60 being constructed.

Recommendation: B.2 a.-(4)- We recommend the Commander, Air Mobility Command: Cancel the following military construction project for dormitories at McGuire Air Force Base: (1) Project PTFL933002, valued at $13,400,000, (2) Project PTFL933003, valued at $13,800,000, (3) Projects PTFL953176 and PTFL953012, valued at $7,600,000, and (4) Project PTFL983003, valued at $10,500,000.

Deleted B.2.a.(3); revised and renumbered B.2.a.(4) as B.2.c.

Response: The Air Force does not concur with this recommendation. These projects are not in the current Program Objective Memorandum (POM). These projects will construct facilities to replace 4 dormitories (2614, 2615, 2616, and 2618) that are scheduled for demolition. An economic analysis will be conducted as part of these project justifications when they are included in the normal budget process.

Recommendation: B.2.b.- We recommend the Commander, Air Mobility Command: Cancel $14.7 million of the planned $20.2 million in funding for the renovation of dormitories at McGuire Air Force Base.

Renumbered as B.2.d.

Response: The Air Force does not concur with this recommendation. These facilities were constructed in FY55 and last renovated in FY88. The FY88 renovations focused on minimum construction necessary to reconfigure these facilities from central latrine to room-bath-room configuration--these O & M renovation projects, planned for completion from FY95-FY02, will bring the dormitories up to current AF standards. The $20.2 million in projects will repair the roofs, exterior finish, renovate the mechanical, electrical and plumbing systems, add a kitchenette and storage lockers and repair the interior finishes in these 10 dormitories. The project requirements are identified in the Building Summaries (Atch 9) for each of the facilities to be renovated.

Recommendation: B.2.c.- We recommend the Commander, Air Mobility Command: Suspend the remaining $5.5 million in funding for the renovation of dormitories until housing officials have completed their revalidation of the requirements and costs for the nine renovation projects.

Renumbered as B.2.e.

Response: The Air Force does not concur with this recommendation. These facilities were constructed in FY55 and last renovated in FY88. The FY88

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renovations focused on the minimum construction necessary to reconfigure these facilities from central latrine to room-bath-room configuration--these O & M renovation projects, planned for completion from FY95-FY02, will bring the dormitories up to current AF standards. The $20.2 million in projects will repair the roofs, exterior finish, renovate the mechanical, electrical and plumbing systems, add a kitchenette and storage lockers and repair the interior finishes in these 10 dormitories. The project requirements are identified in the Building Summaries (Atch 9) for each of the facilities to be renovated.

Renumbered as B.2.f.

Recommendation: B.2.d- We recommend the Commander, Air Mobility Command: Prepare a new Dormitory Construction and Renovation Plan based on the most current data on enlisted personnel, dormitory use, and projected manpower at McGuire Air Force Base.

Response: The Air Force concurs with this recommendation. Prior to the DoD IG Audit, AMC initiated a revision to the Dormitory Construction and Renovation Plan on 2 Mar 94. The requirements calculations will be re-accomplished as part of the Housing Market Analysis which is scheduled for completion by 30 Jun 94. Upon completion of the revision of the AMC Dormitory Construction and Renovation Plan, AMC will restructure the dormitory MILCON and O&M programs as needed. It is planned to update this plan semi-annually to ensure the most accurate and current data is used in developing dormitory requirements.

Finding C

General Response to Finding C: The Air Force nonconcurs with the deletion of the BRAC military family housing MILCON project (391 units) and the Alt Z-1 military family housing MILCON project (111 units). AMC did conduct a site survey and used the current housing market analysis as directed by the BCEG. AMC also considered Tri-Service agreements and looked at Ft Dix housing areas before deciding to construct new housing units under the BRAC and Alt Z-1 programs. The current housing market analysis (Feb 92) is valid for three years and identified a 246 unit deficit at McGuire AFB for FY 4/97. This deficit did not include increases in military personnel resulting from KC-10 realignments due to BRAC and Alt Z-1. To validate the specific number of housing units needed to support the BRAC and other force structure realignments, AMC used the formula specified by the BCEG. AMC considered housing units at Ft Dix (Garden Terrace area), but was advised by Ft Dix personnel that these units were not available on a long term basis and at the time of the site survey (Jul 93), these units were considered only a temporary fix to the current housing deficit. SAF/MII is reexamining the agreement with the Army to determine whether or not 300 units in the Ft Dix Garden Terrace housing area might be available on a long term basis. Additionally, AMC is conducting a new housing market analysis. Also, as directed by SAF/MII (7 Mar 94 letter), AMC and HQ USAF/XOOR/CEP conducted another site survey to relook at BRAC and Alt Z-1 housing requirements due to the 28 Feb 94 Public Announcement on force structure changes. Based on these various actions, AMC will reevaluate housing requirements for BRAC and Alt Z-1 as well as determine the best alternative to satisfy those requirements. Upon completion of the housing market analysis and after the Army responds to SAF/MII's inquiry with respect to the 300 units on Ft Dix Garden Terrace housing area, AMC will revise DD Forms 1391 and perform an economic analysis, as necessary.

Recommendation: C.1.- We recommend that the Commander, Air Mobility Command, cancel planned funding for 111 military family housing units at McGuire Air Force Base until Air Mobility Command officials: Conduct a site survey to validate the family housing deficits at McGuire Air Force Base as requested by the Air Force Base Closure Executive Group.

Response: The Air Force does not concur. AMC did conduct a site survey as directed by the BCEG and used the current housing market analysis, completed in Feb 92, to assess housing availability and deficits as directed by the BCEG. AMC is currently conducting a new housing market analysis and expects to have the results by 30 Jun 94. This analysis will be used to adjust the final BRAC and ALT- Z Family Housing requirements as necessary. The Air Force will not spend construction funds until a new DD Form 1391 can be prepared for these requirements based on the new housing market analysis.

Recommendation: C.2.- We recommend that the Commander, Air Mobility Command, cancel planned funding for 111 military family housing units a McGuire Air Force Base until Air Mobility Command officials: Conduct an economic analysis of the Fort Dix-Sheridanville housing community to determine where it is cost-effective to renovate the housing units to meet the housing deficits.

Response: The Air Force partially concurs with this recommendation. Due to the tight time constraints, a formal Economic Analysis was not accomplished on the BRAC-93 units; however, a comparative economic analysis was accomplished based on AMC in-house estimates of the work required. AMC will accomplish an economic analysis for the 111 unit MILCON project when this project is submitted to Congress.

Recommendation: C.3.- We recommend that the Commander, Air Mobility Command, cancel planned funding for 111 military family housing units a McGuire Air Force Base until Air Mobility Command officials: Revise the planned $14.1 million MILCON family housing project estimate to reflect the results of the site survey and the economic analysis.

Response: The Air Force does not concur with this recommendation. The Air Force recommends withholding these funds until the site survey and economic analysis are completed. Prior to this audit, AMC began to accomplish the McGuire AFB Housing Market Analysis (HMA). The new HMA will contain all known force structure changes. Completion of the revised HMA is scheduled for 30 Jun 94. AMC will use the new HMA to validate the housing requirements at McGuire. An economic analysis will be accomplished to validate the costs.

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