Audit Report

OFFICE OF THE INSPECTOR GENERAL

QUICK-REACTION REPORT ON BASE REALIGNMENT AND CLOSURE BUDGET DATA FOR THE COLLOCATIONS OF ARMY AND NAVY BLOOD AND DENTAL RESEARCH PROGRAMS

Report No. 93-099

May 24, 1993

Department of Defense
**Acronyms**

<table>
<thead>
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<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>BRAC</td>
<td>Base Realignment and Closure</td>
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<tr>
<td>CCPO</td>
<td>Consolidated Civilian Personnel Office</td>
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<tr>
<td>GAO</td>
<td>General Accounting Office</td>
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<tr>
<td>GSF</td>
<td>Gross Square Feet</td>
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<tr>
<td>HVAC</td>
<td>Heating, Ventilation, and Air Conditioning</td>
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<tr>
<td>LAIR</td>
<td>Letterman Army Institute of Research</td>
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<tr>
<td>MILCON</td>
<td>Military Construction</td>
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<td>NDRI</td>
<td>Naval Dental Research Institute</td>
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<td>NMRI</td>
<td>Naval Medical Research Institute</td>
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<td>NSF</td>
<td>Net Square Feet</td>
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<tr>
<td>OMDA</td>
<td>Office of Medical and Dental Affairs</td>
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<td>USAIDR</td>
<td>U.S. Army Institute of Dental Research</td>
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<tr>
<td>VAMC</td>
<td>Veterans Affairs Medical Center</td>
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<tr>
<td>WRAIR</td>
<td>Walter Reed Army Institute of Research</td>
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MEMORANDUM FOR COMPTROLLER OF THE DEPARTMENT OF DEFENSE
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL
MANAGEMENT)
INSPECTOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Quick-Reaction Report on Base Realignment and Closure Budget Data for the Collocations of Army and Navy Blood and Dental Research Programs (Report No. 93-099)

We are providing this final report for your information and use. 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 relating to FY 1994 military construction costs and addresses the collocation of the Letterman Army Institute of Research-Blood Research Division, San Francisco, California, with the Naval Medical Research Institute, Bethesda, Maryland, and the collocation of the U.S. Army Institute of Dental Research, Washington, DC, and Fort Meade, Maryland, with the Naval Dental Research Institute, Great Lakes, Illinois. We are issuing this as a quick-reaction report because time is limited for adjusting and resubmitting the budget information in this report.

DoD Directive 7650.3 requires all recommendations within DoD to be resolved promptly. The Navy did not provide comments to a draft of this report as of May 19, 1993. Additionally, we revised and readdressed three recommendations to the Comptroller of the Department of Defense. Therefore, we request that the addressees provide final comments on the unresolved recommendations by June 24, 1993.

The courtesies and cooperation extended to the staff are appreciated. If you have any questions on the report please contact Mr. Michael A. Joseph, Program Director, at (804) 766-9108 or Mr. Douglas L. Jones, Acting Project Manager, at (804) 766-3816. Copies of the final report will be distributed to the activities listed in Appendix D.

Edward R. Jones
Deputy Assistant Inspector General
for Auditing
EXECUTIVE SUMMARY

Introduction. The audit was directed by Public Law 102-190, "National Defense Authorization Act for Fiscal Years 1992 and 1993." The Public Law states that the Secretary of Defense shall ensure that the amount of the authorization requested by DoD for each military construction project associated with base realignment and closure (BRAC) actions does not exceed the original estimated cost provided to the Base Closure and Realignment Commission (the Commission). The Secretary of Defense is required to explain to Congress the reasons for the differences between the original project cost estimate provided to the Commission and the requested budget amount. The Inspector General, DoD, is required to review each military construction project for which a significant difference exists and to provide the results of the review to the congressional Defense committees. This report is one in a series of reports relating to FY 1994 military construction costs for realigning and closing bases. It provides the results of the audit of three projects valued at $24.2 million relating to the collocation of the Letterman Army Institute of Research-Blood Research Division, San Francisco, California, with the Naval Medical Research Institute, Bethesda, Maryland, and the collocation of the U.S. Army Institute of Dental Research, Washington, DC, and Fort Meade, Maryland, with the Naval Dental Research Institute, Great Lakes, Illinois.

Objective. The overall audit objective was to evaluate significant increases in BRAC military construction project costs over the estimated costs provided to the 1991 Commission. The specific objectives were to determine whether construction requirements were adequately supported and whether improvements to real property facilities at the gaining installations were needed.

Audit Results. We determined that the blood research facility and the applications laboratory facility planned for the collocation of the Army and Navy blood research programs are not needed. Cancellation of these projects and use of existing facilities could save up to $16.3 million (Finding A).

We determined that facility construction and renovation requirements for the collocation of the Army and Navy dental research programs were excess to authorized
needs. Existing facilities could be used to meet requirements. The deletions of excess requirements and the use of existing facilities could save up to $2.4 million (Finding B).

Other Matters of Interest. The physical collocation of the Army and Navy blood and dental research programs will result in some personnel reductions and cost savings. However, the Army and Navy programs, as currently planned, will have generally separate facilities. Budgeting, logistics support, and administrative support will still be through separate Military Department "chains of command." Although we did not evaluate the potential for consolidation, it appears that further savings could be realized through consolidation of the programs.

Internal Controls. We did not include a review of internal controls as related to the objective because of the time sensitivity of the data reviewed.

Potential Benefits of Audit. Implementation of the recommendations will allow DoD to put to better use up to $18.7 million of BRAC construction funds. Appendix B summarizes the potential benefits resulting from the audit. We reduced the monetary benefits from $19.0 million in the draft report because we have increased our estimate of the cost for an additional 1 year lease of the Gillette Building.

Summary of Recommendations. We recommended that the Comptroller of the Department of Defense reduce BRAC funding for the three construction projects by up to $18.7 million. Additionally, we recommended that the Navy renovate existing facilities to meet collocation requirements and budget for and request an extension of the lease of temporary quarters for the Army's blood research program to allow time for the renovation of existing facilities. We also recommended that the Navy place the dental research collocation project on hold until space requirements are known and validated. We revised and readdressed three recommendations to the Comptroller of the Department of Defense to ensure that the overall Navy base realignment and closure budget and funding are appropriately adjusted. The three funding recommendations were addressed to the Comptroller of the Navy in the draft report.

Management Comments. The Director, Management Directorate, Office of the Director of the Army Staff, concurred with the findings and recommendations provided that the animal housing and veterinary medicine support facilities are near the laboratory facilities. As of May 17, 1993, the Navy had not responded to the draft report. We request comments from the Comptroller of the Department of Defense; Commander, Naval Medical Research Institute; and Commander, Naval Dental Research Institute by June 21, 1993.

Audit Response. We consider the Army comments to be responsive to the draft report. The full discussion of the responsiveness of Army comments is in Part II and the complete text of Army comments is in Part IV.
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This report was prepared by the Logistics Support Directorate, Office of the Inspector General for Auditing, DoD. Copies of the report can be obtained from the Secondary Reports Distribution Unit, Audit Planning and Technical Support Directorate (703) 614-6303 (DSN 224-6303).
Part I - Introduction
Background

On May 3, 1988, the Secretary of Defense (the Secretary) chartered the Commission on Base Realignment and Closure (BRAC) to recommend military installations for realignment and closure. Using cost estimates provided by the Military Departments, the Commission recommended 59 realignments and 86 base closures. On October 24, 1988, Congress passed, and the President signed, Public Law 100-526, "Defense Authorization Amendments and Base Closure and Realignment 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 the realignments and closures.

Public Law 101-510, "Defense Base Closure and Realignment Act of 1990," November 5, 1990, re-established the Commission. Public Law 101-510 chartered the Commission to meet during 1991, 1993, and 1995 to ensure that the process for realigning and closing military installations was timely and independent, and 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 an additional 48 bases be realigned and 34 bases be closed, resulting in an estimated net savings of $2.3 billion for FYs 1992 through 1997 after a one-time cost of $4.1 billion.

Public Law 102-190, "National Defense Authorization Act for Fiscal Years 1992 and 1993," December 5, 1991, states that the Secretary shall ensure that the authorization amount DoD requests for each MILCON project associated with BRAC actions does not exceed the original estimated cost provided to the Commission. The Secretary is required to explain to Congress the reasons for the differences between the original project cost estimate provided to the Commission and the requested budget amount. Public Law 102-190 also 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.

Naval Facilities Engineering Command Instruction 11010.44E, "Shore Facilities Planning Manual," October 1, 1990, states that facility requirements must be accurate and justified and that proposals should not exceed requirements. The Manual further provides that requirements should not be inflated to accommodate inefficient or oversized existing facilities. The Manual provides that the use of existing facilities must be considered as an alternative to new construction.
Introduction

Objectives

The overall audit objective was to evaluate significant increases in BRAC MILCON project costs over the estimated costs provided to the 1991 Commission. The specific objectives were to determine whether construction requirements were adequately supported and whether improvements to real property facilities at the gaining installations were needed.

Scope

The Military Departments developed cost estimates, as a realignment and closure package, for a particular realigning or closing base. The FY 1994 budget request includes 13 base closure packages with cost increases from the estimate provided to the Commission ranging from $1.9 million to $80.1 million. For our overall audit, we selected 9 of the 13 packages to review, each of which increased 12 percent or more over the cost estimate provided to the Commission. This report covers the "Project Reliance" base closure package. We limited our review of the package to three MILCON projects, to be funded in FY 1994.

We examined the 1994 MILCON budget requests and related documentation regarding the collocation of the Letterman Army Institute of Research-Blood Research Division (LAIR), San Francisco, California, with the Naval Medical Research Institute (NMRI), Bethesda, Maryland, and the collocation of the U.S. Army Institute of Dental Research (USAIDR), Washington, DC, and Fort Meade, Maryland, with the Naval Dental Research Institute (NDRI), Great Lakes, Illinois. We reviewed supporting documentation for three FY 1994 BRAC construction projects totaling $24.2 million. Navy MILCON Projects P-086S ($9.4 million) and P-425S ($9.6 million) related to the collocation of the blood research programs; Navy MILCON Project P-569S ($5.2 million) related to collocation of the dental research programs. Because standardized space criteria were not available, we limited our evaluation of space requirements related to the two collocations to comparisons to existing facilities or to existing requirements data.

This economy and efficiency audit was made from January through March 1993. We did not rely on computerized data to conduct this review. Additionally, we did not review internal controls related to our objective because of the time sensitivity of the data reviewed. Except as noted, the review was made in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Appendix C lists the activities visited or contacted during the audit.
Prior Audits and Other Reviews

Since 1991, 18 audit reports have addressed DoD BRAC issues. Appendix A lists the reports.
Part II - Findings and Recommendations
Finding A. Collocation of Blood Research

The blood research facility and applications laboratory facility planned for construction at NMRI, Bethesda, Maryland, are not needed to support the collocation of the Army and the Navy's blood research programs. The facilities that are planned for construction are based on unfunded Navy projects originally intended to support NMRI programs; not the Army collocation. Existing facilities can be renovated to meet Army requirements. The cancellation of the projects could save up to $16.3 million.

Background

The collocation of the Army and Navy's blood research programs will result in the transfer of 33 Army personnel from LAIR, San Francisco, California, to NMRI, Bethesda, Maryland. The Army will be responsible for the cost of transferring personnel and equipment. The Navy will be responsible for the cost of facility construction and renovation at NMRI.

The Navy submitted Project P-086S, "Research Laboratory," and Project P-425S, "Applications Laboratory," to satisfy office, laboratory, and other space requirements generated by the collocation of LAIR with NMRI's blood research program. The original request for funding the BRAC projects increased from $13.4 million to $19.0 million because Navy MILCON funding was deleted.

Construction Plans

Project P-086S plans include a blood research facility of 47,020 gross square feet (GSF) consisting of offices, laboratories, and support spaces at an estimated cost of $9.4 million. GSF includes areas such as outside walls, interior partitions, restrooms, hallways and corridors, and heating and ventilating machinery areas. The facility will provide 23,967 net square feet (NSF) for offices and laboratories. NSF represents the interior room spaces. The Army will occupy about 60 percent, the Navy will occupy about 37 percent, and joint use will be made of 3 percent of the planned interior space.

Project P-425S provides a replacement applications laboratory facility of 45,418 GSF at an estimated cost of $9.6 million. The new laboratory facility will provide 19,969 NSF of interior space for animal housing and veterinary
medicine support for the Army's blood research program and all NMRI programs. About 17.5 percent of the planned NSF in the applications laboratory is needed to support the Army blood research program. The remaining 82.5 percent will support NMRI programs. This facility will replace the existing NMRI applications laboratory of about 38,400 GSF.

Initial Project Submission

The BRAC projects are not needed, in part, because the sizing exceeds Army collocation requirements. BRAC funds should be used only to meet requirements generated by the collocation package. The Navy developed the size and design concept for the BRAC projects using existing Navy MILCON plans. The plans for the blood research facility, P-086S, and the applications laboratory facility, P-425S, represent unfunded Navy requirements which were submitted in 1984 and 1986, respectively. These projects were originally designed to provide additional office and laboratory space for NMRI and to replace NMRI's applications laboratory. The initial BRAC request for funding of the collocation included $5.6 million of Navy MILCON funds for the applications laboratory. However, Navy funding of $5.6 million has been deleted and BRAC is to fully fund the projects.

The Army's requirements were not used in determining the size of the projects. The Army's blood research program estimated a requirement for 13,478 NSF of office and laboratory spaces and about 3,500 NSF of animal housing and veterinary support. Table 1. compares Army requirements to planned construction, as well as existing alternative space which is discussed below.
Finding A. Collocation of Blood Research

### Table 1. Army Requirements and Percentage Comparison

<table>
<thead>
<tr>
<th>Army Requirements</th>
<th>Planned BRAC Construction</th>
<th>Existing Facilities</th>
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<tbody>
<tr>
<td></td>
<td>NSF</td>
<td>NSF</td>
</tr>
<tr>
<td>Blood Research P-086S</td>
<td>13,478</td>
<td>23,967</td>
</tr>
<tr>
<td>Applications Laboratory P-425S</td>
<td>3,500</td>
<td>19,969</td>
</tr>
</tbody>
</table>

1/ Percentage of new building needed to meet Army requirements.  
2/ Computed percentage using the Army's current allocated space of 14,328 NSF in planned facility rather than the Army's NSF requirement.  
3/ Existing space occupied by Navy Infectious Disease Program scheduled to relocate to Walter Reed Army Institute of Research.  
4/ Unoccupied space (22 rooms) on the third floor of current applications laboratory.

Alternatives to New Construction

The BRAC projects are not needed because alternative facilities are available at less cost. Sufficient office and laboratory space will become available to satisfy the Army's requirement. Additionally, with renovation, the existing applications laboratory could satisfy the Army and Navy's requirements. Specific details are discussed in the following paragraphs.

Office and laboratory space. NMRI's infectious disease program will be relocating to the Walter Reed Army Institute of Research (WRAIR) in FY 1997, as part of BRAC 1991. The infectious disease program consists of 67 naval personnel occupying about 2,300 NSF of office space and about 11,300 NSF of laboratory space in connecting NMRI buildings. For the Army's blood research program, the Army requested 3,436 NSF of office space and 10,042 NSF of laboratory space. The space to be vacated by the infectious disease program is adequate to fulfill the Army's requirements. The areas occupied by NMRI's infectious disease program are offices and laboratories. These spaces may require minimum or no renovation because the Army's requirement is for offices and laboratories.
Finding A. Collocation of Blood Research

The Army's blood research program will be temporarily located in leased space at the Gillette Building, Rockville, Maryland, from FY 1993 through FY 1996 during MILCON projects at NMRI. About $.5 million will be spent to design and modify the lease facility to meet the Army's blood program requirements. The lease has 10 yearly options. Exercise of the option for FY 1997 would provide time for any renovation of office and laboratory spaces vacated by the Navy's infectious disease program for use by the Army's blood program. The use of renovated space could result in a savings of up to $8.7 million (MILCON P-086S cost of $9.4 million less $.7 million for the additional 1 year lease cost). The savings may be more or less because of renovation time frames and unknown renovation costs.

Applications laboratory. The applications laboratory, Project P-425S, will replace a structurally sound 38,400 GSF building which houses all NMRI animal and veterinary support requirements. The third floor of the existing applications laboratory is vacant except for two animal runs. The Navy's infectious disease program animals comprise about one-third to one-half of the animals being housed. Beginning in FY 1997, the Navy's housing requirements of its infectious disease program for animals will transfer to WRAIR. The unoccupied space of 3,611 NSF will meet the Army's requirement of 3,500 NSF for animal housing and veterinary medicine support. Engineering studies in 1988 and 1989 estimated renovation cost of up to $2 million to achieve the American Association for the Accreditation of Laboratory Animal Care's (the Association) accreditation of the facility, and to meet current building codes. The Association provides the industry standards for laboratory animal care. About $600,000 has been spent on the renovation of heating, ventilation, and air conditioning (HVAC) systems. Although the HVAC system has been renovated, we still estimate other building renovation costs at $2.0 million, due to inflation. The cancellation of Project P-425S could save up to an estimated $7.6 million ($9.6 million less $2.0 million for renovation.)

Recommendations, Management Comments, and Audit Response

1. We recommend that the Comptroller of the Department of Defense:
   
a. Reduce the base realignment and closure funding for Project P-086, "Research Laboratory," by $8.7 million ($9.4 million less $.7 million for an additional 1 year lease of the Gillette Building). Make appropriate adjustments to the budget based on revised DD Form 1391 submitted for the project, including additional validated renovation costs.

   b. Reduce the base realignment and closure funding for Project P-425S, "Applications Laboratory," by $7.6 million ($9.6 million less $2.0 million for renovation) and make appropriate adjustments to the budget based on revised DD Form 1391 submitted for the project.
Finding A. Collocation of Blood Research

2. We recommend that the Naval Medical Research Institute prepare DD Form 1391, "Military Construction Project Data," to:

a. Renovate the offices and laboratories that the Navy's infectious disease program will vacate to meet validated Army blood research renovation requirements, and

b. Renovate the existing applications laboratory building to meet minimum American Association for the Accreditation of Laboratory Animal Care standards and to meet validated Army requirements.

3. We recommend that the Naval Medical Research Institute budget for and request the extension of the lease at the Gillette Building for the Army blood research program until spaces in existing buildings at the Naval Medical Research Institute, which the Navy's infectious disease program is vacating, have been renovated.

Management Comments. The Army concurred with the findings and recommendations provided that the animal housing and veterinary medicine support facilities are near the laboratory facilities.

Audit Response. We consider the Army comments to be responsive to the intent of the recommendations. Our recommendations would use a building adjacent to the laboratory facility to provide animal housing and veterinary medicine support for the Army programs.

Readdressed Recommendation. We revised and readdressed Recommendations 1.a. and 1.b. to ensure that the overall Navy base realignment and closure budget and funding are appropriately adjusted.
Finding B. Collocation of Dental Research

The construction and renovations planned at Naval Dental Research Institute (NDRI), Great Lakes, Illinois, to support the collocation of the Army and Navy's dental research programs are not needed or overstated. The construction requirements can be satisfied through the use of existing facilities. Additionally, the planned renovation sites have changed and are excess to official requirements. As a result, the Navy overstated project construction costs up to $2.0 million and overstated renovation costs up to $367,000.

Background

The Navy initiated Project P-596S, "Collocation of Dental Research Command," to satisfy office, laboratory, and other space requirements to accommodate the collocation of the USAIDR with NDRI at Great Lakes, Illinois. As a result of the collocation, USAIDR will transfer 46 military and 8 civilian personnel to Great Lakes. The Army will be responsible for personnel transfer costs and equipment relocation costs. Cost of facility construction and renovation at Great Lakes will be the responsibility of the Navy.

Initial Project Submission

The estimated facilities cost of $3.0 million, developed by the Navy in August 1991, was based on limited knowledge of USAIDR requirements and without detailed evaluation of renovation requirements for existing facilities. Project documentation showed that facility requirements and space allocation between the USAIDR and NDRI were not determined until a planning meeting was held at NDRI in November 1991. Plans for USAIDR to occupy unused or unneeded
Finding B. Collocation of Dental Research

NDRI space and spaces occupied by the Consolidated Civilian Personnel Office (CCPO) and the Office of Medical and Dental Affairs (OMDA) were finalized at the planning meeting.

Increases to Project Submission

The DD Form 1391, "Military Construction Project Data," submitted in April 1992 by Northern Division, Naval Facilities Engineering Command, increased the project cost from $3.0 million to $5.2 million. The reasons for the cost increase over the August 1991 estimate were:

- asbestos removal costing $452,000 had not been included in the original estimate,
- the level of renovation and amount of built-in equipment had been underestimated by $696,000,
- USAIDR's prefabricated laser laboratory, which is being housed in a weather protecting building shell at Fort Meade, would need a like facility costing $257,000 at Great Lakes. The laser laboratory was originally scheduled to go into existing NDRI space,
- the cost of the prefabricated animal facility had been underestimated by $941,000 ($71.70 versus $390.50 per square foot) although the GSF requirement had been overestimated (8,844 versus 4,032),
- additional space would be needed for the OMDA personnel move and that space would need to be renovated at a cost of $41,000, and
- support facilities (paving and site work) were overestimated, resulting in a decrease of $188,000.

A subsequent DD Form 1391, June 1992, shifted the funding within the various parts of the project, however, the total funding remained at $5.2 million. The realignment of funds resulted in increases in funding estimates for the laser facility of about $40,000, for the animal facility of about $43,000, and for parking of about $8,000. The funds were shifted from the cost of estimated renovation requirements.
Finding B. Collocation of Dental Research

Space Requirements

Planned construction and renovation will provide activities with spaces that exceed official requirements or unnecessarily increase the space that activities will occupy. The project includes a shell structure to house the Army’s prefabricated laser laboratory, a prefabricated facility for USAIDR’s animal support, and a parking area. The requirements can be met by using existing facilities. Additionally, CCPO and OMDA will be relocated to meet Army space needs; however, the relocation sites have changed and the areas planned for renovation provide space in excess of requirements. Table 2. summarizes currently occupied space requirements, and planned space that will be excess to needs.

Table 2. Space Excess to Requirement (GSF)

<table>
<thead>
<tr>
<th></th>
<th>Currently Occupied Space</th>
<th>BRAC Funded Space</th>
<th>Documented Space Requirements</th>
<th>Excess Planned Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Lab Shell</td>
<td>1,100</td>
<td>2,500</td>
<td>Unknown</td>
<td>2,500 2/</td>
</tr>
<tr>
<td>Animal Lab</td>
<td>Unknown 2/</td>
<td>4,032</td>
<td>Unknown 4/</td>
<td>4,032 2/</td>
</tr>
<tr>
<td>CCPO</td>
<td>13,413</td>
<td>9,000</td>
<td>6,900 5/</td>
<td>2,100 5/</td>
</tr>
<tr>
<td>OMDA</td>
<td>20,663 2/</td>
<td>2,300</td>
<td>17,000 5/</td>
<td>2,300 2/</td>
</tr>
</tbody>
</table>

1/ Based on DD Form 1391, June 1992.
2/ Use existing facilities instead of construction.
3/ Currently housed with Walter Reed Army Institute of Research animals.
4/ The USAIDR could not provide documentation to support estimated animal space requirements.
5/ Official space requirements documentation.
6/ Calculated as BRAC funded space less requirements.
7/ Includes 17,095 square feet of space in building 38-H and 3,568 square feet of space in NDRI building.
Construction Requirements

Laser Laboratory. DD Form 1391 showed that a 2,500 GSF shell will be built to accommodate the USAIDR's laser laboratory. The prefabricated laser laboratory at Fort Meade is housed in a 1,100 GSF weather protective shell. Plans call for the USAIDR to ship the existing prefabricated laser laboratory (excluding the shell) to Great Lakes. As an alternative to constructing a building shell to house the laser laboratory, existing space in the basement of building 38-H at Great Lakes can be used to house the laser and supporting equipment. This will eliminate the need for constructing a 2,500 GSF shell at a cost of about $334,000. The savings may be reduced depending on renovation requirements in building 38-H.

Animal Laboratory. Existing NDRI facilities will not meet all the USAIDR's estimated animal requirements. DD Form 1391, June 1992, provides for a 4,032 GSF prefabricated animal facility estimated to cost $1.6 million. The 4,032 GSF requirement was, in essence, a 4,032 NSF requirement because it did not include space for walls, hallways, storage areas, or restrooms. After GSF areas are included in the structure, the usable space will be reduced greatly. The engineering staffs at Naval Facilities Engineering Command, Southern Division, and the selected architectural and engineering firm indicated that if space for functional areas is added to current plans, the size and cost of the building will increase, and it may be impossible to construct the facility on the planned site.

We contacted the North Chicago Veterans Affairs Medical Center (VAMC), which is less than 2 miles from NDRI. Responsible VAMC personnel stated that space in their facility, which is accredited by the Association, was available and that VAMC was willing to work with the Army in meeting its needs. A combination of existing space at NDRI and VAMC would satisfy the Army's estimated requirements. The expense of a $1.6 million prefabricated facility, costing an estimated $406.66 per square foot, which includes overhead and contingency costs, could be avoided.

Parking Area. Project plans will provide an additional parking area for about 71 vehicles, although the Army is transferring only 54 persons to NDRI. With the relocation of CCPO and its parking needs for a staff of 32 people and customers, sufficient parking spaces in existing lots will become available for the Army. Deletion of the parking area will result in an estimated savings of $67,000.

Renovation Requirements

CCPO. CCPO's official space requirements determination, completed on September 23, 1987, showed an authorization of 6,900 GSF. The DD Form 1391, June 1992, provided that the CCPO functions would relocate into 9,000 GSF in building 90, requiring extensive renovations.
Finding B. Collocation of Dental Research

costing $470,000. In September 1992, it was decided instead that CCPO would relocate to building 27, a vacated national historical registered building. CCPO is scheduled to receive about 10,000 GSF or the entire first floor of building 27. An engineering evaluation of building 27 has not been performed to determine the renovation requirements and estimated cost. BRAC funded renovation of space in building 27 should be limited to renovations that support official space requirements. If renovations are limited to official space requirements of 6,900 GSF, we estimated cost savings of up to $109,000. We calculated our savings figure by multiplying the 2,100 excess GSF (9,000 less 6,900) by $52.00 per square foot, the estimated renovation cost for building 90 including overhead and contingency. The number may increase or decrease when validated estimates for renovation of building 27 are generated.

OMDA. The April 5, 1990, space requirements determination for OMDA showed a need for 17,000 GSF. The square footage requirement was based on a staffing level of 111 personnel; however, current documentation shows a staffing level of 79 personnel. Installation property records showed that OMDA occupies 20,663 GSF. The 20,663 GSF included 3,568 GSF in the NMRI facility to be vacated for Army requirements, plus 17,095 GSF in an adjacent building that will meet OMDA total needs. The DD Form 1391, June 1992, provides for the renovation of 2,300 GSF in building 38-H at a cost of $258,000 to accommodate displaced OMDA employees. As of February 1993, OMDA personnel were rescheduled to move into a different area of building 38-H, which was recently renovated. BRAC funds should not be used to renovate OMDA facilities in excess of requirements. The elimination of excessive renovations from the BRAC project would save up to $258,000.

If our recommendations are implemented, savings of up to $2.0 million of construction costs and $367,000 of renovation costs may be recognized. The change in relocation sites and the use of existing facilities instead of construction may increase renovation and asbestos removal cost, thereby reducing the amount of savings. Renovation costs for the areas planned for the relocation of CCPO and OMDA should be revalidated because of the changes.

Recommendations, Management Comments, and Audit Response

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

   a. Reduce funding for Project P-569S, "Collocation of Dental Research Command," by $2.4 million ($2.0 million construction costs plus $.4 million renovation costs).

   b. Make appropriate adjustments to the budget based on revised DD Form 1391 submitted for the project, including validated renovation costs.
Finding B. Collocation of Dental Research

2. We recommend that the Naval Dental Research Institute place Project P-569S, "Collocation of Dental Research Command," on hold until requirements have been fully determined and validated.

3. We recommend that the Naval Dental Research Institute revise and resubmit DD Form 1391, "Military Construction Project Data," for Project P-569S, "Collocation of Dental Research Command," to reflect validated renovation requirements.

Management Comments. The Army concurred with the findings and recommendations provided that the animal housing and veterinary medicine support facilities are near the laboratory facilities.

Audit Response. We consider the Army comments to be responsive to the finding and intent of the recommendations. Our report identified existing animal housing and veterinary medicine support facilities within 2 miles of the planned Army laboratory.

Readdressed Recommendation. We revised and readdressed Recommendation 1. to ensure that the overall Navy base realignment and closure budget and funding are appropriately adjusted.
Part III - Additional Information
Appendix A. Prior Audits and Other Reviews

General Accounting Office

NSIAD 91-224, OSD Case No. 8703, "Military Bases, Observations on the Analyses Supporting Proposed Closure and Realignments," May 15, 1991. The audit found that the DoD BRAC guidance allowed cost estimating and cost factors used by each Military Department to vary. The report recommended that the Military Departments use consistent procedures and practices to estimate costs associated with future base closures and realignments. The report did not contain any management comments on reported conclusions and recommendations.

NSIAD 91-224S, OSD Case No. 8703S, "Military Bases, Letters and Requests Received on Proposed Closures and Realignments," May 17, 1991. This was a supplement to the above report and it contained copies of letters and materials provided by members of Congress, local government officials, and private citizens to GAO on base closure. There were no findings, recommendations, or management comments included in this supplement.

NSIAD 93-161, OSD Case No. 9294-B, "Military Bases, Revised Cost and Savings Estimates for 1988 and 1991 Closures and Realignments," March 31, 1993. The report stated that Congress may have to appropriate more money to the BRAC accounts than previously estimated. GAO found that while the total realignment and closure costs have remained relatively stable, land revenue projections have declined. The report did not contain any recommendations.

NSIAD 93-173, OSD Case No. 9374, "Military Bases, Analysis of DoD's Recommendations and Selection Process for Closure and Realignments," April 15, 1993. The audit found that the Secretary of Defense's March 12, 1993, recommendations and selection process were generally sound. However, the report stated that problems exist in the selection process of DoD Components, OSD did not provide strong oversight of the process, and DoD continues to ignore the Government wide cost implications of its decisions. GAO recommended improvements to program oversight, cost calculations, and data documentation. GAO also recommended that the Commission take corrective action.

Inspector General, DoD

Report No. 92-078, "DoD Base Realignment and Closures," April 17, 1992. The report stated that the Navy and the Air Force developed construction requirements for 33 projects with $127.1 million of estimated costs for which $72 million were not supported and should not be funded from the base closure
Appendix A. Prior Audits and Other Reviews

account. The report recommended issuing additional guidance for realignment actions and canceling or reducing selected projects. The Director of Construction, Office of the Comptroller of the Department of Defense, concurred with the recommendation to reduce the base realignment funds related to the construction projects.

Report No. 92-085, "Quick-Reaction Report on the Review of Defense Base Closure and Realignment Budget Data for Naval Aviation Engineering Service Unit," May 7, 1992. The Navy proposed to renovate a facility at the Naval Air Warfare Center while a decision was being reevaluated as to where the Naval Aviation Engineering Service Unit would actually be located. The report recommended that the project be suspended until the Navy decides on a location. The Assistant Secretary of the Navy agreed, and stated that no funds would be authorized or expended for the project until an Expense Operating Budget Study was completed. The study was completed in June 1992; however, the need for a more comprehensive study was identified and initiated for completion in February 1993. The Navy decided in March 1993 to relocate the Naval Aviation Engineering Service Unit to Lakehurst. The Navy intends to proceed with design of the BRAC construction project.


Report No. 92-087, "Quick-Reaction Report on the Review of Defense Base Closure and Realignment Budget Data for Fort Knox and Fort Meade," May 7, 1992. The report stated that the Army could reduce construction costs by $500,000 by deleting unnecessary requirements from projects. The report recommended that the Army review the construction project at Fort Knox to determine whether costs associated with "state-of-the-art design" were warranted. The Comptroller of the Army agreed with the recommendation.


Report No. 93-036, "DoD Base Realignment and Closures II for Lowry Air Force Base," December 18, 1992. The report stated that at least five projects could be either canceled or downsized because the BRAC requirements changed. The report made no recommendations because the Air Force acted to cancel and downsize the projects during the audit.

Report No. 93-052, "Defense Base Closure and Realignment Budget Data for the Naval Surface Warfare Center," February 10, 1993. The report stated that the Navy overstated costs by $7.5 million on two Carderock BRAC projects. The report recommended that the Navy reduce the estimate after accounting for
duplicate requirements. The Navy agreed to revise the costs of the shop materials technology facility project and resubmit the BRAC budget request.

Report No. 93-092, "Report on Base Closure and Realignment Budget Data for the Naval Surface Warfare Center," April 28, 1993. The report stated that for two projects with budget costs of $36.5 million, one was overstated $193,000 and had $9.8 million of project costs that were questionable. The report recommended developing and submitting new project costs based on documented data. The Navy agreed with the recommendation.

Report No. 93-094, "Quick-Reaction Report on Base Closure and Realignment Budget Data for the Naval Shipyard, Philadelphia, Pennsylvania," April 29, 1993. The report stated that the utilities reconfiguration project, with an estimated cost of $11.8 million, contained about $5.2 million of overstated and unsupported requirements. The report recommended that the Navy revise and resubmit the project to reflect realistic requirements. Management comments were not received from the Navy for inclusion in this report.

Report No. 93-095, "Quick-Reaction Report on Base Closure and Realignment Budget Data for Naval Station, Philadelphia, and Naval Training Center, Great Lakes," May 5, 1993. The report stated that a project to renovate Naval Aviation Supply Office facilities for $2.0 million was not supported. Likewise, a $22.2 million project for the Naval Damage Control Training Center realignment was overstated by $13.7 million. The report recommended adjusting both projects.

Army Audit Agency

SR 92-702, "Base Realignment and Closure Construction Requirements," August 12, 1992. The report stated that BRAC funding was not appropriate for projects totaling $197 million because either the projects were not valid BRAC requirements or because alternatives to new construction were not considered. The report recommended that the Army establish guidance for determining BRAC construction requirements. The Army agreed with the intent of the recommendation.

Air Force Audit Agency

Project 0185210, "Base Closure Facility Management," June 19, 1991. The report stated that Air Force planned projects costing $2.8 million at closing bases may not be needed. The report recommended that the Air Force issue specific facility selection criteria (quality-of-life, mission accomplishment, personnel health and safety, etc.) to be used at closing bases. The Air Force agreed to develop detailed facility management criteria.

Appendix A. Prior Audits and Other Reviews

Air Force internal controls were adequate to administer the BRAC account. The report made no recommendations.

Project 1175213, "Base Closure Environmental Planning," June 18, 1991. The report stated that the Air Force had adequate guidance for installation planners for use in developing environmental plans and actions necessary for bases to close and meet disposal dates. The report made no recommendations.
## Appendix B. Summary of Potential Benefits Resulting from Audit

<table>
<thead>
<tr>
<th>Recommendation Reference</th>
<th>Description of Benefit</th>
<th>Amount and/or Type of Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1.a.</td>
<td>Economy and Efficiency. Reduce funding.</td>
<td>Funds put to better use up to $8.7 million to the base closure account.</td>
</tr>
<tr>
<td>A.1.b.</td>
<td>Economy and Efficiency. Reduce funding.</td>
<td>Funds put to better use up to $7.6 million to the base closure account.</td>
</tr>
<tr>
<td>B.1.</td>
<td>Economy and Efficiency. Reduce funding.</td>
<td>Funds put to better use up to $2.4 million to the base closure account.</td>
</tr>
<tr>
<td>B.2.</td>
<td>Economy and Efficiency. Determine requirements.</td>
<td>Nonmonetary.</td>
</tr>
<tr>
<td>B.3.</td>
<td>Economy and Efficiency. Revise and resubmit renovation requirements to reflect validated requirements.</td>
<td>Undetermined.</td>
</tr>
</tbody>
</table>
Appendix C. Activities Visited or Contacted

Office of the Secretary of Defense

Comptroller of the Department of Defense, Washington, DC
Deputy Assistant Secretary of Defense (Installations), Washington, DC

Department of the Army

United States Army Medical Research and Development Command, Fort Detrick, MD
U.S. Army Institute of Dental Research, Washington, DC and Fort Meade, MD
Letterman Army Institute of Research, San Francisco, CA
Walter Reed Army Institute of Research, Washington, DC

Department of the Navy

Comptroller of the Navy, Washington, DC
Naval Bureau of Medicine and Surgery, Washington, DC
National Naval Medical Center, Bethesda, MD
Naval Hospital Great Lakes, IL
Naval Medical Research and Development Command, Bethesda MD
Naval Dental Research Institute, Great Lakes, IL
Naval Medical Research Institute, Bethesda, MD
Chesapeake Division, Naval Facilities Engineering Command, Washington, DC
Northern Division, Naval Facilities Engineering Command, Philadelphia, PA
Southern Division, Naval Facilities Engineering Command, Charleston, SC
Naval Training Center Great Lakes, IL

Other Activities

American Association for Accreditation of Laboratory Animals, Rockville, MD
Veterans Affairs Medical Center, North Chicago, IL
Flad and Associates, Madison, WI
Appendix D. Report Distribution

Office of the Secretary of Defense

Assistant Secretary of Defense (Health Affairs)
Assistant Secretary of Defense (Production and Logistics)
Assistant Secretary of Defense (Public Affairs)
Comptroller of the Department of Defense

Department of the Army

Secretary of the Army
Inspector General, Department of the Army
Auditor General, Army Audit Agency

Department of the Navy

Secretary of the Navy
Assistant Secretary of the Navy (Financial Management)
Auditor General, Naval Audit Service

Department of the Air Force

Auditor General, Air Force Audit Agency

Defense Agencies

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, Defense Logistics Studies Information Exchange
Director, National Security Agency
Inspector General, Defense Intelligence Agency
Non-Defense Activities

Office of Management and Budget
U.S. General Accounting Office
National Security and International Affairs Division, Technical Information Center
National Security and International Affairs Division, Defense and National Aeronautics and Space Administration Management Issues
National Security and International Affairs Division, Military Operations and Capabilities Issues

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 Barbara Boxer, U.S. Senate
Senator Carol Moseley-Braun, U.S. Senate
Senator Dianne Feinstein, U.S. Senate
Senator Barbara A. Mikulski, U.S. Senate
Senator Paul S. Sarbanes, U.S. Senate
Senator Paul Simon, U.S. Senate
Congressman Steny H. Hoyer, U.S. House of Representatives
Congresswoman Constance A. Morella, U.S. House of Representatives
Congresswoman Eleanor Holmes Norton, U.S. House of Representatives
Congresswoman Nancy Pelosi, U.S. House of Representatives
Congressman John R. Porter, U.S. House of Representatives
MEMORANDUM THRU

DIRECTOR OF THE ARMY STAFF

ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, LOGISTICS AND ENVIRONMENT)

FOR IG, DOD (Auditing)

SUBJECT: IG, DOD Draft Quick Reaction Audit Report on Base Realignment and Closure Budget Data for the Collocation of Army and Navy blood and Dental Research Programs (Project No. 3CG-0013.04)

1. HQDA has reviewed the subject draft report and concurs as noted below.

   a. Finding/recommendation A: Cancel the planned construction of new laboratory facilities at NMRI, Bethesda, MD, and renovate existing facilities to accommodate the collocation of Army and Navy blood research programs.

      Response: Concur, providing that animal facilities remain proximate to the laboratory.

   b. Finding/recommendation B: Reduce funding for construction and renovation of facilities at Great Lakes Naval Base, and use existing facilities to accommodate collocation of Army and Navy dental research programs. Revalidate space requirements.

      Response: Concur, providing that animal space remains proximate to the laboratory. Army spatial requirements were provided by U. S. Army Medical Research and Development Command (USAMRDC) on 6 Apr 93.

2. HQDA point-of-contact for this action is LTC John St Louis, DACS-DMB, (703) 693-7556.

   /s/ C. Menig
   Acting Director of Management

CF: CDR, USAMRDC
Part IV - Management Comments
Audit Team Members

Shelton R. Young  Director, Logistics Support Directorate
Michael A. Joseph  Program Director
Douglas L. Jones  Acting Project Manager
James R. Knight  Auditor
Mary J. Gibson  Auditor