

# **Audit**



# **Report**

OFFICE OF THE INSPECTOR GENERAL

**BASE CLOSURE AND REALIGNMENT BUDGET DATA  
FOR THE NAVAL SURFACE WARFARE CENTER**

Report No. 93-092

April 29, 1993

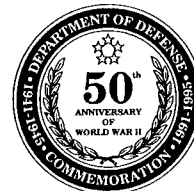
**Department of Defense**

## **Acronyms**

BRAC	Base Realignment and Closure
CHESDIV	Chesapeake Engineering Field Division, Naval Facilities Engineering Command
COBRA	Cost of Base Realignment Actions
HM&E	Hull, Mechanical, and Electrical
ISE	In-Service Engineering
MILCON	Military Construction
NAVFACENGCOM	Naval Facilities Engineering Command
NAVSEASYSKOM	Naval Sea Systems Command
NAVSSSES	Naval Ship Systems Engineering Station
NSWC	Naval Surface Warfare Center



**INSPECTOR GENERAL**  
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April 29, 1993

**MEMORANDUM FOR COMPTROLLER OF THE DEPARTMENT OF DEFENSE  
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL  
MANAGEMENT)**

**SUBJECT: Report on Base Closure and Realignment Budget Data for the Naval  
Surface Warfare Center (Report No. 93-092)**

We are providing this final report for your information and use. Comments on a draft of this report were considered in preparing the 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 relating to FY 1994 military construction costs and addresses the realignment of the Combined Research Laboratory to the Naval Surface Warfare Center, Dahlgren Division, Dahlgren, Virginia, and the realignment of the Hull, Mechanical, and Electrical, In-Service Engineering Program to the Naval Ship Systems Engineering Station, Naval Surface Warfare Center, Carderock Division, Philadelphia, Pennsylvania.

DoD Directive 7650.3 requires that audit recommendations be resolved promptly. Therefore, we request the Comptroller of the Department of Defense provide comments on Recommendation B.3 and the Navy provide additional comments on Recommendation B.2. by June 27, 1993.

The courtesies and cooperation extended to the staff are appreciated. If you have any questions on this audit please contact Mr. Wayne K. Million, Program Director, at (703) 692-2991 (DSN 222-2991) or Mr. Nicholas Como, Project Manager, at (703) 692-2996 (DSN 222-2996). Appendix D lists the planned distribution of the report.

**Robert J. Lieberman**  
Assistant Inspector General  
for Auditing

**cc:**  
Secretary of the Navy

## Office of the Inspector General, DoD

Report No. 93-092  
Project No. 3CG-0013.05

April 29, 1993

### BASE CLOSURE AND REALIGNMENT BUDGET DATA FOR THE NAVAL SURFACE WARFARE CENTER

#### EXECUTIVE SUMMARY

**Introduction.** The audit was directed by Public Law 102-190, "National Defense Authorization Act for Fiscal Years 1992 and 1993," December 5, 1991. 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 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.

**Objective.** The overall audit objective was to evaluate significant increases in base realignment and closure military construction project costs over the estimated costs provided to the Commission. This report provides the results of the audit of two projects valued at \$36.5 million related to the realignment of the Combined Research Laboratory to the Naval Surface Warfare Center, Dahlgren Division, Dahlgren, Virginia, and the realignment of the Hull, Mechanical, and Electrical, In-Service Engineering Program to the Naval Ship Systems Engineering Station, Naval Surface Warfare Center, Carderock Division, Philadelphia, Pennsylvania.

**Audit Results.** We determined that the \$26.4 million military construction estimate for the realignment of the Combined Research Laboratory was overstated by at least \$4.65 million (Finding A).

The Navy could not support military construction requirements for the realignment of the Hull, Mechanical, and Electrical, In-Service Engineering Program. As a result, the Navy overstated project costs by \$193,900, based on known requirements, and as much as \$9.8 million of project costs were questionable (Finding B).

**Internal Controls.** Navy internal controls were not effective to validate the accuracy of base realignment and closure military construction budget estimates. We consider these weaknesses to be material. See the Internal Controls section in Part I for details of the internal controls reviewed and Part II for details of the weaknesses.

**Potential Benefits of Audit.** Implementation of the recommendations can result in monetary benefits of about \$4.65 million of military construction funds. The actual

amount of monetary benefits will be determined after the requirements are recomputed and revised DD Forms 1391 are submitted by the Navy. Strengthening Navy internal controls over the accuracy of budget estimates for construction projects resulting from base realignments and closures will result in additional monetary benefits. However, we could not quantify the amount. Appendix B summarizes the potential benefits resulting from the audit.

**Summary of Recommendations.** We recommended that the Navy revise and resubmit construction estimates for project P-273S, "Combined Research Laboratory" to reflect project costs based on known requirements and that the Comptroller of the Navy reduce the funding for the Combined Research Laboratory by at least \$4.65 million. We recommended that the Navy revise and resubmit cost estimates for military construction project P-010S, "Gas Turbine Ship-Building Modifications," based on planned workload and equipment space requirements. We also recommended that Naval Sea Systems Command implement controls to validate data on the DD Form 1391, "Military Construction Project Data," before budget submission.

**Management Comments.** The Acting Assistant Secretary of the Navy (Financial Management) agreed to revise and resubmit DD Forms 1391 for projects P-273S and P-010S and to reduce the funding allocation for project P-273S should the revised DD Form 1391 reflect that the decrease is necessary. The Navy also stated that procedures were in place to validate data on DD Forms 1391 before budget submission.

We consider the Navy comments to be responsive, except for the comments on the adequacy of controls over data validation on the DD Forms 1391. The full discussion of the responsiveness of management comments is in Part II and the complete text of management comments is in Part IV. We added an additional recommendation for the Comptroller of the Department of Defense to monitor and adjust funding for Projects P-273S and P-010S based on Navy submission of revised DD Forms 1391. Accordingly, additional comments are requested from the Comptroller of the Department of Defense and the Navy by June 27, 1993.

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This report was prepared by the Contract Management 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 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 calendar years 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 34 bases be closed and 48 bases be realigned, resulting in an estimated net savings of \$2.3 billion for FYs 1992 through 1997 after a one-time cost of \$4.1 billion.

To develop cost estimates for the Commission, the Military Departments used the Cost of Base Realignment Actions (COBRA) computer model. 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 DoD requests for each MILCON project associated with BRAC actions does not exceed the original estimated cost provided to 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. 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

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, to determine whether improvements to real property facilities at gaining installations were needed, and to evaluate the effectiveness of internal controls over BRAC actions. This report provides the results of the audit of the realignment of the Combined



Research Laboratory to the Naval Surface Warfare Center, Dahlgren Division, Dahlgren, Virginia, and the realignment of the Hull, Mechanical, and Electrical, In-Service Engineering Program to the Naval Ship Systems Engineering Station, Naval Surface Warfare Center, Carderock Division, Philadelphia, Pennsylvania.

## Scope

The Military Departments developed cost estimates as a realignment and closure package for a particular realigning or closing base and did not develop estimates by individual MILCON project. Therefore, we were unable to determine the amount of cost increases for each individual MILCON project related to a BRAC. We compared the total COBRA cost estimates for each BRAC package to the Military Departments' FY 1994 BRAC MILCON \$900 million budget submission. Thirteen base closure packages increased 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 Naval Surface Warfare Center (NSWC) realignment package.

We examined the 1994 MILCON budget requests and related documentation regarding the realignment of the Combined Research Laboratory (the Laboratory) to the NSWC, Dahlgren Division (Dahlgren), Dahlgren, Virginia, and the realignment of the Hull, Mechanical, and Electrical (HM&E), In-Service Engineering (ISE) Program to the Naval Ship Systems Engineering Station (NAVSES), NSWC, Carderock Division (Carderock), Philadelphia, Pennsylvania. The supporting documentation for the two FY 1994 BRAC MILCON projects we reviewed were valued at \$36.5 million. We did not audit additional related projects, currently estimated at \$3.7 million, scheduled for implementation during FYs 1995 through 1997. We did not rely on computerized data to conduct this review.

This economy and efficiency audit was made during January and February 1993 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 as were considered necessary. Appendix C lists the activities visited or contacted during the audit.

## **Introduction**

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### **Internal Controls**

We evaluated the internal controls for validating construction and renovation requirements for NSWC realignment plans for the Laboratory and the HM&E, ISE Program. Specifically, we reviewed planning, programming, and budgeting for the realignment projects.

We identified material internal control weaknesses for the realignment projects as defined by Public Law 97-225, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. Internal controls were circumvented or were not adequate to verify that the analysis for the Laboratory project was based on accurate data and that estimating costs for the Gas Turbine Ship-Building Modifications project was properly documented and auditable. Recommendation B.2., if implemented will correct these weaknesses at Carderock and Dahlgren. We could not determine the monetary benefits that can be realized by implementing the recommendations related to internal controls because the benefits will result from future decisions and future budget estimates. A copy of the final report will be provided to the senior official responsible for internal controls in the Department of the Navy.

### **Prior Audits and Other Reviews**

Since 1991, 13 audit reports have addressed DoD BRAC issues. Appendix A lists these reports.

## **Part II - Findings and Recommendations**

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## **Finding A. Combined Research Laboratory**

Dahlgren overestimated BRAC MILCON requirements for project P-273S, "Combined Research Laboratory." Dahlgren overstated requirements to correspond with the \$26.4 million funding ceiling allocated for the project. As a result, Dahlgren overstated the project costs by at least \$4.65 million.

### **Background**

Project P-273S was initiated to satisfy laboratory, office, and other space requirements to accommodate the realignment and transfer of the Antisubmarine Warfare, the Mine Countermeasures, and the Electromagnetic Pulse departments to Dahlgren. The realignment will consolidate and integrate work now being performed at White Oak Detachment, White Oak, Maryland; Naval Coastal Systems Station, Panama City, Florida; and Naval Command Control and Ocean Surveillance Systems Center, San Diego, California.

Military Handbook 1010, "Cost Engineering: Policy and Procedures," October 16, 1989, contains unit cost factors for standard laboratory facilities but does not contain specific unit cost factors for this type of laboratory. Naval Facilities Engineering Command (NAVFACENGCOM) Publication P-80, "Facility Planning Criteria," suggests three basic methods for developing and justifying net floor areas for research facilities: architectural method, industrial method, and use-of-criteria (approved rules-of-thumb) method. However, to apply any of the methods, the facility planners must determine the number of authorized personnel (billets) who will occupy the facility and the amount of equipment that will be installed in the facility.

### **Requirements Determination**

To define project P-273S requirements, NSWC tasked the three realigning departments to identify their existing space requirements. To complete the project, NSWC then added to their requirements suitable conference space, a

snack bar, and supporting facilities. In April 1991, NSWC estimated the project requirements at 212,815 gross square feet to support 491 billets at a total cost of \$38.2 million. However, NSWC did not formally submit this estimate to the Naval Sea Systems Command (NAVSEASYS COM).

### Funding Ceiling

NAVSEASYS COM established a funding ceiling of \$26.4 million for the Laboratory before NSWC defined the project scope and calculated the estimated cost. In June 1991, NSWC downsized the project scope from 491 billets to 395 billets to meet the NAVSEASYS COM funding ceiling of \$26.4 million for the project. Further, NSWC adjusted the gross square footage requirement from 212,815 to 147,286.

### Initial Project Submission

NSWC submitted DD Form 1391, "FY 1994 Military Construction Program," (undated), to the Comptroller of the Navy for review by the Comptroller of the Department of Defense. NSWC requested 165,700 square feet at a cost of \$26.4 million for the Laboratory. NSWC officials could not explain the difference between the June 1991 estimate of 147,286 and the higher square footage estimate (an 18,414-square-foot increase) submitted to the Comptroller of the Navy.

### Cost Certification and Approval

Chesapeake Engineering Field Division (CHESDIV), NAVFACENGCOM, prepared an engineering cost certification for the project in November 1991. CHESDIV estimated the construction cost to be \$21.75 million based on 147,270 square feet to support 395 billets. At this point, NSWC realized that \$4.65 million of the \$26.4 million funding ceiling remained. As a result, NSWC facility planners requested an additional 24,000 gross square feet in an attempt to reduce a perceived space shortfall in relation to the funding ceiling. NAVFACENGCOM approved the additional request, bringing the total square footage requested to 171,286 square feet, and authorized CHESDIV to proceed

## **Finding A. Combined Research Laboratory**

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with all execution efforts to synopsise, slate, select, and negotiate project engineering and design for the Laboratory. On December 23, 1991, Dahlgren was established and assumed responsibility for project P-273S.

### **Recent Estimate**

NAVFACENGCOM approved the Laboratory project scope based on 445 billets with 171,286 total gross square feet. As of January 1993, Dahlgren further defined the requirements, changing from a high of 491 billets to the current projection of 350 billets. As of the date of this report, Dahlgren plans no further changes to the number of billets. We validated that 350 billets will be moved into the new facility; however, Dahlgren did not recompute the square footage requirement based on the lower 350-billet figure. Further, Dahlgren officials attempted to maximize the use of the funding ceiling and build a larger facility to fully utilize the \$26.4 million budget allocation. As a result, Dahlgren overstated the total cost of the Laboratory by at least \$4.65 million.

In our opinion, the CHESDIV engineering cost certification of \$21.75 million, based on requirements of 147,270 square feet to support 395 billets, most closely approximates the cost and requirements of the project. If the square footage requirements are recalculated for the 350 billets, additional monetary benefits could be realized.

### **Recommendations, Management Comments, and Audit Response**

1. We recommend that the Commander, Naval Surface Warfare Center, Dahlgren Division, revise and resubmit DD Form 1391, "FY 1994 Military Construction Project Data," for project P-273S, "Combined Research Laboratory," to reflect requirements of 350 billets.

**Management Comments.** The Navy concurred, with qualifications, and stated a revised DD Form 1391 will be prepared when project design warrants a valid cost estimate. However, the Navy contended that the requirement for necessary laboratory space for equipment was re-examined and may have been understated in the cost estimate for the Laboratory. The current project cost estimate was \$26.4 million and the estimate to complete a revised DD Form 1391 was July 31, 1993.

**Audit Response.** The Navy comments meet the intent of our recommendation. However, regarding the Navy comment that the Laboratory space requirement may have been understated, we based the requirements for the Laboratory on known equipment, billets, and laboratory space provided to us by the Navy during January and February of 1993. The Navy had no additional known or contemplated requirements for the Laboratory at that time. The recommended reduction of at least 18,414 square feet, with monetary benefits amounting to \$4.65 million, was conservatively based on the CHESDIV certification of estimated costs for the Laboratory. The CHESDIV estimate included the requirement for 395 billets, based on known equipment and laboratory requirements. We validated that only 350 billets will be relocated to the Laboratory.

2. We recommend that the Comptroller of the Navy reduce the total funding allocated for project P-273S by at least \$4.65 million.

**Management Comments.** The Navy agreed to decrease funding for project P-273S should the revised DD Form 1391 reflect a decrease in funding requirements.

## **Finding B. Gas Turbine Ship-Building Modifications**

NSWC<sup>1</sup> did not fully justify BRAC MILCON requirements for project P-010S, "Gas Turbine Ship-Building Modifications." NSWC did not fully identify and support project requirements based on equipment and personnel strength. In addition, project costs of \$10.1 million were estimated to correspond to a Navy imposed funding ceiling. As a result, NSWC overstated project costs by \$193,900, based on known requirements; as much as \$9.8 million of project costs are questionable.

### **Background**

Project P-010S was developed to modify the existing interior of NAVSSES Building 77H in Philadelphia. The project will provide additional test cells, a test pad, and other space requirements to accommodate the realignment of the HM&E, ISE Program. The realignment will transfer the HM&E, ISE functions from the NSWC, Annapolis Detachment (Annapolis), Annapolis, Maryland (formerly the David Taylor Research Center), and consolidate existing HM&E, ISE functions from the Philadelphia Naval Shipyard to NAVSSES.

NAVFACENGCOM Instruction 11010.44E, "Shore Facilities Planning Manual," October 1, 1990, outlines the Navy policy on the responsibilities and procedures for the facilities planning process. Included in this instruction are requirements for planning unique (one-of-a-kind) facilities. Unique facility planning should be based on an engineering analysis of the operation and the required support facilities. Navy planners are required to provide a detailed justification of the requirements including the function(s) to be accommodated, the space needed, the number and organizational status of personnel, and the support space requirements. The Navy considers NAVSSES Building 77H a unique facility.

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<sup>1</sup>Carderock was established December 23, 1991. At that time, Carderock assumed responsibility for project P-010S.



## Construction Requirements

NSWC established a 25,200-square-foot requirement for the HM&E, ISE functions being realigned from Annapolis and from the Philadelphia Naval Shipyard to NAVSSES without adequately defining the required project scope to support the transferring functions.

The 25,200 square feet proposed for project P-010S consists of:

- o 10,000 square feet for an HM&E test pad<sup>2</sup>,
- o 1,600 square feet for two engine test cells, and
- o 13,600 square feet for engineering space.

NSWC did not identify the existing space requirements, personnel billets, and current workload for the functions being realigned from Annapolis. In addition, NAVSSES did not accurately identify the requirement for the existing HM&E, ISE functions being consolidated from the Philadelphia Naval Shipyard. Furthermore, NAVSEASYSCOM approved the BRAC MILCON project without validating that all requirements were identified and supported. As a result, the 25,200-square-foot estimate is not based on well-defined requirements.

**HM&E Test Pad.** NSWC, without adequate planning and analysis, proposed a requirement for a 10,000-square-foot HM&E test pad to accommodate the HM&E, ISE functions being realigned from Annapolis to NAVSSES. In June 1991, NAVSSES requested that Annapolis provide a description of the available or budgeted funds, personnel, and equipment for the new HM&E test sites, and a description of the HM&E, ISE Program to be transferred. Annapolis did not conduct an analysis and did not provide the data to NAVSSES. Therefore, the 10,000-square-foot estimate for the HM&E test pad, as well as related built-in-equipment and support facilities, is not supported by a defined requirement or by project documentation.

**Engine Test Cells.** Of the 25,200 square feet NSWC proposed for project P-010S, 1,600 square feet was proposed to accommodate two engine test cells for those HM&E, ISE functions being consolidated from the Philadelphia Naval Shipyard to NAVSSES. The largest diesel engine and its specialized ancillary equipment require 462 square feet for each of the two cells, for a total of 924 square feet. Thus, NAVSSES's current requirement supports only 58 percent of the 1,600 proposed square feet. At an estimated unit cost of \$288 per square foot, the supported costs for the two engine test cells totaled

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<sup>2</sup>The 10,000-square-foot HM&E test pad was categorized as a special construction feature and, as such, was not included in the total estimated square footage. We could not determine the estimated cost for the test pad; however, the cost was reflected in the total project cost.

## **Finding B. Gas Turbine Ship-Building Modifications**

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\$266,112. Therefore, \$193,888 of unsupported costs exist for the engine test cells. We could not determine the associated costs of roof alteration, built-in-equipment, and support facilities.

**Engineering Space.** NSWC established a requirement of 13,600 square feet for the HM&E, ISE functions being realigned and consolidated from Annapolis and the Philadelphia Naval Shipyard to NAVSSES without identifying the workload or billets required to support the HM&E, ISE functions. The requirements for 13,600 square feet of engineering space, estimated to cost \$1.7 million, and related costs for built-in equipment, roof alteration, and support facilities were unsupported. Carderock informed us that the square-footage requirement was based on the equivalent of 100 man-years of HM&E, ISE work transferring from Annapolis to NAVSSES. The "100 man-years" was included in the "Department of The Navy, Base Closure and Realignment Recommendation Detailed Analysis," April 1991. However, Carderock could not provide documentation to support the estimated 100 man-years of HM&E, ISE work transferring from Annapolis to NAVSSES. Additionally, Annapolis was unable to provide adequate documentation to identify the number of transferring billets. Because the 13,600 square feet was not based on a defined requirement, the estimated cost of \$1.7 million for the 13,600 square feet of engineering space, plus the cost of related support facilities, remains questionable.

## **Funding Ceiling**

The Navy established a \$10-million funding ceiling for project P-010S before the project scope and requirements were defined or before the estimated costs were calculated. Estimated costs in the DD Form 1391 are required to represent well-defined requirements, scope, and costs. NAVSSES informed us in February 1993 that they were verbally instructed to keep the cost of the project under \$10 million. However, NAVSSES could not document the source of the verbal instruction. Because NAVSSES was trying to match a funding ceiling, the cost estimate, its development process, and the supporting documentation for the costs are questionable.

## **Internal Controls**

The budget estimates on the DD Forms 1391 for the Laboratory (Finding A) and the Gas Turbine Ship-Building Modifications were based on incomplete or inadequate documentation. The budget estimates were based solely on funding ceilings. Budget estimates based solely on funding ceilings can result in buildings that are either too large or too small for project requirements. Also, in times of fiscal austerity, basing a construction project estimate on a dollar-value estimate from a headquarters activity is an inappropriate use of appropriated funds. NAVFACENGCOM Instruction 11010.44E, section 11-16, requires that "Major Claimants review project documentation to ensure that the

## Finding B. Gas Turbine Ship-Building Modifications

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projects forwarded are necessary and fully supported for the program." Accordingly, internal controls were not followed or were not adequate to verify the cost estimates on the DD Forms 1391 were "fully supported" by complete and accurate documentation. Not every DD Form 1391 is subject to audit; therefore, to prevent the waste of funds, NAVSEASYS COM, the major claimant for the projects, must verify that internal control procedures are adequate and followed to validate the cost estimates on DD Forms 1391 to factual data.

### Summary

NSWC did not identify the existing space requirements for the HM&E, ISE functions realigned from Annapolis nor accurately define the functions consolidated from the Philadelphia Naval Shipyard. Therefore, as much as \$9.8 million in costs remain unsupported for project P-010S. Carderock should suspend action on this BRAC MILCON project until square footage and personnel strength requirements are fully identified and supported by current work load or eliminate project P-010S from the FY 1994 budget.

### Recommendations, Management Comments, and Audit Response

1. We recommend that the Commander, Naval Surface Warfare Center, Carderock Division:

a. Revise and resubmit DD Form 1391, "FY 1994 Military Construction Project Data" for project P-010S, "Gas Turbine Ship-Building Modifications," based on work load and equipment space requirements, or

b. Eliminate project P-010S from the FY 1994 budget.

**Management Comments.** The Navy concurred with Recommendation B.1.a. and will revise and resubmit DD Form 1391 for project P-010S, "Gas Turbine Ship-Building Modifications" by April 30, 1993.

2. We recommend that the Commander, Naval Sea Systems Command establish procedures to validate data on the DD Form 1391, "FY 1994 Military Construction Project Data," to supporting documentation before budget submission.

**Management Comments.** The Navy concurred with the intent of Recommendation B.2. The Navy stated that, during budget formulation, procedures are in place to validate workload for each field activity by coordinating the resources and the manpower required with the customer.

## **Finding B. Gas Turbine Ship-Building Modifications**

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Parallel to the budget effort is the site selection, workload performance, and facilities identification to support the work. In addition, tradeoffs of construction and equipment requirements are made to validate the scope used in preparation of DD Form 1391 data.

**Audit Response.** Although the Navy stated that procedures exist to validate workload and to coordinate resources and manpower during budget formulation, we determined that budget estimates for projects P-273S and P-010S were based on incomplete or inadequate documentation. The Navy based the estimated project costs on budget ceilings. Therefore, we believe that Navy procedures that would provide accurate and documented budget formulation were not followed or were not adequate. As of the date of this report, the Navy is in the process of responding to IG, DoD, draft reports on BRAC budget data for the Naval Shipyard, Philadelphia, Pennsylvania; Naval Station, Philadelphia, Pennsylvania; and Naval Station, Puget Sound (Sand Point), Washington. The three reports identify similar problems with internal controls over the accuracy of data on the DD Forms 1391; the reports contain similar recommendations to improve Navy internal controls. We do not accept the Navy response that existing Navy procedures are adequate. We request that the Navy reconsider its position and advise how internal controls over the accuracy of data on the DD Forms 1391 used for BRAC budget requests will be improved.

3. We recommend that the Comptroller of the Department of Defense adjust Navy BRAC funding as appropriate for projects P-273S and P-010S.

**Added Recommendation.** We have added Recommendation B.3. to ensure that the overall Navy BRAC budget and funding are appropriately adjusted.

## **Part III - Additional Information**

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## **Appendix A. Summary of 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 Realignment," May 15, 1991. The report states 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. Management did not comment on the report.

NSIAD 91-224S (OSD Case No. 8703S), "Military Bases, Letters and Requests Received on Proposed Closures and Realignments," May 17, 1991. The report consisted of letters from members of Congress, local government officials, and private citizens expressing their concerns to the Defense Base Closure and Realignment Commission. The audit report did not include findings, recommendations, or management comments.

### **Inspector General, DoD**

Report No. 92-078, "DoD Base Realignment and Closures," April 17, 1992. The report states that the Navy and the Air Force developed construction requirements for 33 projects with \$127.1 million of estimated costs. Of the \$127.1 million, \$72 million was either not supported or should not be funded from the Base Closure Account. The report recommended issuing additional guidance for realignment actions and canceling or reducing the scope for selected projects. The Office of the Secretary of Defense stated that additional guidance on realignment actions was issued since the audit started and agreed 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 a decision was made after completion of an expense operating study.

## Appendix A. Summary of Prior Audits and Other Reviews

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Report No. 92-086, "Quick-Reaction Report on the Review of Defense Base Closure and Realignment Budget Data for MacDill Air Force Base, Luke Air Force Base, and Seymour Johnson Air Force Base," May 7, 1992. The report stated that four MILCON projects valued at \$9.6 million were supported. However, the Air Force could reduce construction costs by \$702,000 to \$1.95 million by using existing facilities and deleting unnecessary requirements. The Air Force generally agreed to use existing facilities when cost effective.

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 four MILCON projects valued at \$34.1 million were supported; however, the Army could reduce construction costs by \$500,000 by deleting unnecessary requirements from projects. The report recommended that the Army review the MILCON 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 and will determine the monetary benefits when the final decision is made on the project.

Report No. 93-027, "Quick-Reaction Report on the Review of Defense Base Closure and Realignment Budget Data for Carswell, Barksdale, Dyess, Minot, and Tinker Air Force Bases," November 27, 1992. The report stated that 10 MILCON projects valued at \$18.3 million did not have adequate documentation to support the project requirements. Also, the Air Force could reduce BRAC MILCON costs of \$11.9 million by deleting unnecessary and canceled requirements from the projects. The report recommended that the Air Force eliminate invalid project requirements and maximize the use of existing equipment. The Air Force agreed with the recommendations.

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 cancelled and downsized 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 \$18.4 million on one project and understated the cost of a second project by \$3.5 million at the Naval Surface Warfare Center, Carderock Division. The report recommended that the Navy reduce the estimate on one project after accounting for duplicate requirements and increase the size of another project estimate to meet requirements. The Navy agreed to revise the costs of the projects and resubmit the BRAC budget request.

### 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

## **Appendix A. Summary of Prior Audits and Other Reviews**

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four projects totaling \$38.2 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.

Project 1255312, "Air Force Administration of the Department of Defense (DoD) Base Closure Account," September 10, 1991. The report stated that Air Force internal controls were adequate to administer the Base Closure 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.



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## Appendix B. Summary of Potential Benefits Resulting from Audit

Recommendation Reference	Amount and/or Description of Benefit	Type and/or Amount of Benefit
A.1.	Economy and Efficiency. Revise and resubmit DD Form 1391 to reflect requirements of 350 billets.	Undeterminable. <sup>1</sup>
A.2.	Economy and Efficiency.	Funds put to better use of about \$4.65 million to the Base Closure Account.
B.1.	Economy and Efficiency. Revise and resubmit DD Form 1391 to reflect actual requirements.	Undeterminable. <sup>2</sup>
B.2.	Internal Controls. Eliminate unsupported costs in budget estimates submitted to OSD and Congress.	Undeterminable.
B.3.	Economy and Efficiency. Revise funding for projects P-273S and P-010S to reflect actual requirements.	Undeterminable. <sup>3</sup>

<sup>1</sup>Additional monetary benefits may occur when the Navy revises the construction estimate to reflect the requirements of 350 billets and submits a revised DD Form 1391. Monetary benefits of \$4.65 million cited for Recommendation A.2. were based on requirements of 395 billets.

<sup>2</sup>We could not quantify the amount of monetary benefits that could be realized from the current construction estimate of \$10.1 million. The actual monetary benefits will be determined after requirements are recomputed, fully identified, and supported in a revised DD Form 1391.

<sup>3</sup>The amount of monetary benefits to be realized will be based on Navy resolution of Recommendations A.1. and B.1.

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## **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 Navy**

Deputy Chief of Naval Operations (Logistics), Washington, DC  
Headquarters, Naval Facilities Engineering Command, Alexandria, VA  
Chesapeake Engineering Field Division, Washington, DC  
Northern Engineering Field Division, Philadelphia, PA  
Headquarters, Naval Sea Systems Command, Washington, DC  
Headquarters, Naval Surface Warfare Center, Washington, DC  
Carderock Division, Bethesda, MD  
Annapolis Detachment, Annapolis, MD  
Naval Ship Systems Engineering Station, Philadelphia, PA  
Dahlgren Division, Dahlgren, VA  
White Oak Detachment, White Oak, MD  
Naval Coastal Systems Station, Panama City, FL  
Headquarters, Space and Naval Warfare Systems Command, Washington, DC  
Research, Development, Test, and Evaluation Division, Navy Command Control  
and Ocean Surveillance Systems Center, San Diego, CA

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## **Appendix D. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisitions  
Assistant Secretary of Defense (Production and Logistics)  
Assistant Secretary of Defense (Public Affairs)  
Comptroller of the Department of Defense

### **Department of the Navy**

Secretary of the Navy  
Assistant Secretary of the Navy (Financial Management)  
Comptroller of the Navy  
Deputy Chief of Naval Operations (Logistics)  
Commander, Naval Facilities Engineering Command  
    Commander, Chesapeake Engineering Field Division  
    Commander, Northern Engineering Field Division  
Commander, Naval Sea Systems Command  
Commander, Space and Naval Warfare Systems Command  
Commander, Naval Surface Warfare Center  
    Commander, Naval Surface Warfare Center, Dahlgren Division  
    Commander, Naval Surface Warfare Center, Carderock Division  
Auditor General, Naval Audit Service

### **Non-Defense Activities**

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

**Non-Defense Activities (cont'd)**

Senator Barbara A. Mikulski, U.S. Senate  
Senator Charles S. Robb, U.S. Senate  
Senator Paul S. Sarbanes, U.S. Senate  
Senator Arlen Specter, U.S. Senate  
Senator John W. Warner, U.S. Senate  
Senator Harris Wofford, U.S. Senate  
Congressman Herbert H. Bateman, U.S. House of Representatives  
Congressman Thomas M. Foglietta, U.S. House of Representatives  
Congresswoman Constance A. Morella, U.S. House of Representatives

## **Part IV - Management Comments**

# Department of the Navy Comments



DEPARTMENT OF THE NAVY  
OFFICE OF THE ASSISTANT SECRETARY  
(FINANCIAL MANAGEMENT)  
WASHINGTON, D.C. 20360

16 APR 1993

MEMORANDUM FOR THE DEPARTMENT OF DEFENSE ASSISTANT INSPECTOR GENERAL  
FOR AUDITING

Subj: DODIG DRAFT QUICK-REACTION REPORT ON BASE CLOSURE AND REALIGNMENT  
BUDGET DATA FOR THE NAVAL SURFACE WARFARE CENTER (PROJECT NO.  
3CG-0013.05) - ACTION MEMORANDUM

Ref: (a) DODIG memo of 12 March 1993

Encl: (1) DON Response to Draft Quick-Reaction Audit Report

I am responding to the draft quick-reaction audit report forwarded by reference (a) concerning Base Realignment and Closure budget data for the Naval Surface Warfare Center.

The Department of the Navy response is provided at enclosure (1). We generally concur with the draft report findings and recommendations. As outlined in the enclosed comments, the Department is taking specific actions to revise project cost estimates to reflect revised spacing and billeting requirements. If necessary, funding for these projects will be reduced upon completion and submittal of revised Military Construction Project Data Sheets (DD Form 1391).

*Al Conte*  
ALBERT V. CONTE  
Acting

Subj: DODIG DRAFT QUICK-REACTION REPORT ON BASE CLOSURE AND REALIGNMENT  
BUDGET DATA FOR THE NAVAL SURFACE WARFARE CENTER (PROJECT NO.  
3CG-0013.05) - ACTION MEMORANDUM

Copy to:  
NAVINGEN  
NAVCOMPT (NCB-53)

Blind copy to:  
NAVCOMPT (NCB-231)

DEPARTMENT OF THE NAVY RESPONSE

TO

DODIG DRAFT QUICK-REACTION REPORT OF MARCH 12, 1993

ON

BASE CLOSURE AND REALIGNMENT  
BUDGET DATA FOR THE NAVAL SURFACE WARFARE CENTER  
PROJECT NO. 3CG-0013.05

Finding A:

Naval Surface Warfare Center, Dahlgren Division, overestimated BRAC MILCON requirements for project P-273S, "Combined Research Laboratory" (the Laboratory). NSWCDD overstated requirements to correspond with the \$26.4 million funding ceiling allocated for the project. As a result, NSWCDD overstated the project costs by at least \$4.65 million.

Recommendation A-1:

We recommend that the Commander, Naval Surface Warfare Center, Dahlgren Division, revise and resubmit DD Form 1391, "Military Construction Project Data," for project P-273S, "Combined Research Laboratory," to reflect requirements of 350 billets.

DON Position:

Concur with qualifications. The complex and confusing technical issues related to functions and equipment relocation made the initial scoping and cost estimating difficult to develop a DD Form 1391, "Military Construction Project Data". The initial and very preliminary estimate identified approximately 213,000 SF for the relocation of billets and equipment. After the Base Realignment and Closure announcement to relocate billets, functions, and equipment, the activity formed its own task force to examine the requirements for relocation. Subsequently, an inventory of potential equipment for relocation was conducted and functional layouts were examined to integrate billets, equipment, and laboratory space. The preliminary concept of housing 491 billets was incorrect and the requirement was modified to accommodate 350 billets. At this point in time, design concepts had not been explored to facilitate the transition without disruption. As a result of this task force process, laboratory space in conjunction with functions and departmental alignments were re-examined and determined to be understated when overlaid by the interrelationships between the functions and equipment now identified for relocation. This resulted in an increase in laboratory space for equipment but not to accommodate additional billets.

Project design is underway. A revised DD Form 1391 will be prepared when design has progressed far enough to provide a better valid cost estimate. Currently, the project estimate is \$26.4 million. Target completion date for a valid cost estimate/revised DD Form 1391 is 31 July 1993 with a final design scheduled for 30 November 1993.



DON COMMENTS ON DODIG DRAFT QUICK-REACTION REPORT ON BASE CLOSURE AND REALIGNMENT BUDGET DATA FOR THE NAVAL SURFACE WARFARE CENTER (PROJECT NO. 3CG-0013.05) OF 12 MARCH 1993

Recommendation A-2:

We recommend that the Comptroller of the Navy reduce the funding allocated for project P-273S by at least \$4.65 million.

DON Position:

Concur with qualifications. The DD Form 1391 will be revised to reflect a decrease in funding requirements if necessary. Target completion date is 31 July 1993.

Finding B:

Naval Surface Warfare Center did not fully justify BRAC MILCON requirements for project P-010S, "Gas Turbine Ship Building Modifications." NSWC did not fully identify and support project requirements based on equipment and personnel strength. In addition, project costs of \$10.1 million were estimated to correspond to a Navy imposed funding ceiling. As a result, NSWC overstated project costs by \$193,000, based on known requirements, and as much as \$9.8 million of project costs are questionable.

Recommendation B-1(a):

We recommend that the Commander, Naval Surface Warfare Center, Carderock Division:

(a) revise and resubmit DD Form 1391, "Military Construction Project Data," for project P-010S, "Gas Turbine Ship Building Modifications," based on workload and equipment requirements, or

DON Position:

Concur. The DD Form 1391, "Military Construction Project Data," will be revised and resubmitted. Target completion date is 30 April 1993. Project documentation will be revised to further define the present test cells, control room, tear down area, parts, machine shop area, and the support systems. A profile of planned workload will be provided addressing the transfer from the Annapolis Detachment to the Philadelphia Detachment.

Recommendation B-1(b):

(b) eliminate project P-010S from the FY 1994 budget.

DON Position:

Nonconcur. The Naval Surface Warfare Center will revise and resubmit DD Form 1391, "Military Construction Project Data". Target completion date is 30 April 1993.

DON COMMENTS ON DODIG DRAFT QUICK-REACTION REPORT ON BASE CLOSURE AND  
REALIGNMENT BUDGET DATA FOR THE NAVAL SURFACE WARFARE CENTER (PROJECT NO.  
3CG-0013.05) OF 12 MARCH 1993

Recommendation B-2:

We recommend that the Commander, Naval Sea Systems Command establish procedures to validate data on the DD Form 1391, "Military Construction Project Data," to supporting documentation before budget submission.

DON Position:

Concur with the intent of the recommendation. The Commander, Naval Sea Systems Command has procedures in place to validate workload for each field activity. Approximately 500 customers obtain work from our field activities. Validation of field activity workload is conducted by coordinating with each customer the resources and manpower required for each product line during budget formulation. Parallel to this budget effort is the site selection for workload performance, the identification of facilities to support this work, and tradeoffs of construction and equipment requirements necessary to validate the scope used in the preparation of DD Form 1391 data.

## **Audit Team Members**

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