

**Audit**



**Report**

OFFICE OF THE INSPECTOR GENERAL

**QUICK-REACTION REPORT ON BASE CLOSURE AND  
REALIGNMENT BUDGET DATA FOR THE NAVAL  
SHIPYARD, PHILADELPHIA, PENNSYLVANIA**

Report No. 93-094

April 29, 1993

**Department of Defense**

## **Acronyms**

**BRAC**  
**COBRA**  
**NAVFACENCOM**  
**MILCON**

Base Realignment and Closure  
Cost of Base Realignment Actions  
Naval Facilities Engineering Command  
Military Construction



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202

April 29, 1993

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

SUBJECT: Quick-Reaction Report on Base Closure and Realignment Budget Data for  
the Naval Shipyard, Philadelphia, Pennsylvania (Report No. 93-094)

We are providing this final report for your review and comments. 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 Closure and Realignment. This report is one in a series of reports relating to FY 1994 military construction costs and addresses the reconfiguration of the Naval Shipyard, Philadelphia, Pennsylvania. 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. In addition, we added a recommendation to the Comptroller of the Department of Defense. Therefore, we request that the addressees provide final comments on the unresolved recommendations by May 26, 1993.

The courtesies and cooperation extended to the staff are appreciated. If you have any questions on the report please contact Ms. Patricia A. Brannin, Program Director, at (703) 692-3206 (DSN 222-3206) or Ms. Victoria C. Hara, Project Manager, at (703) 692-3026 (DSN 222-3026). Copies of the final report will be distributed to the activities listed in Appendix D.

A handwritten signature in cursive script that reads "Robert J. Lieberman".

Robert J. Lieberman  
Assistant Inspector General  
for Auditing

cc:  
Secretary of the Navy

## Office of the Inspector General, DoD

Report No. 93-094  
(Project No. 3CG-0013.07)

April 29, 1993

### QUICK-REACTION REPORT ON BASE CLOSURE AND REALIGNMENT BUDGET DATA FOR THE NAVAL SHIPYARD, PHILADELPHIA, PENNSYLVANIA

#### EXECUTIVE SUMMARY

**Introduction.** The audit was required 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 DoD requested for each military construction project associated with base closure and realignment 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 difference 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 closing and realigning bases.

**Objective.** The overall audit objective was to evaluate significant increases in base closure and realignment military construction project costs over the estimated costs provided to the Commission. This report provides the audit results of one project valued at \$11.8 million related to the utility reconfiguration of the Naval Shipyard, Philadelphia, Pennsylvania.

**Audit Results.** We determined that the Navy did not adequately plan and document the utility reconfiguration project to provide complete and usable utilities within a justified cost. As a result, the estimated cost of \$11.8 million for the utility reconfiguration contains \$5.2 million of overstated and unsupported requirements. The remainder of the estimate is questionable.

**Internal Controls.** Navy internal controls were not effective to validate the accuracy of base closure and realignment military construction budget estimates. We consider this weakness to be material. See Part I for details of the internal controls reviewed and Part II for a discussion of the internal control weakness.

**Potential Benefits of Audit.** Implementation of the recommendations can result in monetary benefits of \$5.2 million and a more realistic cost estimate for the utility reconfiguration project. Improved internal controls over the validity of data incorporated into the Navy budget request to Congress will provide for more accurate funding for military construction projects. Appendix B summarizes the potential benefits resulting from the audit.

**Summary of Recommendations.** We recommended that the Commander, Naval Shipyard, Philadelphia, revise and resubmit DD Form 1391, "FY 1994 Military Construction Program Data," for the utility reconfiguration project P-591S to reflect project costs based on realistic requirements and that the Comptroller, Department of Defense, reduce the funding for Project P-591S by \$5.2 million and make appropriate adjustments to the budget based on revised DD Form 1391 submitted for the project. We also recommended that the Commander, Naval Sea Systems Command, establish procedures to validate data on the DD Forms 1391 for Base Realignment and Closure construction.

**Management Comments.** As of April 26, 1993, the Commander, Naval Shipyard, Philadelphia, and the Commander, Naval Sea Systems Command, had not responded to the draft report. We added a recommendation to the Comptroller of the Department of Defense to ensure that the overall Navy BRAC budget and funding are appropriately adjusted. We request comments from the Comptroller of the Department of Defense; Commander, Naval Sea Systems Command; and Commander, Naval Shipyard, Philadelphia by May 26, 1993.

# Table of Contents

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Executive Summary	i
<b>Part I - Introduction</b>	
Background	2
Objectives	3
Scope	3
Internal Controls	4
Prior Audits and Other Reviews	4
<b>Part II - Finding and Recommendations</b>	
Utility Reconfiguration	6
<b>Part III - Additional Information</b>	
Appendix A. Summary of Prior Audits and Other Reviews	10
Appendix B. Summary of Potential Benefits Resulting From Audit	13
Appendix C. Activities Visited or Contacted	14
Appendix D. Report Distribution	15

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**

## Introduction

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## 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 enacts 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 closures and realignments.

Public Law 101-510, "Defense Base Closure and Realignment Act of 1990," November 5, 1990, re-establishes the Commission. Public Law 101-510 charts the Commission to meet during calendar years 1991, 1993, and 1995 to ensure that the process for closing and realigning military installations is timely and independent and stipulates that closure and realignment 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 MILCON requirements were adequately supported, to determine whether improvements to real property facilities at closing installations were needed, and to evaluate the effectiveness of internal controls over BRAC actions.

## Scope

The Military Departments developed cost estimates for a particular closing and realigning base as a closure and realignment package 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 had increases 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 Naval Shipyard, Philadelphia, Pennsylvania (the Shipyard), realignment package.

We examined the FY 1994 MILCON budget request and related documentation for project P-591S, "Utility Reconfiguration," valued at \$11.8 million. 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 MILCON and renovation requirements for the Shipyard realignment plans. Specifically, we reviewed planning, programming, and budgeting for the realignment project. The Shipyard did not conduct a vulnerability assessment.

We identified a material internal control weakness for the realignment project as defined by Public Law 97-225, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. Internal controls were not adequate to verify that the analysis for project P-591S was based on accurate data and that the estimated costs were properly documented and auditable. Recommendation 2., if implemented, will correct the internal control weakness. We could not determine the monetary benefits that could be realized by implementing the recommendation related to internal controls because the benefits will result from future decisions and budget estimates. A copy of the 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, 14 audit reports have addressed DoD BRAC issues. Appendix A lists those reports.

## **Part II - Finding and Recommendations**

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## **Utility Reconfiguration**

The Navy did not adequately plan and document project P-591S to provide complete and usable utilities within a justified cost. The inadequate planning and documentation occurred because the Shipyard did not prepare or retain data to support the estimate and because the Shipyard intended to rely upon an architect-engineering study, not yet completed, for a more detailed cost estimate. As a result, the estimated cost of \$11.8 million for the utility reconfiguration contains \$5.2 million of overstated and unsupported requirements, and the remainder of the estimate is questionable.

## **Background**

The Shipyard is scheduled to close effective FY 1996. However, some land and structures will be retained for general mobilization purposes. The Naval Inactive Ships Maintenance Facility; the Naval Ship Systems Engineering Station, Naval Surface Warfare Center, Carderock Division; and the Propeller Facility will remain open. Also, after the Shipyard closes, some facilities will be maintained to support emergent-ship drydocking and repair requirements.

For the excess property to retain its economic value, the property must be preserved. Project P-591S separates the electrical, sanitary sewer, storm sewer, potable water, nonpotable water, and steam distribution systems into two components: one supporting the retained property and one supporting the excess property. The sanitary sewer and storm sewer systems needed to serve the active facilities retained by the Navy must be severed from the excess property to limit the environmental liability of the Navy.

## **Internal Controls**

The Shipyard did not adequately plan and document project P-591S to provide complete and usable utilities within a justified cost. The Shipyard estimating procedures and practices did not comply with Naval Facilities Engineering Command (NAVFACENGCOM) Instruction 11010.44E, "Shore Facilities Planning Manual," October 1, 1990. The Navy DD Form 1391, "FY 1994 Military Construction Program," submission for project P-591S was not based on accurate, complete, or current cost data.

We examined the Shipyard's estimating procedures for project P-591S; we considered the source of the data used in the process; and we determined whether the data were accurate, complete, and current. We found no documentation supporting either the quantitative requirements or the rationale behind assumptions used. Further, we found numerous mathematical errors, incorrect escalation factors, cost factors applied twice, and previous estimates instead of historical costs used to support current estimates. Based on the documentation provided, \$0.9 million was overstated, \$4.3 million was unsupported, and \$6.6 million was questionable.

NAVFACENGCOM Instruction 11010.44E, section 11-16, requires that "Major Claimants review project documentation to ensure that the projects forwarded are necessary and fully supported for the program." In addition, the General Accounting Office, "Standards for Internal Controls in the Federal Government," require documentation to be clear and documentation to be readily available for examination. The Federal Managers' Financial Integrity Act and OMB Circular A-123 require compliance with the GAO standards. Accordingly, internal controls either were not followed or were not adequate to ensure that 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, Naval Sea Systems Command must establish procedures to validate the cost estimates on the DD Forms 1391 to accurate supporting documentation. The Naval Sea Systems Command should validate the DD Form 1391 cost estimates before the cost estimates are incorporated into the Navy budget request to the Office of the Secretary of Defense and Congress.

## **Cost Certification and Approval**

NAVFACENGCOM Instruction 11010.44E requires NAVFACENGCOM to review DD Forms 1391 to ensure that project planning documents are complete, accurate, and sufficient to allow the design to proceed. NAVFACENGCOM evaluates the project and certifies the sufficiency of data for each project as "Certified Ready for Design." If the project is simple, or if similar facilities have been constructed recently, NAVFACENGCOM may certify the costs based on in-house review. If the project is complicated, NAVFACENGCOM may use architect-engineering contracts. NAVFACENGCOM Publication P-80, "Facility Planning Criteria for Navy and Marine Corps Shore Installations," October 1982, requires an architect-engineering study for utility reconfigurations.

The architect-engineering study for project P-591S was not completed and the project was not "Certified Ready for Design" by NAVFACENGCOC before the FY 1994 budget submission. The Shipyard did not plan to award the architect-engineering study contract until March 1993, and the study will not be completed until July 1993. The utility design is not anticipated to be completed until Spring 1994.

### Recommendations For Corrective Action

1. We recommend that the Commander, Naval Shipyard, Philadelphia, Pennsylvania, revise and resubmit a DD Form 1391, "FY 1994 Military Construction Program," for project P-591S, "Utility Reconfiguration," based on the results of the architect-engineering study to reflect a realistic requirement.
2. We recommend that Commander, Naval Sea Systems Command, establish procedures to validate data on the DD Forms 1391, "FY 1994 Military Construction Program," to accurate supporting documentation before budget submission.
3. We recommend that the Comptroller, Department of Defense reduce the funding allocated for project P-591S by \$5.2 million and make appropriate adjustments to the budget based on revised DD Forms 1391 submitted for the project.

**Added Recommendation.** We have added Recommendation 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 91-224S, OSD Case No. 8703S, "Military Bases, Letters and Requests Received on Proposed Closures and Realignment," 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.

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.

### **Inspector General, DoD**

Report No. 93-092, "Report on Base Closure and Realignment Budget Data for the Naval Surface Warfare Center," April 28, 1993. The report states that for two projects with budget costs of \$36.5 million: one was overstated \$4.7 million and the other 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. 93-052, "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.

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

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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. 93-027, "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. 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 MILCON 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. 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 the four MILCON projects valued at \$9.6 million were supported. However, the Air Force could reduce MILCON 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. 92-085, "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 is made after completion of an expense operating study.

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 for which \$72 million were either not supported or should not be funded from the Base Closure Account. The report recommended issuing additional guidance for

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

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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.

### **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 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 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 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 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

Recommendation Reference	Description of Benefit	Type of Benefit
1.	Economy and Efficiency. Ensures construction estimates reflect project costs based on known requirements.	Undeterminable.*
2.	Internal Controls. Establishes procedures to ensure BRAC MILCON DD Forms 1391 are based on accurate data and that cost estimates are properly documented and auditable.	Undeterminable.
3.	Economy and Efficiency. Revises funding for project P-591S to reflect actual requirements.	Funds put to better use of \$5.2 million in the Base Closure Account.*

\*The benefits are included with Recommendation 3. Additional monetary benefits may occur when the Navy revises the construction estimate based on the Architect and Engineering study and submits a revised DD Form 1391. The difference between the improved supportable estimate and the previously submitted estimate will be the monetary benefits of implementing the recommendation.

## **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), Office of the Assistant Secretary  
of Defense (Production and Logistics), Washington, DC

### **Department of the Navy**

Deputy Chief of Naval Operations (Logistics), Washington, DC  
Comptroller of the Navy, Washington, DC  
Headquarters, Naval Facilities Engineering Command, Alexandria, VA  
Northern Engineering Field Division, Philadelphia, PA  
Headquarters, Naval Sea Systems Command, Washington, DC  
Naval Shipyard, Philadelphia, PA  
Naval Surface Warfare Center, Carderock Division, Philadelphia, PA  
Naval Ship Systems Engineering Station, Philadelphia, PA

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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)  
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, Northern Engineering Field Division  
Commander, Naval Sea Systems Command  
    Commander, Naval Surface Warfare Center, Carderock Division  
    Commander, Naval Ship Systems Engineering Station  
    Commander, Philadelphia Naval Shipyard

### **Non-Defense Federal 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

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

House Committee on Government Operations  
House Subcommittee on Legislation and National Security, Committee on  
Government Operations

Senator Arlen Specter, U.S. Senate  
Senator Harris Wofford, U.S. Senate  
Congressman Thomas M. Foglietta, U.S. House of Representatives

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