Audit Report

OFFICE OF THE INSPECTOR GENERAL

REALIGNMENT OF THE FLEET AND MINE WARFARE TRAINING CENTER FROM NAVAL STATION CHARLESTON, SOUTH CAROLINA, TO NAVAL STATION INGLESIDE, TEXAS

Report No. 95-037

November 23, 1994

Department of Defense

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Acronyms

BRAC	Base Realignment and Closure
COBRA	Cost of Base Realignment Actions
MILCON	Military Construction
NS	Naval Station
NAVFAC	Naval Facilities Engineering Command

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-2884

November 23, 1994

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

SUBJECT: Audit Report on the Realignment of the Fleet and Mine Warfare Training Center From Naval Station Charleston, South Carolina, to Naval Station Ingleside, Texas (Report No. 95-037)

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. This report is one in a series of reports about FYs 1994 and 1995 base realignment and closure military construction costs. Under Secretary of Defense (Comptroller) and Navy comments on a draft were considered in preparing this final report.

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. The Navy comments were not fully responsive. Therefore, we request the Navy to provide final comments on Recommendation 2.a. by January 10, 1995.

We appreciate the courtesies and cooperation extended to the audit staff. If you have any questions on this audit, please contact Mr. Wayne K. Million, Audit Program Director, at (703) 604-9312 (DSN 664-9312) or Mr. Thomas W. Smith, Audit Project Manager, at (703) 604-9314 (DSN 664-9314). Copies of the report will be distributed to the organizations listed in Appendix F. The audit team members are listed inside the back cover.

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Office of the Inspector General, DoD

Report No. 95-037 **November 23, 1994**
(Project No. 4CG-5008.24)

REALIGNMENT OF THE FLEET AND MINE WARFARE TRAINING CENTER FROM NAVAL STATION CHARLESTON, SOUTH CAROLINA, TO NAVAL STATION INGLESIDE, TEXAS

EXECUTIVE SUMMARY

Introduction. Public Law 102-190, "National Defense Authorization Act for Fiscal Years 1992 and 1993," December 5, 1991, directs the Secretary of Defense to ensure that the amount of the authorization that DoD requested for each military construction project associated with base realignment and closure does not exceed the original estimated cost provided to the Commission on Defense Base Closure and Realignment (the Commission). If the requested budget amounts exceed the original project cost estimates provided to the Commission, the Secretary of Defense is required to explain to Congress the reasons for the differences. The Inspector General, DoD, is required to review each base realignment and closure military construction project for which a significant difference exists from the original cost estimate and to provide the results of the review to the congressional Defense committees. This report is one in a series of reports about FYs 1994 and 1995 base realignment and closure military construction costs.

Objectives. The overall audit objective was to determine the accuracy of Defense base realignment and closure military construction budget data. We reviewed the requirements and supporting documentation for seven projects, valued at $26.4 million, associated with the closure of Naval Station Charleston, South Carolina, and the realignment of dedicated personnel, equipment, and support services to Naval Station Ingleside, Texas; Naval Security Group Activity Northwest, Chesapeake, Virginia; Naval Submarine Base Kings Bay, Georgia; and Naval Weapons Station Charleston, South Carolina. This report provides the results of the audit of two of the seven projects, valued at $18 million, supporting the closure of Naval Station Charleston and the realignment of the Fleet and Mine Warfare Training Center (the Training Center) from Naval Station Charleston to Naval Station Ingleside. The results of our audit of the other five projects supporting the realignment of Naval Station Charleston will be discussed in a separate report.

Audit Results. For two projects, the Navy overstated the base realignment and closure military construction requirements. As a result, the estimated base realignment and closure costs of $18 million for projects P-045T, "Applied Instruction Building," and P-401T, "Advanced Fire Fighting Facility," should be reduced by $700,000 and could be further reduced by up to $3.9 million. See the finding in Part II for details.

Internal Controls. Navy internal controls and the implementation of the DoD Internal Management Control Program were not effective because they did not prevent or identify a material internal control weakness in planning and programming requirements for base realignment and closure military construction projects. However, the Commander, Naval Facilities Engineering Command, issued guidance establishing a requirement for all Naval Facilities Engineering Command field activities to validate Defense base realignment and closure military construction requirements and improve the budget estimating process. In addition, during the audit, the Commander,

Training Command, Atlantic Fleet (the major claimant of the projects), implemented internal controls to validate base realignment and closure military construction requirements at the major-claimant level and is in the process of issuing guidance to the field activities to also implement internal controls to validate base realignment and closure military construction requirements. These policies, when fully implemented, should enhance internal controls over base realignment and closure military construction project estimates. As a result, we made no recommendation to correct the material internal control weakness at Naval Facilities Engineering Command and Training Command, Atlantic Fleet. However, a material internal control weakness exists at Naval Facilities Engineering Command regarding the adequacy of base realignment and closure military construction project design certification. See Part I for the internal controls reviewed and the finding in Part II for details on the internal control weakness identified.

Potential Benefits of Audit. Implementation of the recommendations allowed the Navy to develop documentation to support the use of approximately $4.6 million of base realignment and closure military construction funds. Strengthening Navy internal controls will ensure the accuracy of budget estimates for military construction projects resulting from base realignments and closures and could result in additional monetary benefits. However, we could not quantify the additional amount. Appendix D summarizes the potential benefits resulting from the audit.

Summary of Recommendations. We recommend that the Under Secretary of Defense (Comptroller) reduce funding by $700,000 and suspend the remaining funds for projects P-045T and P-401T. We recommend that the Navy implement existing military construction procedures that require projects be certified ready for design before awarding design contracts for architect and engineering services for base realignment and closure military construction projects. We recommend that the Navy delay the award of construction contracts for projects P-045T and P-401T until the project requirements are adequately validated and based on reliable and verifiable data. We also recommend that the Navy revise and resubmit DD Forms 1391, "FY 1994 Military Construction Project Data," for projects P-045T and P-401T based on valid and supported base realignment and closure requirements.

Management Comments. The Under Secretary of Defense (Comptroller) agreed to place funding for the two projects on administrative withhold pending resolution of the project requirements. The Navy agreed with the findings but did not want to delay funding because the Navy developed additional data and documentation that shows projects P-045T and P-401T are now supported as initially proposed. A summary of managements comments is at the end of the finding in Part II. The complete text of management comments is in Part IV.

Audit Response. Based on the information the Navy provided after our audit, projects P-045T and P-401T were supported by the Commander, Training Command, Atlantic Fleet, by increasing the basic facility requirements for the projects after they had been approved and funds had been expended for an architect and engineering contract. We agree that increasing the number of courses and student through-put at the proposed facility will support the projects as they were initially proposed. However, we request that the Navy provide, by January 10, 1995, a completion date and details of the action being taken to assure that future base realignment and closure military construction projects are certified ready for design before awarding and expending funds for architect and engineering contracts.

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

Part I - Introduction

Background

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

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

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

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

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

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

Objectives

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

This report provides the audit results of two projects, valued at $18 million, associated with the realignment of the Fleet and Mine Warfare Training Center (the Training Center) from Naval Station (NS) Charleston, South Carolina, to NS Ingleside, Texas. The results of our audit of the other five projects, valued at $8.4 million, supporting the realignment of NS Charleston will be discussed in a separate report.

Scope and Methodology

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

Overall Audit Selection Process. We compared the total COBRA cost estimates for each BRAC package with the Military Departments' and the Defense Logistics Agency's FYs 1994 through 1999 BRAC MILCON $2.6 billion budget submission. We selected BRAC packages for which:

- the package had an increase of more than 10 percent from the total COBRA cost estimates to the current total package budget estimates or

- the submitted FYs 1994 and 1995 budget estimates were more than $21 million.

Specific Audit Limitations for This Audit. This report is limited to the review of two of seven BRAC MILCON projects. The closure of NS Charleston resulted in the realignment of dedicated personnel, equipment, and support services to NS Ingleside; Naval Security Group Activity Northwest,

Chesapeake, Virginia; Naval Submarine Base Kings Bay, Georgia; and Naval Weapons Station Charleston, South Carolina. Two FY 1994 BRAC MILCON projects for an applied instruction building and an advanced firefighting facility, valued at $18 million, are planned for NS Ingleside. For this report, we reviewed the FY 1994 budget request and related supporting project requirements documentation for projects P-045T, "Applied Instruction Building," and P-401T, "Advanced Firefighting Facility."

Audit Standards and Locations. This economy and efficiency audit was made from May through September 1994 in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD. Accordingly, we included tests of internal controls considered necessary. The audit did not rely on computer-processed data or statistical sampling procedures. Appendix E lists the organizations visited or contacted during the audit.

Internal Controls

Internal Controls Reviewed. The overall audit reviewed internal controls over validating BRAC MILCON requirements. Specifically, we reviewed Navy procedures for planning, programming, budgeting, and documenting BRAC MILCON requirements applicable to seven realignment projects associated with closing NS Charleston. We also examined Navy procedures for identifying and correcting inaccurate BRAC MILCON project requirements. In this report, we reviewed internal controls over projects P-045T and P-401T.

Adequacy of Internal Controls Over Validation Procedures. The audit identified a material internal control weakness as defined by DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987. Navy internal controls and the implementation of the DoD Internal Management Control Program were not effective because they did not prevent or identify a material internal control weakness in the accuracy of the BRAC MILCON requirements for projects P-045T and P-401T. We also examined the portion of the DoD Internal Management Control Program applicable to validating the accuracy of BRAC MILCON budget requirements. See Part II for a discussion of the internal controls over the two BRAC MILCON projects.

Command Efforts to Improve Internal Controls Over Validation Procedures. In December 1993, the Commander, Naval Facilities Engineering Command (NAVFAC), issued guidance establishing a requirement at all NAVFAC field activities to validate BRAC MILCON requirements and improve the budget estimating process. NAVFAC field activities full implementation of this policy should enhance controls over BRAC project estimates because the policy provides for applying the existing criteria to validate regular MILCON project requirements. Implementation of the DoD Internal Management Control Program will also be strengthened by including the validation of BRAC MILCON project requirements as an assessable unit. In addition, in July 1994, the Commander, Training Command, Atlantic Fleet (the major claimant of the BRAC MILCON projects), implemented internal controls to validate base

realignment and closure military construction requirements at the major claimant level and is in the process of issuing guidance to the field activities to implement internal controls to validate base realignment and closure military construction requirements. Because of the Commander, NAVFAC, and the Commander, Training Command, Atlantic Fleet, efforts, we made no recommendation concerning internal controls over validation of BRAC MILCON project requirements.

Adequacy of Internal Controls Over Design Certification. NAVFAC did not certify ready for design projects P-045T and P-401T although the projects were 100-percent design complete and synopsized in the *Commerce Business Daily* for invitation for bid. We consider this a material internal control weakness as defined by DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987. Navy controls did not provide for an effective BRAC MILCON project design certification review and validation process. Recommendation 2., if implemented, will correct the weakness. Appendix D describes the potential monetary and other benefits that can be realized by implementing the recommendation to correct the internal control weakness. The actual monetary benefits will be determined after the Navy revises the BRAC MILCON estimates to reflect valid requirements. 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, numerous audit reports have addressed DoD BRAC issues. Appendix A lists selected DoD and Navy BRAC reports.

Part II - Finding and Recommendations

Basic Facility Requirements Estimates

The Training Center overstated space requirements for BRAC MILCON projects P-045T, "Applied Instruction Building," and P-401T, "Advanced Firefighting Facility." Also, the Southern Division, NAVFAC, failed to certify the projects as ready for design at the project engineering phase and allowed the projects to become 100-percent design complete without certification. The space requirements were overstated because the Training Center did not use Navy criteria to establish requirements. Further, the Southern Division, NAVFAC, and the Training Command, Atlantic Fleet, did not follow established Navy procedures to validate the space requirements that the Training Center submitted for the BRAC MILCON projects. As a result, the estimated BRAC MILCON costs of $18 million for projects P-045T and P-401T should be reduced by $700,000 and could be further decreased by up to $3.9 million. Also, the Southern Division, NAVFAC, synopsized uncertified project requirements in the *Commerce Business Daily*; as a consequence, the Navy could award construction contracts for projects that exceed Navy requirements.

Background

1993 Commission Recommendation to Relocate the Training Center. The 1993 Commission recommended closing NS Charleston and relocating most of its functions to various sites. As a result, the Training Center was required to relocate to NS Ingleside, and the following BRAC MILCON projects were developed to accommodate the Training Center relocation.

- Project P-045T, "Applied Instruction Building," was proposed to provide a training facility for Mine Warfare Training Operations that will consist of basic and advanced mine maintenance and operations and minehunting sonar and navigational systems techniques.

Initially, the Navy planned the training facility as two projects, valued at a total of $7 million, with DD Forms 1391 combined space requirements of 55,430 gross square feet. Then, the Navy consolidated the two projects into one and reduced the space requirements to 55,413 gross square feet[1] and reduced the total value to $6.3 million. The Navy submitted the consolidated project for required reviews and approval; however, the Navy did not reduce the initial funding request to reflect the $700,000 reduction in the total project cost achieved by consolidating the projects.

[1]The basic facility requirement was established at 55,364 gross square feet. Navy planning officials could not explain the difference between the calculated basic facility requirement of 55,364 gross square feet and the 55,413 gross square feet proposed on the DD Form 1391.

Subsequently, the Navy increased the space requirements to 61,550 gross square feet and increased the estimated costs to the initially estimated $7 million.

- Project P-401T, "Advanced Fire Fighting Facility," was proposed to provide a facility for training Navy personnel in the proper techniques and procedures to combat fires that occur on board Navy ships.

The project was originally planned to be built at NS Charleston and was moved to NS Ingleside.

See Appendix B for additional details on the planning process for projects P-045T and P-401T.

Navy Criteria Used to Develop Facility Requirements

Guidance for Establishing Space Requirements. NAVFAC Instruction 11010.44E, describes the development of valid facility requirements as the foundation for the remaining phases of the planning process. The instruction:

- defines the requirement based on an analysis of the organization's mission, workload, assigned tasks, and base loading;

- provides that requirements not be inflated to accommodate inefficient or oversized existing facilities;

- states that the "major claimants . . . ensure completeness and currency of project documentation throughout the planning and programming cycle;" and

- requires NAVFAC to review DD Forms 1391 to ensure that project planning documents are complete, accurate, and sufficient to allow for facility design to proceed.

Certifying Ready for Design. In an October 13, 1993, memorandum, the Commander, NAVFAC, stated that no BRAC MILCON project is to proceed beyond the project engineering phase[2] (35-percent design) until the engineering field division or activity has certified the project ready for design. As part of the certification process, the engineering field division or activity has to review DD Forms 1391 to ensure that project planning documents are complete, accurate, and sufficient to allow the design to proceed.

Navy Facility Space-Planning Criteria. NAVFAC Publication-80 (NAVFAC P-80), "Facility Planning Criteria for Navy and Marine Corps Shore

[2]During project engineering phase, a study is conducted to systematically develop the scope, requirements, and costs for a given project.

Installations," October 1982, describes the maximum space allowances for instruction-type facilities. Instruction facilities include spaces for classrooms, support and circulation, and service areas.

Establishing Requirements for Projects P-045T and P-401T

We reviewed the estimated space requirements for projects P-045T and P-401T and determined that the Training Center and the Southern Division, NAVFAC, planning officials (the planning officials), overstated the space requirements.

Specifically, for project P-045T:

- the requirement for specialized space was overstated,
- the requirement for support space was overstated, and
- the mine neutralization system deep pool size was not supported.

For project P-401T, the space requirement for the support building was not adequately supported.

Finally, in violation of the October 13, 1993, NAVFAC memorandum, both projects were 100-percent design complete and synopsized for invitations for bid in the *Commerce Business Daily* before NAVFAC validated the project requirements and certified the projects ready for design. A summary of our review of the projects follows.

Project P-045T Space Requirement

Results of Review for Project P-045T. We compared the space requested for project P-045T for classrooms, auditorium, specialized, and support space with the criteria contained in NAVFAC P-80. See the table in Appendix B for the detail of the Navy's initial and revised space requirements. The Navy space requirements were justified, with the following exceptions:

- The specialized space requirement requested was almost double the architect and engineering 100-percent design.
- The support space was overstated because of a computational error.

In addition, the requirement for the Mine Neutralization System Deep Pool size was unsupported.

Specialized Space Requirement Almost Double Architect and Engineering 100-Percent Design. The Navy overstated the original requirement for specialized space by 17,371 gross square feet. We compared the Navy's original 25,038-net-square-feet estimate for specialized space with the architect

and engineering 100-percent design. Using the same data the Navy used, the architect and engineering firm designed a facility with 13,927 gross square feet of specialized space for project P-045T, much less than the Navy calculated.

When we discussed the architect and engineering 100-percent design with the planning officials, the planning officials could not explain the difference between the Navy estimated requirement of 25,038 net square feet for specialized space and the 13,927 gross square feet allocated in the architect and engineering 100-percent design. See Appendix C for the architect and engineering allocation of specialized space for project P-045T.

Table 1 shows that the specialized space requirement for project P-045T can be reduced by 17,371 gross square feet according to the architect and engineering 100-percent design. We calculated that the estimated cost of the project can be reduced $1.8 million.

Table 1. Overstated Square Footage and Costs of Specialized Space

Facility Requirements	Proposed Space (square feet)
Net specialized space requested	25,038
Net to gross conversion factor at 1.25 square feet	6,260
Total gross square feet	31,298
Less specialized space per 100-percent design (see Appendix C)	13,927
Overstated gross square feet	17,371
Cost per square foot (from DD Form 1391)	x $92
Amount overstated	$1,598,132
Contingency costs (5 percent of amount overstated)	79,906
Supervision, inspection and overhead costs (6 percent of amount overstated plus contingency costs)	100,682
Subtotal	180,588
Total	$1,778,720

Computational Error for Support Space. The planning officials overstated the support space by 3,972 gross square feet (61,550 gross square feet minus 57,578 gross square feet) because of a computational error. The Navy could not explain how the computational error occurred. We reviewed the space requested for support space and determined that the planning officials erroneously calculated the administrative space. (Support space comprises administrative and staff, storage, break areas, calibration and computer laboratories, security station, library, reproduction, audio visual equipment maintenance and repair, in-house facility maintenance, video teletraining conference rooms, and weight room.)

Table 2 shows the overstated space requirement and costs for project P-045T as 3,972 gross square feet and $406,717.

Table 2. Navy Support Space Computational Error Resulted in Overstated Requirements and Associated Costs

	Initial Requirement (P-056T) (gross square feet)	Revised Requirement (P-045T) (gross square feet)
Space required	55,364	59,183
4 percent mechanical space	2,214	2,367
Total	57,578	61,550

	Overstatement
Overstated basic facility requirements (61,550 gross square feet minus 57,578 gross square feet)	3,972
Cost per square foot (from DD Form 1391)	x $92
Amount overstated	$365,424
Contingency costs (5 percent of amount overstated)	18,271
Supervision, inspection, and overhead costs (6 percent of amount overstated plus contingency costs)	23,022
Subtotal	41,293
Total	$406,717

Mine Neutralization System Deep Pool Requirement. Training Center, Southern Division, and NAVFAC officials could not provide justification for the initial or revised training pool size.

Initial Pool Request. As part of project P-045T, Training Center officials requested a deep pool to provide hands-on training for the AN/SLQ-48 Mine Neutralization System Operator Course. Training Center officials initially requested a training pool 40 feet long, 20 feet wide, and 20 feet deep to allow adequate maneuvering space for training on the mine neutralization vehicle, at an estimated cost of $40,600.

Revised Pool Request. After the initial request, the Training Center revised the project and increased the training pool size to 90 feet long, 30 feet wide, and 12 feet deep, at an estimated cost of $146,058.

Existing Pool Size Limits Training. The existing Training Center training pool at NS Charleston is only 20 feet long, 10 feet wide, and 12 feet deep. Training Center officials explained that the small pool prohibits the mine neutralization vehicle from free-flight operations, which is a core operator skill. Therefore, because the existing pool is so small, the trainees' hands-on training is limited to only deploying and retrieving the mine neutralization vehicle.

We agree that the existing pool is too small to meet the Training Center training mission for the AN/SLQ-48 Mine Neutralization System Operator Course. However, because the Training Center did not adequately justify the pool size, the pool size and the associated costs are questionable.

Project P-401T Space Requirement

Advanced Firefighting Facility Space Requirements. Of the 36,493 gross square feet that the Navy planned for the advanced firefighting facility, the planning officials could not support 13,966 gross square feet for the support building. The support building is made up of classrooms, showers, toilets, storage, and administrative space. Planning officials adequately supported the remaining 22,527 gross square feet for the advanced shipboard firefighting trainer, utilities building, and pumphouse.

Justification of Support Building Space Requirements. When we discussed the estimated requirement for support building space requested on the DD Form 1391 with Training Center, Southern Division, and NAVFAC officials to determine the criteria used to calculate the support building space requirements, the officials were unable to provide criteria or justification on how the support space was derived.

Table 3 shows space requirements for the advanced firefighting facility, including the space for classrooms and other space that was not supported.

Table 3. Advanced Firefighting Facility Total Space Requirements

Facility Requirements		Proposed Space (square feet)
Advanced shipboard firefighting trainer		17,687*
Support building (applied instruction building)		
Classroom space	3,735	
Showers, toilets, storage, and administrative space	10,231	
		13,966
Utilities building (trainer support building)		4,000*
Pumphouse		840*
Total gross square feet		36,493

*Represents properly supported requirements that total 22,527 gross square feet.

Classroom Space Requirement. The programmed classroom space requirement of 3,735 gross square feet for project P-401T is overstated by 1,823 gross square feet. The Training Center plans to relocate seven firefighting classes to NS Ingleside. Using NAVFAC P-80 criteria, we calculated the average number of students on board for the seven classes to determine the authorized classroom space. Using this average, the Training Center is authorized only 1,912 gross square feet, not 3,735 gross square feet, for classroom space.

Classroom Costs. Because the classroom space was overstated, the costs were overstated by $218,760. The overstated project costs also result in overstated contingency and supervision, inspection, and overhead costs of $10,938 and $13,782, respectively. Therefore, the total overstated costs for the classroom space is $243,480.

Showers, Toilets, Storage and Administrative Space Requirements. The remaining support space of 10,231 gross square feet for showers, storage, toilets, and administrative space is unsupported and questionable.

Showers, Toilets, Storage and Administrative Space Costs. The questionable cost for the remaining support space is $1,227,720. The questionable contingency and contingency and supervision, inspection, and overhead costs are $61,386 and $77,346, respectively. Therefore, the total questionable costs for the remaining support space is $1,366,452.

All project P-401T funding should be suspended until the Training Center adequately validates all project requirements.

Internal Controls Over Establishing and Validating Requirements and Certifying Designs

Neither the Southern Division, NAVFAC, nor the Training Command, Atlantic Fleet, had validated the project requirements. As a result, the designed facilities and proposed construction exceed the requirements of the Training Center training mission. NAVFAC should follow established procedures to require projects to be certified ready for design before proceeding to the 100-percent design.

NAVFAC Memorandum on Internal Controls. On December 14, 1993, the Commander, NAVFAC, issued a memorandum instructing all NAVFAC field activities to:

> identify BRAC funding as a separate assessable unit for the current five-year Management Control Program. The memorandum stated that the vulnerability [risk] assessment should be a "high" risk rating due to the nature of the program and the continuous processes evolving within the program.

NAVFAC issued the memorandum after planning officials submitted the BRAC projects to the Commission. The Southern Division, NAVFAC, has implemented the memorandum instruction and is scheduled to perform a management control review in FY 1995. Full implementation of this policy should improve the NAVFAC field activities' internal controls for validating and documenting BRAC project requirements. However, internal control improvements are needed to ensure that projects are properly certified at the project engineering phase.

Project Requirements Validation and Design Certification. As of July 28, 1994, NAVFAC neither validated the project requirements nor certified ready for design the DD Forms 1391 for projects P-045T and P-401T; however, the projects were 100-percent design complete and had been synopsized for invitations for bid in the *Commerce Business Daily*. Construction contract contracts were awarded for project P-401T on September 28, 1994, and project P-045T on November 9, 1994.

Not every BRAC MILCON project is subject to audit; therefore, to prevent waste and to prevent building facilities that do not satisfy realigning missions, the major claimants must assess the Navy vulnerability associated with validating BRAC MILCON requirements, and design and implement internal control procedures to ensure that missions are realigned to adequate facilities in a cost-effective manner.

Summary of Questioned Project Costs

Table 4 summarizes the total costs questioned by the audit for projects P-045T and P-401T. The Under Secretary of Defense (Comptroller) should reduce the budget for project P-045T by $700,000 from the consolidation of the initial two projects and should suspend the remaining $17.3 million ($6.3 million for P-045T and $11.0 million for P-401T) until the Navy adequately validates and justifies the projects.

Table 4. Questioned Costs on Projects P-045T and P-401T

Cost Element	Gross Square Feet Questioned	Costs Questioned
Project P-045T		
Project cost reduction not identified to Navy Comptroller		$ 700,000
Specialized space	17,371	$1,778,720
Support space	3,972	406,717
Training pool (12 feet deep)	2,700	146,058
Subtotal		2,331,495
Project P-401T		
Classroom space	1,823	243,480
Storage, shower, toilets, and administrative space	10,231	1,366,452
Subtotal		1,609,932
Total		$4,641,427

Recommendations, Management Comments, and Audit Response

1. We recommend that the Under Secretary Defense (Comptroller):

a. Reduce project P-045T, "Applied Instruction Building," by $700,000.

b. Suspend the remaining $17.3 million for projects P-045T and P-401T, "Advanced Fire Fighting Facility," until the Navy fully validates the project requirements.

Management Comments. The Under Secretary of Defense (Comptroller) agreed to place the funding for projects P-045T and P-401T on administrative withhold pending resolution of the amount of savings in dispute.

Audit Response. The action proposed by the Under Secretary of Defense (Comptroller) met the intent of the recommendation.

2. We recommend that the Commander, Naval Facilities Engineering Command:

a. Implement established procedures that base realignment and closure military construction projects be certified ready for design before awarding and expending funds for architect and engineering contracts.

Management Comments. NAVFAC partially concurred with the recommendation, stating that some checks in the normal MILCON process were knowingly bypassed because of the extraordinary circumstances of projects P-045T and P-401T and the accelerated timeline dictated by the BRAC process. NAVFAC further stated that the procedures established for MILCON projects are being emphasized for BRAC projects.

Audit Response. NAVFAC comments are partially responsive. In response to the final report, we request that the Navy provide a completion date and details of the action being taken to ensure that BRAC MILCON projects are certified ready for design before awarding and expending funds for architect and engineering contracts.

b. Delay the award of construction contracts for base realignment and closure military construction projects for P-045T and P-401T until the project requirements are adequately validated and based on reliable and verifiable data and the projects are certified ready for design.

Management Comments. NAVFAC concurred with the comments in the finding discussion but nonconcurred with the recommendation to delay award of the construction contracts for projects P-045T and P-401T. The number of courses to be offered at the facility proposed by project P-401T at NS Ingleside had been revised by the Commander, Training Command, Atlantic Fleet, to include three new courses that had not been addressed in the initial project requirements. Further, project P-045T was designed in conjunction with project P-401T and provides the site utilities for both buildings. Delaying the contract for construction of project P-045T would also delay project P-401T, which would ultimately impact fleet readiness.

Audit Response. NAVFAC comments are considered responsive to the recommendation. The Navy provided additional information after the audit that showed requirements for projects P-045T and P-401T had been developed by the Commander, Training Command, Atlantic Fleet, after the two projects had been approved and after architect and engineering contracts had been awarded.

3. We recommend that the Commander, Fleet and Mine Warfare Training Center, revise and resubmit DD Forms 1391, "FY 1994 Military Construction Project Data" for projects P-045T and P-401T to reflect the differences in project requirements identified in this report.

Management Comments. NAVFAC concurred with the comments in the finding discussion but nonconcurred with the recommendation to resubmit the DD Forms 1391, "FY 1994 Military Construction Project Data" for projects P-045T and P-401T. The information provided to the auditors after the audit justifies the scope and the requirements for projects P-045T and P-401T as designated on the initial DD Forms 1391.

Audit Response. Based on the information the Navy provided the auditors after the audit, the Navy actions met the intent of the recommendation.

Part III - Additional Information

Appendix A. Summary of Prior Audits and Other Reviews

Inspector General, DoD

Report No.	Report Title	Date
95-029	Defense Base Realignment and Closure Budget Data for Naval Air Station Miramar, California, and Realigning to Various Sites	November 15, 1994
95-010	Defense Base Realignment and Closure Budget Data for Marine Corps Air Station Tustin, California, and Realignment to Marine Corps Air Station Camp Pendleton, California	October 17, 1994
94-179	Defense Base Realignment and Closure Budget Data for McGuire Air Force Base, New Jersey; Barksdale Air Force Base, Louisiana; and Fairchild Air Force Base, Washington	August 31, 1994
94-146	Defense Base Realignment and Closure Budget Data for Closing Naval Air Station Cecil Field, Florida, and Realigning Projects to Various Sites	June 21, 1994
94-141	Defense Base Realignment and Closure Budget Data for Naval Air Station Dallas, Texas, and Memphis, Tennessee, Realigning to Carswell Air Reserve Base, Texas	June 17, 1994
94-127	Defense Base Realignment and Closure Budget Data for the Realignment of the Defense Personnel Support Center to the Naval Aviation Supply Office Compound in North Philadelphia, Pennsylvania	June 10, 1994
94-126	Defense Base Realignment and Closure Budget Data for the Closure of Naval Air Station Glenview, Illinois, and Realignment Projects at Fort McCoy, Wisconsin, and Carswell Air Reserve Base, Texas	June 10, 1994

Inspector General, DoD (cont'd)

Report No.	Report Title	Date
94-125	Defense Base Realignment and Closure Budget Data for the Naval Medical Center Portsmouth, Virginia	June 8, 1994
94-121	Defense Base Realignment and Closure Budget Data for Naval Air Technical Training Center, Naval Air Station Pensacola, Florida	June 7, 1994
94-109	Quick-Reaction Report on the Audit of Defense Base Realignment and Closure Budget Data for the Naval Training Center Great Lakes, Illinois	May 19, 1994
94-108	Quick-Reaction Report on the Audit of Defense Base Realignment and Closure Budget Data for Naval Station Treasure Island, California	May 19, 1994
94-107	Griffiss Air Force Base, New York, Defense Base Realignment and Closure Budget Data for Military Construction at Other Sites	May 19, 1994
94-105	Defense Base Realignment and Closure Budget Data for a Tactical Support Center at Naval Air Station Whidbey Island, Washington	May 18, 1994
94-104	Defense Base Realignment and Closure Budget Data for the Defense Contract Management District-West	May 18, 1994
94-103	Air Force Reserve 301st Fighter Wing Covered Aircraft Washrack Project, Carswell Air Reserve Base, Texas	May 18, 1994
94-040	Summary Report on the Audit of Defense Base Closure and Realignment Budget Data for FYs 1993 and 1994	February 14, 1994
93-100	Summary Report on the Audit of Defense Base Closure and Realignment Budget Data for Fiscal Years 1992 and 1993	May 25, 1993

Naval Audit Service

Report No.	Report Title	Date
041-S-94	FY 1995 Military Construction Projects from Decisions of 1993 Base Closure and Realignment Commission	April 15, 1994
023-S-94	Military Construction Projects Budgeted and Programmed for Bases Identified for Closure or Realignment	January 14, 1994
028-C-93	Implementation of the 1993 Base Closure and Realignment Process	March 15, 1993

Appendix B. Navy Planning Process for Projects P-045T, "Applied Instruction Building," and P-401T, "Advanced Firefighting Facility"

Project P-045T, "Applied Instruction Building"

Initial Project Budget Submission for Two BRAC MILCON Projects. On November 3, 1993, Navy planning officials prepared and submitted the DD Forms 1391, "FY 1994 Military Construction Project Data," to the Comptroller of the Navy for review by the Under Secretary of Defense (Comptroller). The initial budget submission included two BRAC MILCON projects for training facilities for the Training Center: P-045T, "Training Facility," valued at $2.8 million, and P-049T, "Mine Warfare Training School," valued at $4.2 million. The DD Forms 1391 were not accompanied by detailed justification to support the requirements the Navy used to prepare the cost estimates. The DD Forms 1391 combined space requirement for the two facilities was 55,430 gross square feet, estimated to cost $7 million.

Consolidation of Two BRAC MILCON Projects Into One Project. After the Navy submitted the initial project budget submission, projects P-045T and P-049T were combined into one project: project P-056T, "Mine Warfare Training Facility," at 55,413* gross square feet, valued at $6.3 million. After combining, the project was reduced by $700,000. Project P-056T was endorsed through NAVFAC and the Training Center chains of command, but was not submitted to the Navy Comptroller for a corresponding budget reduction. Therefore, the BRAC budget should be reduced by $700,000 to reflect the economies of combining the two projects.

Responsibility for Space Requirement Planning for Project P-056T. Ordinarily, the functional-area users are responsible for identifying the basic facility requirements and for preparing a detailed analysis and document justification for the project requirements. The supporting NAVFAC engineering field division or activity is responsible for reviewing and validating the requirements. However, for project P-056T, the Training Center provided the Southern Division, NAVFAC, the estimated space requirements for modified lecture, lecture, specialized, and support space based on existing Training Center space at NS Charleston. The Southern Division, NAVFAC, used the Training Center estimates to establish the basic facility requirements for a 55,364-gross-square-foot facility and prepare the DD Form 1391;

*Navy planning officials could not explain the difference between the 55,413 gross square feet proposed on the DD Form 1391 and the calculated basic facility requirement of 55,364 gross square feet.

however, the Southern Division, NAVFAC, did not first validate the space requirements. Also, the Southern Division, NAVFAC, assumed project management responsibility.

Project Renamed and Project Space and Costs Increased. In April 1994, the Navy renamed project P-056T as P-045T, "Applied Instruction Building," to avoid the confusion of a new project number. At the same time the project was renamed, the facility requirements were increased to 61,550 gross square feet, and the estimated cost were increased to the initial $7 million.

The following table shows how much the space requirements for the Training Facility increased when the project was renamed.

Increased Space Requirements for the Training Facility

Facility Requirements	Proposed: Initial Requirement (P-056T) (square feet)	Proposed: Revised Requirement (P-045T) (square feet)
Modified lecture space (classrooms)	3,240	3,240
Lecture space (auditorium)	1,125	1,125
Specialized space	25,038	25,038
Support space	14,888	17,943
Total net square feet	44,291	47,346
Net to gross conversion at 1.25 square feet	11,073	11,837
Total gross square feet	55,364	59,183
4-percent mechanical space	0	2,367
Total	55,364	61,550

Project P-401T, "Advanced Firefighting Facility"

Project P-624, "Firefighting Trainer," was the precursor to project P-401T. Before NS Charleston was scheduled to close, project P-624 was proposed for an advanced firefighting facility containing 47,773 gross square feet and estimated to cost $13.8 million. The proposed project P-624 included an advanced shipboard firefighting trainer, a shipboard aircraft firefighting trainer, trainer support facility, and an applied instruction building. However, when the 1993 Commission announced the closure of NS Charleston and realigned the Training Center to NS Ingleside, the Navy canceled project P-624.

The planning officials used project requirements for project P-624 to support project P-401T at 47,780 gross square feet and estimated the cost to be $12 million at NS Ingleside. In May 1994, the Navy reduced the facility requirements and associated costs for project P-401T to 36,493 gross square feet and $11 million because the shipboard aircraft firefighting trainer was deleted from the project.

Appendix C. Architect and Engineering Specialized Space Breakout for Project P-045T

Functional Space	Proposed (gross square feet)
Sonar maintenance classroom	590
Winch	369
Bosun mate	613
Electrician mate storage	160
Electrician mate	679
Captor	820
Mines bay	3,988
Computer test lab	982
Test set maintenance and storage	1,363
Half-covered mine storage	4,363
Total	13,927*

*We did not include calibration space because it was allocated under support space.

Appendix D. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Amount and/or Type of Benefit
1.a. and 1.b.	Economy and Efficiency. Reduces and suspends funding for BRAC MILCON projects until the Navy validates project requirements.	Nonmonetary. Suspension of funding caused the Navy to develop documentation to support the projects.
2.a.	Internal Controls. Implements established procedures to certify BRAC MILCON project requirements.	Undeterminable.*
2.b.	Economy and Efficiency. Delays the award of construction contracts until the Navy validates and certifies ready for design the project requirements.	Undeterminable.*
3.	Economy and Efficiency. Revises and resubmits project requirements to reflect validated requirements and cost estimates.	Undeterminable.*

*The actual monetary benefits will be determined after the Navy revises the BRAC MILCON estimates to reflect valid requirements.

Appendix E. Organizations Visited or Contacted

Office of the Secretary of Defense

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

Department of the Navy

Chief of Naval Operations, Washington, DC
  Deputy Chief of Naval Operations (Logistics), Washington, DC
Office of the Comptroller of the Navy, Washington, DC
Atlantic Fleet, Norfolk, VA
  Mine Warfare Command, Corpus Christi, TX
  Naval Base Charleston, SC
  Naval Station Charleston, SC
  Naval Station Ingleside, TX
  Naval Submarine Base Kings Bay, GA
  Training Command, Norfolk, VA
  Fleet and Mine Warfare Training Center, Charleston, SC
Shore Intermediate Maintenance Activity, Ingleside, TX
Fleet Industrial Service Center, Ingleside, TX
Naval Reserve Center, Corpus Christi, TX
Naval Facilities Engineering Command, Alexandria, VA
  Southern Division, North Charleston, SC
Naval Audit Service, Arlington, VA

Other Government Organization

General Accounting Office, Washington, DC

Appendix F. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
  Assistant Secretary of Defense (Economic Security)
    Deputy Assistant Secretary of Defense (Economic Reinvestment and BRAC)
Under Secretary of Defense (Comptroller)
Under Secretary of Defense (Personnel and Readiness)
Assistant Secretary of Defense (Reserve Affairs)

Department of the Navy

Secretary of the Navy
Assistant Secretary of the Navy (Financial Management)
Assistant Secretary of the Navy (Installations and Environment)
Deputy Chief of Naval Operations (Logistics)
Commander in Chief, Atlantic Fleet
  Commander, Naval Base Charleston
  Commanding Officer, Naval Station Ingleside
Commander, Training Command, Atlantic Fleet
  Commanding Officer, Fleet and Mine Warfare Training Center
Commander, Naval Facilities Engineering Command
  Commanding Officer, Southern Division

Non-Defense Federal Organizations and Individuals

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 Federal Organizations and Individuals (cont'd)

Honorable Phil Gramm, U.S. Senate
Honorable Ernest Hollings, U.S. Senate
Honorable Ray Hutchinson, U.S. Senate
Honorable Strom Thurmond, U.S. Senate
Honorable E. De La Garza, U.S. House of Representatives
Honorable Arthur Ravenel, Jr., U.S. House of Representatives

Part IV - Management Comments

Under Secretary of Defense (Comptroller) Comments

OFFICE OF THE COMPTROLLER OF THE DEPARTMENT OF DEFENSE

WASHINGTON, DC 20301-1100

(Program/Budget)

OCT 11 1994

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING, DOD IG

SUBJECT: Quick-Reaction Report on the Realignment of the Fleet and Mine Warfare Training Center at Naval Station Charleston, South Carolina, to Naval Station Ingleside, Texas (Project No. 4CG-5008.24)

This responds to your September 16, 1994, memorandum requesting our comments on the subject report.

The audit recommends that the Under Secretary of Defense (Comptroller) reduce and withhold funding for projects P-045T, "Applied Instruction Building," and P-041T, "Advanced Fire Fighting Facility," until the Navy fully validates the project requirements using established criteria and procedures.

We agree that cost and scope estimates for these projects should be determined and validated using established criteria and procedures and the project cost reduced where warranted. However, since the findings and amount of the savings are still in dispute, we will place the funds for the projects on administrative withhold pending resolution.

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

Department of the Navy Comments

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOVALL STREET
ALEXANDRIA, VA 22332 2300

IN REPLY REFER TO

20 Oct 94

From: Commander, Naval Facilities Engineering Command
To: Department of Defense Assistant Inspector General for Auditing

Subj: DODIG REPORT 4CG-5008.24 DODIG QUICK ACTION REPORT ON THE REALIGNMENT OF THE FLEET AND MINE WARFARE RAINING CENTER AT NAVAL STATION CHARLESTON, SC TO NAVAL STATION INGLESIDE, TX

Ref: (a) DODIG memo of 16 Sep 94
(b) Phonecon between DODIG/Mr J. Delaware and NAVFAC 31A/CDR M. Thornton on 19 Oct 94

Encl: (1) DoD Audit Report Response, Project P-045T

1. Reference (a) recommended: (1) that funds be suspended for Project P-045T until the Navy fully validated the project requirements, and (2) that COMNAVFACENGCOM delay award of the construction contract until the project requirements were adequately validated. NAVFACENGCOM concurs with the auditors comments in the draft report; however, since their field visit, the information contained in enclosure (1) has been developed and submitted that fully validated the project as designed.

2. Enclosure (1) was reviewed and accepted by IG personnel on 19 Oct 94. Based on the preliminary approval of enclosure (1), we are formally providing the information needed that validates the requirements for the project. The Navy response justifies the project scope requirement on the DD Form 1391 and square feet as currently designed.

3. Request authority to proceed with award of the subject project as currently designed.

C. W. WOOMER
Director, Facilities Programming
and Construction Directorate

Copy to:
CNO (N44)
NAVCOMPT (NCB-231)

Final Report Reference

DODIG REPORT 4CG-5008.24 DODIG QUICK ACTION REPORT ON THE REALIGNMENT OF THE FLEET AND MINE WARFARE TRAINING CENTER AT NAVAL STATION CHARLESTON, SC TO NAVAL STATION INGLESIDE, TX

Project No: P-045T
Description: Applied Instruction Building
Location: Ingleside, Tx

Auditor's Position: Requirements for Specialized Space were overstated.

DON Revised Response: Partially Concur. Our assessment of the Final Design identified 20,102 nsf of space vice the initial BFR of 25,038 nsf. The final design was based on two additional factors not highlighted in the BFR. These are: (1) innovative design which allowed a reduction in the requirement for fully enclosed specialized training spaces and (2) omission of three courses which require training space. The auditors identified only 13, 927 nsf as specialized space. The attached sheet lists those class rooms which are identified as specialized spaces.

Our conclusion is that the design compares favorably with the revised BFR of 21,147 nsf and the project should be accepted as designed.

Auditor's Position: Requirement for Support Space was overstated

DON Revised Response: Navy Concurs. However, revised information indicates that the number of instructors was understated in the initial BFR by 11 persons. The revised total instructors are 61 vice 50. Additionally, the support space for instructors was designed to accommodate modular furniture in an open space concept. This concept requires 92 nsf per person vice 60 as shown in the BFR. This results in 2612 nsf more than stated in the initial BFR. However, in reviewing the potential of delays associated with redesign of 7 months, any potential savings would be obviated by the costs associated with performing the redesign. These include:

Escalation cost for construction delay	$140,000
Redesign Costs	$150,000
In house costs	$ 20,000
Rental of Alternate spaces (60,000 SF x $1/m /sf x 7 m)	$420,000
Totals	**$730,000.**

Further, the Navy must close the existing facility in Charleston on 30 Sep 95. Current programming for this project allows for a nine month gap in the training pipeline to the Fleet. As there is no other source for trained personnel to man fleet mine warfare billets, further delay will result in a negative fleet readiness which would be unacceptable to fleet commanders.

Auditor's Position: Requirement for The Mine Neutralization System Pool was not Supported:

Navy Response: Do not Concur. At past meetings, the auditors have indicated that a pool was required for this unique training. The attached diagram showed the optimum size pool to use for this training. The auditors requested that we obtain a statement from the device manufacturer that the size designed was adequate. The device manufacture was not willing to provide such a statement. As his turning data is proprietary information that the Navy chose not buy, he was unwilling to provide the necessary information. We have reviewed the current design and determined as best as possible that the 90 ft x 30 ft x 12 ft would provide adequate training for students.

Diagram Not Attached

ENCLOSURE(1)

Finally, P-045T was designed in conjunction with P-401T Fleet Fire Fighting Training Complex. P-045T provides the site utilities for both buildings. Delay for P-045T would have an impact on P-401T and ultimately fleet readiness.

Conclusion: Project P-045T is valid and supportable. Due to the extra-ordinary circumstances of this project, and the accelerated project development dictated by the BRAC timeline, some check points within the normal NAVFAC process were knowingly bypassed. However, in the final analysis, the cost and requirement for this project is fair and reasonable. Any delay in this project will result in expensive unnecessary costs and will jeopardize the military readiness of the Navy's Mine Warfare community, i.e. required training will be deficient and operational units potentially taken off line. NAVFAC is addressing project development in the BRAC process to eliminate these errors from recurring.

Based on the above costs, and training impacts, recommend that P-045T proceed as planned.

DEPARTMENT OF THE NAVY

NAVAL FACILITIES ENGINEERING COMMAND
200 STOVALL STREET
ALEXANDRIA, VA 22332 2300

IN REPLY REFER TO
00G2/pb
23 September 1994

From: Commander, Naval Facilities Engineering Command
To: Department of Defense Assistant Inspector General for Auditing

Subj: DOD DRAFT QUICK-REACTION REPORT ON THE AUDIT OF DEFENSE BASE CLOSURE AND REALIGNMENT BUDGET DATA FOR NAVAL STATION INGLESIDE, TX (PROJECT NO. 4CG-5008.24)

Ref: (a) DODIG memo of 16 September 1994
(b) Meeting Between DoDIG and NAVFACENGCOM Staff of 23 September 1994, subj: BRAC Project P-401T

Encl: (1) CTC, U.S. Atlantic Fleet ltr 1500/Ser01C/1846, dtd 23 August 1994
(2) DoD Audit Report Response, Project P-401T

1. Reference (a) recommended (1) that funds be suspended for Project P-401T until the Navy fully validated the project requirements, and (2) that COMNAVFACENGCOM delay the award of the construction contract until the project requirements were adequately validated and based on reliable and verifiable data. NAVFACENGCOM concurs with the auditors comments in the draft report; however, since their field visit the number of courses taught at the facility were revised and endorsed by enclosure (1).

2. The meeting held between the DoDIG auditors and NAVFACENGCOM personnel (reference (b)) discussed enclosures (1) and (2). Based on the outcome of the meeting, we are formally providing the information needed that validates the requirements for the project. The Navy response, provided as enclosure (2) justifies the project scope requirement on the DD Form 1391 and square feet as currently designed.

3. Request authority to proceed with award of the subject project as currently designed.

C. W. WOOMER
Director, Facilities Programming
and Construction Directorate

Copy to:
CNO (N44)
NAVCOMPT (NCB-231)

FAX TRANSMITTAL

DEPARTMENT OF

COMMAND
TRAINING COMMAND, U.S.
1474 GILBERT
NORFOLK, VIRGINIA

1500
Ser 01C/0246
23 AUG 1994

From: Commander, Training Command, U.S. Atlantic Fleet
To: Commander in Chief, U.S. Atlantic Fleet
Commanding Officer, Fleet and Mine Warfare Training Center

Subj: FLEET AND MINE WARFARE TRAINING SUPPORT FOR INGLESIDE, TX

Ref: (a) FLEMINEWARTRACEN ltr 11000 Ser 10/00769 of 25 Jul 1994
(b) COMTRALANT ltr 3500 Ser 01A/1152 of 4 Jun 1993
(c) CINCLANTFLT ltr 3500 Ser N711/002914 of 23 Jun 1993
(d) COMCMGRU THREE (N8) memorandum of 19 Jul 1994
(e) COMINEWARCOM ltr 3502 Ser N8/362 of 10 May 1994
(f) CNTECHTRA ltr 1500 Ser N352/1643 of 18 Feb 1994
(g) CNO Washington DC 261827Z Jan 94

Encl: (1) MIW/FF/DC Training Requirements
(2) MIW SWTRR Officer BST

1. The purpose of this letter is to provide an update on the Mine Warfare and Fire Fighting/Damage Control training and facility requirements at Ingleside, Texas.

2. Reference (a) provides a chronology of events associated with the relocation of Fleet and Mine Warfare Training Center from Charleston, South Carolina to Ingleside, Texas in conjunction with BRAC 1993 decisions to close the Charleston Naval Base. Based on available manpower resources, reference (b) forwarded a listing of courses that would be offered in Ingleside. Reference (c) endorsed this list of training courses. Enclosure (1) provides information on course length and planned throughput for the courses identified by COMTRALANT, along with updated information provided in reference (d).

3. In addition to the training requirements previously identified, reference (e) discussed the importance of teaching the surface, subsurface, air, and EOD aspects of MIW at the relocated Mine Warfare Center of Excellence at Ingleside. The mission need statement specifically identified the training and technology requirements for:

a. MCM-1, MHC-51, and LPH-2 class combat information center team training and tactical group training.

b. Coordinated MCM operations to include the electronic connectivity and C4I capabilities needed to support expeditionary, amphibious and joint task forces.

c. Realistic training and performance feedback. encl (1)

Subj: FLEET AND MINE WARFARE TRAINING SUPPORT FOR INGLESIDE, TX

4. Reference (f) reflects changes impacting the surface mine inshore warfare (MIW) billet specialty training and selected other course requirements. A synopsis of these requirements is provided in enclosure (2). Reference (g) approved the reconfiguration of courses for the MIW billet specialty training. The development of new courses was also approved but is not addressed in current facility requirements.

5. The DODIG visit of July 1994 to Fleet and Mine Warfare Training Center reviewed the facility requirements for the Mine Warfare Training Center at Ingleside, Texas. Enclosure (1) reflects the current mine warfare, Fire Fighting and Damage Control training requirements. Specifically, the MILCON P-401T facility will justify four training spaces (two theory classrooms and two laboratories). The two theory classroom spaces will support all the theory related to engineering, Fire Fighting, and Damage Control courses of instruction. One laboratory space will provide hands-on training in P-250 Mod I Pump Operations and Maintenance (K-495-2058), P-250 Mod II Pump Operations and Maintenance (K-495-2063), and Shipboard Collection Holding Tank (CHT) systems (K-652-2141). The second laboratory space will provide hands-on training in Fuels Testing (K-821-2142).

6. The MILCON P-045T facility will justify eight trainer spaces for the non-fire fighting courses listed in enclosure (1). The calculations for training spaces for both facility projects was based on training days and planned convenings per course.

7. COMTRALANT point of contacts are LCDR V. Sibal, Staff Civil Engineer (Code N44), DSN 565-1996 or commercial (804) 445-1996 and Mr. C. Hartz, Senior Education Advisor (Code 01A), DSN 564-1579 or commercial (804) 444-1579.

J. A. GOODMAN
Acting

Copy to:
CNET (N4, T23)

2

DOD AUDIT REPORT RESPONSE
Project P-401T Fire Fighting training Facility, NS Ingleside, TX

QUESTION:
Fire Fighting Facility Space requirements. Of the 36,493 gross square feet that the Navy planned for the advanced fire fighting facility, the planning officials could not support 13,966 gross square feet for the support building. The support building is made up of classrooms, showers, toilets, storage, and administrative space. Planning officials adequately supported the remaining 22,527 gross square feet for the advanced shipboard fire fighting trainer, utilities building, and pumphouse.

Support building (applied instruction building)	Unsupported
Classroom space	3,735 SF
Showers, toilets, storage, and administrative space	10,231 SF
Total unsupported space	13,966 SF
Classroom cost	$243,480
Showers, toilets, storage, and administrative cost	$1,366,452
Total unsupported cost	$1,609,932

Classroom Space requirements. The programmed classroom space requirement of 3,735 gross square feet, for project P-401T is overstated by 1,823 gross square feet. The training center plans to relocate seven fire fighting classes to NS Ingleside. Using NAVFAC P-80 criteria, we calculated the average number of students on board for the seven classes to determine the authorized classroom space. Using this average, the Training Center is authorized only 1,912 gross square feet, not 3,735 gross square feet, for classroom space.

ANSWER:
The size of the support facility is supportable, however, the documentation was deficient. The initial project documentation justified the size of the support facility based primarily on the fire fighting trainer constructed at Mayport. COMTRALANT has recently provided the current list of courses to be taught. From the list we have calculated that the associated classroom square footage required, using standard space allocation formulas, is 3,389 SF which we feel compares very favorably to the 3,735 currently designed. Enclosure (1) is the back up documentation to support this facility.

QUESTION:
Shower, Toilets, Storage and Administrative Space Requirements: The remaining support space of 10,231 gross square feet for the showers, storage, and administrative space is unsupported and questionable.

encl (2)

ANSWER:

Rest room/shower facilities: The normal planning criteria includes a 33% net square footage conversion ratio which includes rest room facilities, corridors, entrances, etc. This project includes 6231 SF for these facilities. In unique projects such as this facility the rest room area is normally developed based on specific requirements (there are no standard formulas or methods). For this facility the following requirements exist:

- Individual facilities for men, women, instructors, and students. Men to women participation ratio is 4 to 1.
- The student rest room/shower facilities must accommodate large number of students in a short period of time (class break periods are short and showers are required by all students immediately upon completion of the team training portion of fire fighting classes). The design includes 20 shower heads. The fire fighting training class size is expected to be 60 students. This equates to a student to shower ratio of 3 to 1.
- All required rest room/showers facilities must be constructed by this project since there are no facilities at NS Ingleside that would reasonably satisfy the requirements of this project.

Storage Spaces - The design includes the following areas;

- Ensemble/changing area (1708 SF) - The students store their fire fighting gear, boots in this area. They also put the gear on before class and take it off after class in this area.
- Gear storage area (480 SF) - This area is used to store replacement fire hoses, CO bottles, AFFF bottles, repair parts, extra ensembles and many other items critical to the fire fighting facility.

The total square footage for these areas is approximately 2,188 SF. They are unique to a fire fighting facility and there are no planning guides that relate to their required size. They were not included in either the Charleston or Mayport projects since existing facilities were to be used (the existing functions are now being accomplished in Charleston in approximately 3,200 SF). This design is more efficient than currently existing areas in Charleston and are justified for the unique requirements of this type of facility.

Support spaces: Support spaces include a medical/first aid room (264 SF), instructor lounge/training area (208 SF), break room (240 SF) and mechanical room (650 SF) for a total of 1362 SF.

Admin space - The design includes 2 spaces totaling approximately 450 SF for four persons. This breaks down to approximately 112.5 SF/person which is less than the 130 SF/person requirement in the P-80 criteria.

These requirements imposed a unique planning/design challenge for this facility. We feel that the square footage as designed reflects the minimum necessary to accommodate the requirements as outlined by the using facility.

QUESTION:
All project P-401T funding should be suspended until project requirements are adequately validated and are based on reliable and verifiable data.

ANSWER:
Under the current schedule this FFT facility is five-months in conflict with the device installation start date due to early award of the trainer device for installation in the Charleston FFT facility. BRAC recommended closing NS Charleston and as a result the Training Center was required to be relocated to NS Ingleside. The Navy is employing all means to complete this facility ahead of schedule to avoid the five month conflict with the device installation start date. This conflict costs the government 100,000 dollars per month in device delay penalties. Additional consideration to make this award is that the estimated re-design of this project could delay award an additional 6 months or an equivalent cost of 600,000 dollars in device delay penalties. The total estimated cost of a 6 month delay including facility construction delays costs are as follows:

Escalation cost for construction delay (6 months delay)	$175,000
Re-design cost for support building	$35,000
Re-design cost for FMW building, P-045T (shared utilities)	$50,000
In-house support cost	$40,000
Device delay penalties	$600,000
Total cost	$790,000

In addition NS Ingleside does not have fire fighting training facilities to support individual and team fire fighting training needs of the ships to be homeported there. Delays in this project will prolong the inability to train Navy personnel which impacts FFT capability at Ingleside and translates into possible loss of lives.

CONCLUSION: Project P-401T is valid and supportable. Due to extra-ordinary circumstances of this project, and the accelerated project development dictated by the BRAC timeline, some check points within the normal NAVFAC process were knowingly bypassed. However, in the final analysis, the cost and requirement for this project is fair and reasonable. Any delay in this project will result in expensive unnecessary costs and will jeopardize the Military readiness of the Navy's Mine Warfare community, i.e. required training will be deficient and operational units potentially taken off line.

RECOMMENDATION: Proceed with P-401T on current schedule and as currently designed. Bid opening is scheduled for 20 Sep 1994.

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