Audit Report

OFFICE OF THE INSPECTOR GENERAL

JOINT CROSS-SERVICE GROUP FOR TEST AND EVALUATION 1995 DEFENSE BASE REALIGNMENT AND CLOSURE PROCESS

Report No. 95-177

April 13, 1995

Department of Defense

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Acronyms

BRAC	Base Realignment and Closure
JCSG	Joint Cross-Service Group
OSD	Office of the Secretary of Defense
RFC	Request for Clarification
TEC	Test and Evaluation Center

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Report No. 95-177

April 13, 1995

MEMORANDUM FOR DIRECTOR, OPERATIONAL TEST AND EVALUATION
DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR ECONOMIC REINVESTMENT AND BRAC
DIRECTOR FOR TEST, SYSTEMS ENGINEERING, AND EVALUATION

SUBJECT: Joint Cross-Service Group for Test and Evaluation 1995 Defense Base Realignment and Closure Process (Project No. 4CG-5016.02)

Introduction

We are providing this final report for your information and use. This report is one of a series of reports that discusses the review of the Joint Cross-Service Groups (JCSGs), developed by the 1995 Defense Base Realignment and Closure (BRAC) Steering Groups' (the Steering Group) implementation of the internal control plan for managing the identification of DoD cross-Service opportunities. Six JCSGs implemented the internal control plan to ensure the accuracy, completeness, and integrity of the information upon which the Secretary of Defense recommendations for closures and realignments to the 1995 Commission on Defense Base Realignment and Closure are based. The Inspector General, DoD, was directed by the Deputy Secretary of Defense to review the adequacy and implementation of the internal control plan over this process. This report focuses on the adequacy of the JCSG for Test and Evaluation's implementation of the internal control plan.

Audit Results

The JCSG for Test and Evaluation's implementation of the internal control plan was generally effective. We identified the following deficiencies to management, and management took the appropriate action to correct the deficiencies:

o errors and inconsistencies in data consolidation,

o errors in calculations and data entry into the JCSG computer analysis programs, and

o inadequate documentation to support the information or analysis performed by the JCSG.

Audit Objectives

The overall audit objective was to assess the adequacy of the Steering Group's internal control plan. The specific objective of this audit was to determine whether the JCSG for Test and Evaluation adequately implemented the internal control plan. A summary report will discuss the overall audit objective.

Scope and Methodology

We reviewed the JCSG for Test and Evaluation process for collecting and analyzing 1995 BRAC data. We did not review the data collection process of the Military Departments.

We attended JCSG for Test and Evaluation meetings and reviewed the formal minutes and briefing charts of the meetings. We attended meetings of the JCSG for Test and Evaluation and its subordinate Test and Evaluation Joint Cross-Service Working Group (the Working Group). Inspector General, DoD, audit personnel were resident during all significant activities conducted by the Working Group at the Test and Evaluation Center, located at the Institute for Defense Analyses in Alexandria, Virginia. These Inspector General, DoD, audit personnel were responsible for reviewing and monitoring the activities of the Working Group to ensure compliance with approved management and control plans.

We verified the accuracy of the JCSG for Test and Evaluation consolidation of data submitted by the Military Departments. We performed 100-percent data input verification to ensure the accuracy of computer data used in computer programs used by the JCSG for Test and Evaluation.

This program audit was conducted from January 1994 through March 1995. The audit was conducted 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. See Enclosure 2 for a complete list of the organizations we visited or contacted.

Internal Control Plan

On April 13, 1994, the Steering Group issued the 1995 BRAC internal control plan for the JCSGs to use in the 1995 BRAC process. The objective of the internal control plan was to ensure the accuracy, completeness, and integrity of the information upon which the Secretary of Defense recommendations for closures and realignments would be based.

The internal control plan established two principal mechanisms to control the process: organization and documentation.

Implementation of Organizational Controls. Organizational controls consisted of the establishment of three organizations that were separated by distinct functional boundaries and levels of decisionmaking authorities. An Inspector General, DoD, summary report will discuss the implementation of organizational controls.

Implementation of Documentation Controls. Documentation controls were divided into the following control elements: data information and collection, certification, record keeping, oral briefings, outside studies, technical experts, and access to records. We monitored the JCSG Test and Evaluation (the JCSG) for implementation of these controls.

The primary purpose of the internal control plan was to provide a consistent set of management controls for all JCSGs and to ensure the accuracy of the data collection and analysis process. In addition, the internal control plan incorporated the certification procedures set forth in "Defense Base Realignment and Closure Act of 1990," November 5, 1990, (Public Law 101-510), as amended, and policy guidance in the Deputy Secretary of Defense memorandum, "1995 Base Realignment and Closures," January 7, 1994.

Audit Background

The January 7, 1994, Deputy Secretary of Defense memorandum established policy, procedures, authorities, and responsibilities for selecting bases for realignment or closure under Public Law 101-510, as amended. To oversee the entire process and to enhance opportunities for consideration of cross-Service tradeoffs and multi-Service use of the remaining infrastructure, the memorandum established a 1995 BRAC Review Group, a Steering Group, and six JCSGs. In addition, the Deputy Secretary of Defense directed the Inspector General, DoD, to review the activities of the JCSGs to ensure such activities comply with the requirements of the internal control plan.

Review Group Authorities. The Review Group oversaw the entire process. The Review Group was chaired by the Deputy Secretary of Defense and included a senior representative from each Military Department, the chairperson of the Steering Groups and the JCSGs, and senior representatives from various other DoD Components. Authorities of the Review Group included:

- reviewing 1995 BRAC analysis policies and procedures,
- reviewing 1995 BRAC excess capacity analyses,
- establishing 1995 BRAC closure or realignment alternatives and numerical excess capacity reduction targets for consideration by the DoD Components, and
- making recommendations to the Secretary of Defense.

Steering Group Authorities. The Steering Group assisted the Review Group in exercising its authorities and reviewed DoD Component supplementary 1995 BRAC guidance. The Steering Group was chaired by the Assistant Secretary of Defense (Economic Security) and was composed of representatives from the Military Departments, the JCSGs, and other DoD Components.

JCSG Authorities. The JCSGs were established to consider six common-support areas with significant potential for cross-Service impact in the 1995 BRAC process. The six JCSGs are:

o depot maintenance;

o test and evaluation;

o laboratories;

o medical treatment facilities, including graduate medical education;

o undergraduate pilot training; and

o economic impact.

The JCSGs are chaired by senior DoD officials, with members from each of the Military Departments and other DoD offices, as considered appropriate by the chairpersons. The Director, Operational Test and Evaluation, and the Director for Test, Systems Engineering, and Evaluation, co-chaired the JCSG for Test and Evaluation.

JCSG Responsibilities. The JCSGs (excluding the JCSG for Economic Impact) were tasked to perform the following functions.

o Establish guidelines, standards, assumptions, measures of merit, data elements, and milestone schedules for cross-Service analysis of the common-support area.

o Perform an excess-capacity analyses.

o Develop closure or realignment alternatives and numerical excess-capacity reduction targets for Military Department consideration.

o Analyze cross-Service tradeoffs.

The JCSG for Economic Impact had the following unique responsibilities.

o Establish the guidelines for measuring economic impact and, if practicable, cumulative economic impact.

o Analyze DoD Component recommendations under those guidelines.

o Develop a process for analyzing alternative closures or realignments necessitated by cumulative economic impact considerations, if necessary.

Joint Cross-Service Group Process. To fulfill its responsibilities, each JCSG generally performed the following tasks.

o Developed a methodology for analyzing cross-Service opportunities.

o Developed data call requirements to use in the analyses.

o Determined capacity requirements and functional value and prepared optimization scenarios.

o Analyzed the results for operational feasibility.

o Recommended cross-Service opportunities to the Military Departments.

Discussion

Data Information and Collection. The JCSG for Test and Evaluation developed a data call that tasked the Military Departments to collect the capacity and mission data for each test and evaluation activity identified by the JCSG. Specifically, the data call requested information about personnel; workload; technical resources; facility condition; specialized test support facilities and targets; available air, land, and sea space; and geographic and climatological features of each test and evaluation activity. Additional information was requested and segregated by selected functional area or what was termed a common support function. Specifically, the common support functions were segregated for air vehicles, electronic combat, and armament/weapons.

The JCSG for Test and Evaluation prepared the data call for all three Military Departments. After receiving the data call, the Military Departments identified their test and evaluation sites and forwarded the data call to those sites. The sites thus identified prepared a response to the data call that was subsequently reviewed by the respective Army, Navy, or Air Force audit agencies.

Certifying the Data Call Results. As each activity completed its response to the data call, the activity commander certified that the information "is accurate and complete to the best of [the commander's] knowledge and belief." The responses were then sent to higher headquarters for review and certification. The responses continued up the chain of command, ending at each Military Department's respective BRAC organization. After final reviews and certifications, the Military Department BRAC organizations forwarded the responses to the Working Group.

Record Keeping of the Data Call Results. After release of the responses to the test and evaluation data call by the Military Departments on August 15, 1994, the Inspector General, DoD, was assigned the responsibility to monitor compliance with the internal control plan by the Working Group at the Test and Evaluation Center (TEC) facility. The Office of the Secretary of Defense (OSD) data administrator expressed some initial concerns over the control of and access to the Military Department responses to the data calls. The OSD

data administrator also expressed concerns over the control of working documents within the TEC. The initial concerns were resolved when the decision was made to have the Working Group personnel inventory and manually assign sequential numbers to each page in their respective Army, Navy, and Air Force data call books.

We inventoried the data call books at the close of business each day, and the data call books were then secured in combination safes. Combinations to these safes were known only to a limited number of OSD staff and Inspector General, DoD, audit personnel specifically assigned to the TEC center for this project. Assigned OSD staff and audit staff from the Inspector General, DoD, designed a signature and sign-out log to control access to the data call responses.

The test and evaluation JCSG Working Group consisted of representatives from each of the Military Departments. In addition, two auditors from the Inspector General, DoD, were assigned to observe the Working Group develop internal procedures and to ensure adherence to the established internal control plans. The Working Group was used to review and score the data received from the test and evaluation activities. The group also was tasked to conduct requirements and capacity analyses and to determine functional values for the identified activities. In its early meetings, the Working Group decided to divide into three teams for scoring the data, with one representative from each Military Department on a scoring team.

Oral Briefings. In response to the request from the Deputy Secretary of Defense to assist DoD Components during the 1995 BRAC Commission process, the Inspector General, DoD, assigned audit personnel to review and monitor the activities of the JCSG for Test and Evaluation and the Working Group to ensure compliance with approved management and control plans. Specifically, we attended meetings of the JSCG for Test and Evaluation to advise on internal control matters and were resident during all significant activities conducted by the Working Group at the Test and Evaluation Center.

The Director, Operational Test and Evaluation, and the Director for Test, Systems Engineering and Evaluation co-chaired the JCSG test and evaluation. When guidance was necessary, or when impasses were reached, the Working Group met with the representatives of the co-chairs for guidance or mediation.

In March 1994, the assigned audit personnel started attending the JCSG Test and Evaluation meetings. We monitored the meetings and, when appropriate, provided internal control suggestions related to both overall policy and the analytical process to be implemented by the Working Group.

We also monitored the functional-value scoring process by attending the Working Group scoring sessions as independent and impartial observers. We also attended Working Group presentations to the JCSG for Test and Evaluation and attended various meetings within the Working Group and with OSD staff.

We established control of the responses to the data call maintained at the TEC. The responses were maintained and updated as requests for clarifications were distributed and additional responses received.

We also attended meetings of the Working Group, especially when scores and scoring conventions were discussed. As independent members, we hand-carried data between the scoring facility and JCSG meetings. The auditors also hand-delivered the data to the optimization model facility and the alternatives from the optimization model facility to the Working Group facility. When data were entered into any of the computer programs at the Working Group facility, we performed a 100-percent data input verification to ensure accuracy. We also ensured that the score sheets that had been developed were properly completed.

Outside Studies. The JCSG for Test and Evaluation decided that no outside studies were to be used in the JCSG test and evaluation process.

Technical Experts. Personnel from the Institute for Defense Analyses independently recalculated allowable airspace using uniform definitions. Allowable airspace was one of the primary physical values used to determine functional value. We monitored and independently verified this recalculation process at the TEC.

Access to Records. Personnel from the Office of the Director for Test, Systems Engineering and Evaluation and the Office of the Director, Operational Test and Evaluation, arranged for a dedicated, secure, working area at the Test and Evaluation Center for Working Group personnel from the JCSGs for Test and Evaluation and Laboratories. The entrance door was controlled by a cipher lock and each member of the Working Group had a personal code for the door.

The Office of the Director, Operational Test and Evaluation, assigned a data administrator who was responsible for establishing and maintaining an access list to the TEC facility and for issuing and controlling combinations for the TEC facility cipher lock. Members of the Laboratory and Test and Evaluation Working Group had unlimited access to the TEC facility, but not to the safes containing data call responses or to removable hard drives for the local area network computers.

When the responses to the data calls were first received at the TEC, the assigned data administrator assumed responsibility for controlling access to the data call responses. The duties were subsequently assumed by the Inspector General, DoD, auditors assigned to the TEC facility for the duration of the analyses and scoring process.

Each of the Working Group Military Department teams were issued data call responses daily by Inspector General, DoD, audit personnel. Upon close of business for that day, the data call responses were returned to the Inspector General, DoD, audit personnel who secured them in a locked safe or filing cabinet. The lock combinations were known only by the auditors and the OSD personnel responsible for the facility.

Data Analysis. Upon receipt of the responses to the data calls from each Military Department BRAC office, the Working Group commenced a series of reviews and analyses. For the first review, each Military Department team of the Working Group independently evaluated the data call responses of its own Military Department activities to determine whether the responses were

complete. Next, members of the Working Group reviewed responses submitted by activities from the other Military Departments. Afterwards, the Working Group independently scored its portions of the data. Each of the scoring teams in the Working Group then reviewed and discussed the individual scores and determined the final scores. When the Working Group could not reach consensus on a scoring issue, representatives of the co-chairs resolved the issue.

During each of the reviews, the Working Group prepared requests for clarification (RFC) for incomplete responses and unanswered questions or to obtain more details. RFCs had to be approved by at least two of the three representatives from each Military Department before being issued. The RFCs were sent to the respective Military Department BRAC organizations to be distributed to the appropriate test and evaluation activity. Responses to RFCs were reviewed and certified in the same manner as the original data call responses. We developed control logs to monitor, control, and track each of these RFCs.

The information from data call responses and RFC's were initially entered into Excel spreadsheets. These data were summarized in the Excel spreadsheets and subsequently analyzed. As modifications were received, the spreadsheets were updated as needed. Audit tests were conducted on all data entries made to the Excel spreadsheet. Specifically, all entries made to the Excel spreadsheet were traced back to the original document, that is, either the response to the data call or the RFC. To ensure that the scores were correct, we did a 100-percent verification by tracing scoring information back to the data call books for all scored questions.

Functional value scoring was accomplished using D-PADS software. During this D-PADS input process, we functioned as independent and impartial observers.

The spreadsheets were used to develop and evaluate excess capacity, functional requirements, and functional capacity. Test and evaluation excess capacity was computed for the entire set of activities based on the actual and programmed aggregate workyears reported by the activities, that were modified by applying production workload factors. The functional requirement was calculated for each cross-Service function. The functional capacity was the capacity for each activity to perform each common support function and life-cycle combination.

After all of the necessary data were received, entered into the spreadsheet, and processed, the resulting information was transported to the facility established for the optimization model runs. We controlled access to the data by hand-carrying 1995 BRAC information to meetings in the Pentagon; by delivering exclusions, requirements and capacity analyses, and functional value data to the Tri-Department BRAC Team located at the Center for Naval Analyses; by picking up military values from the three Military Departments and delivering those values to the Center for Naval Analyses; and by removing the hard drives from the local area network every night. Finally, auditors reviewed detailed write-ups summarizing and supporting analyses, conclusions, and alternatives.

The optimization model used the excess capacity, functional requirements, functional capacities, and functional values to develop unconstrained alternatives on closure or realignment. When the Military Departments provided military values for the activities, these values were entered into the optimization model. The optimization model then developed a set of constrained alternatives. In both cases, the outputs were assignments of workload by cross-Service function for each activity. When the outputs were received, the Working Group developed recommended alternatives. The recommended alternatives were then submitted to the JCSG for Test and Evaluation for approval and subsequently to the Military Departments for their consideration.

Management Comments

We provided a draft of this report to the Deputy Assistant Secretary of Defense (Installations) on March 28, 1995. Because the report contained no findings or recommendations, written comments were not required. However, the Deputy Assistant Secretary of Defense (Installations) concurred with the report and provided comments. See Enclosure 1 for the full text of management comments.

We appreciate the courtesies extended to the audit staff. If you have any questions on this report, please contact Mr. Raymond A. Spencer, Audit Program Director, at (703) 604-9071 (DSN 664-9071), or Mr. David F. Vincent, Audit Project Manager, at (703) 604-9058 (DSN 664-9058). The audit team members are listed inside the back cover. See Enclosure 3 for the report distribution.

David K. Steensma

David K. Steensma
Deputy Assistant Inspector General
for Auditing

Enclosures

Office of the Assistant Secretary of Defense Comments

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ECONOMIC SECURITY

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MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

SUBJECT: Draft Audit Report on Joint Cross-Service Group for Test and Evaluation, 1995 Base Realignment and Closure Process (Project No. 4CG-5016.02)

I have reviewed the draft report and concur in the auditor's description of the process used by the Joint Cross-Service Group (JCSG) for Test and Evaluation to develop alternatives for consideration by the Military Departments during their BRAC analyses.

The Inspector General, DoD, has been a key part of the Department's BRAC process by providing advice and review of organizational and internal management controls for JCSG activities. The involvement of the Inspector General enhanced the process by helping to ensure the accuracy, completeness, and integrity of the information used as a basis for development of functional alternatives by the Joint Cross-Service Groups.

Robert E. Bayer
Deputy Assistant Secretary of Defense
Installations

Organizations Visited or Contacted

Office of the Secretary of Defense

Under Secretary of Defense (Comptroller), Washington, DC
Assistant Secretary of Defense (Economic Security), Washington, DC
Deputy Assistant Secretary of Defense (Installations), Washington, DC
Director, Base Closure and Utilization, Washington, DC
Director, Operational Test and Evaluation, Washington, DC
Director for Test, Systems Engineering and Evaluation, Washington, DC

Department of the Army

Deputy Under Secretary of the Army (Operations Research), Washington, DC
Army Operational Test and Evaluation Command, Washington, DC
The Army Basing Study Office, Washington, DC

Department of the Navy

Base Structure Analysis Team, Center for Naval Analysis, Alexandria, VA
Naval Air Warfare Center
- Aircraft Division, Patuxent River, MD
- Weapons Division, China Lake, CA
- Weapons Division, Point Mugu, CA

Department of the Air Force

Air Force Test and Evaluation Directorate, Washington, DC
Edwards Air Force Base, CA
Eglin Air Force Base, FL

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Test and Evaluation Center, Institute for Defense Analyses, Alexandria, VA

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Assistant Secretary of the Air force (Financial Management and Comptroller)
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Air Force Test and Evaluation Directorate

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Director, Defense Logistics Agency
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Inspector General, Central Imagery Office

Non-Government Organization

Institute for Defense Analyses, Test and Evaluation Center*

Non-Defense Federal Organizations

Office of Management and Budget
Technical Information Center, National Security and International Affairs Division, U.S. General Accounting Office
Chairman and Ranking Minority Member of Each of the Following Congressional Committees and Subcommittees:

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  Senate Subcommittee on Defense, Committee on Appropriations
  Senate Committee on Armed Services
  Senate Committee on Governmental Affairs
  House Committee on Appropriations
  House Subcommittee on National Security, Committee on Appropriations
  House Committee on Government Reform and Oversight
  House Subcommittee on National Security, International Affairs, and Criminal Justice, Committee on Government Reform and Oversight
  House Committee on National Security

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