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The Army Basing Study 2005 Process

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Executive Summary

Audit Report: A-2005-0164-ALT

22 April 2005



The Army Basing Study 2005 Process

The Director, The Army Basing Study (TABS) asked that we audit the TABS 2005 process. Our overall objective was to determine whether the process was effective. We focused our efforts on determining whether the Army established and used effective procedures for:

- Identifying candidate installations and leased facilities to study for possible closure or realignment.
- Collecting, certifying, and changing data.
- Assessing Army installations and leased facilities.

We also evaluated management controls established for the TABS 2005 process.

Overall, the TABS process was effective. The TABS charter, internal control plan, and analytical framework effectively explained the TABS Group's authority, mission, and responsibilities; set up key controls within the process; and established a framework for developing Army scenarios for Base Realignment and Closure (BRAC) 2005. Specifically, the TABS Group used effective:

- Procedures, reliable data, and appropriate methodology based on BRAC law to identify candidate installations and leased facilities to study for possible closure and realignment. It also used output from two models that appropriately rank-ordered installations and leased facilities based on military value and identified potential stationing alternatives for Army units as starting points for the Army's BRAC 2005 analyses.
- Processes in place to collect, certify, and change data received from installations and leased facilities, corporate databases, and open sources. Generally, the data collected was adequately supported and accurate, but responses to certain questions were frequently unsupported and/or inaccurate. However, the TABS Group and six Joint Cross-Service Groups that planned to use the data acted to mitigate the potential risks from using data that may have been systemically problematic.
- Procedures for assessing Army installations and leased facilities. The TABS Group had a charter, an analytical framework, a system that tracked proposals to ensure that analysts followed the framework, and the Cost of Base Realignment Actions model that calculated costs and savings as prescribed in the operators manual.
- Controls throughout the TABS process. Key management controls were in place and operating relative to: access and communication, certification requirements, recordkeeping, and data collection at the TABS Group; certification of data and use of government e-mail for requests and responses at selected installations and leased sites; and submission, review, and certification of data in the group's online data interface collection tool.

Because our results are positive or the TABS Group took corrective actions during the audit, we made no recommendations and the report was not subject to the command-reply process. However, you chose to comment, and we included your verbatim comments in Annex D.



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22 April 2005

Director, The Army Basing Study Group

This is the report on our audit of The Army Basing Study 2005 process. It includes audit work we conducted on the analytical tools, data collection and certification procedures, management controls, and overall study process since The Army Basing Study began in February 2003.

We conducted our audit from September 2004 to March 2005 in accordance with generally accepted government auditing standards and included the tests of management controls that we considered necessary.

Because our results are positive or the Study Group acted to correct problems we observed during the study process, we are not making any recommendations in this report. Accordingly, the report is not subject to the command-reply process that AR 36-2 prescribes. However, you chose to comment, and we included your verbatim comments in Annex D.

For additional information about this report, contact the Installation Studies Division at 703-681-6020.

I appreciate the courtesies and cooperation extended to us during the audit.

FOR THE AUDITOR GENERAL:

A handwritten signature in black ink, reading "David H. Branham".

DAVID H. BRANHAM
Program Director
Installation Studies

Abbreviations Used in This Report

BRAC	Base Realignment and Closure
COBRA	Cost of Base Realignment Actions Model
JCSG	Joint Cross-Service Group
MVA	Military Value Analyzer
ODEM	Optimal Decision Evaluation Model
ODIN	Online Data Interface Collection Tool
OSAF	Optimal Stationing of Army Forces
PIMS	Proposal Information Management System
TABS	The Army Basing Study

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INTRODUCTION

BASE REALIGNMENT AND CLOSURE 2005

The Defense Base Closure and Realignment Act of 1990, as amended by 10 U.S.C. sections 2687 and 2901–2926, authorized a fair process that resulted in the timely closure and realignment of military installations inside the United States in 1991, 1993, and 1995. Congress amended the law in 10 U.S.C. sections 3001–3008 to authorize a new round of base closures during 2005 in accordance with the process and rules established in 10 U.S.C. sections 2687 and 2901–2926.

The Secretary of Defense initiated Base Realignment and Closure (BRAC) 2005 on 15 November 2002. The Secretary of the Army established the Deputy Assistant Secretary of the Army (Infrastructure Analysis) to lead the Army's efforts to support BRAC 2005. The Deputy Assistant Secretary served as director of The Army Basing Study (TABS) Group, which is the ad hoc organization chartered as the single point of contact for planning and executing the Army's responsibilities in the development of recommendations for BRAC 2005. The TABS Group was responsible for:

- Assessing the capacity and military value of Army installations.
- Evaluating BRAC alternatives.
- Developing recommendations for BRAC 2005 on behalf of The Secretary of the Army.

To accomplish this, the TABS Group obtained and analyzed certified data from Army installations and leased facilities; Army corporate databases; and open source data. The Army's inventory included 88 installations and 11 leased facilities that met the BRAC 2005 threshold for study.¹

We did audits of the analytical tools, data collection and certification procedures, management controls, and overall

¹ Near the end of our audit, we learned that the TABS Group removed one installation and one leased facility from the Army's inventory. The group removed the installation because it was closed by congressional action (Pub. L. No. 108-375, 28 October 2004). It removed the leased facility because it was double-counted when the group developed the inventory.

TABS process. A complete list of the audit reports we issued is in Annex B beginning on page 49. A flowchart of the TABS 2005 process is in Annex C on page 51.

OTHER MATTERS

For the BRAC 2005 process, DOD established seven functionally aligned Joint Cross-Service Groups (JCSGs) responsible for making recommendations directly to the Secretary of Defense concerning potential realignments and closures. The seven JCSGs were:

- Education and Training.
- Headquarters and Support Activities.
- Industrial.
- Medical.
- Supply and Storage Activities.
- Technical.
- Intelligence.

The TABS Group collected Army data for all of the JCSGs except Intelligence. The Army Deputy Chief of Staff, G-2 collected Army data for that group. Additional information about our audit coverage related to the Intelligence JCSG is in Audit Reports: A-2004-0545-AMI, 30 September 2004, Attestation Review of Validation of Data for Base Realignment and Closure 2005, U.S. Army Intelligence Community and A-2005-0125-ZBI, 8 March 2005, Attestation Review of Validation of Data for Base Realignment and Closure 2005, U.S. Army Intelligence Community. Both reports are classified.

In conjunction with the TABS process, the Army also analyzed closure and realignment actions in the Reserve Components through the Reserve Component Process Action Team. The results of our audit of the Reserve Component Process Action

Team are in a separate audit report (A-2005-0165-ALT, 29 April 2005) addressed to the Director, TABS Group.

A – THE STUDY PROCESS

OBJECTIVE

Was The Army Basing Study 2005 process effective?

CONCLUSION

Yes. The TABS 2005 process was effective.

DA instituted the TABS charter that explained its authority, mission, and responsibilities during the process. The TABS Group effectively developed and used:

- An internal control plan that established key controls within its process.
- An analytical framework that established a process to develop Army scenarios in support of BRAC 2005.

The TABS Group also established and used effective:

- Procedures for identifying candidate installations and leased facilities to study for possible closure or realignment, including two models that provided a rank order of installations and leased facilities based on military value and potential stationing alternatives for units.
- Processes to collect, certify, and change data from installations and leased facilities, corporate databases, and open sources. The data the TABS Group obtained was generally supported with appropriate evidentiary matter and accurate. However, responses to certain questions were frequently unsupported and/or inaccurate, and the TABS Group and six JCSGs acted to mitigate the potential risk of using data that may have been systemically problematic.
- Procedures for assessing Army installations and leased facilities. In addition to the analytical framework, the TABS Group used the Proposal Information Management System (PIMS) that tracked proposals to ensure analysts followed the analytical process and the Cost of Base Realignment

Actions (COBRA) model that calculated costs and savings estimates in accordance with the operator's manual.

Furthermore, key management controls were in place and operating throughout the TABS process, including controls that minimized the risk of processing corrupted data in its online data interface collection tool (ODIN), which was used to collect most data, and controls that ensured all data used in the study process was certified.

Our detailed discussion of these conditions begins on page 7. Because our results are positive or the TABS Group took corrective action during the audit, we are making no recommendations.

BACKGROUND

The TABS Charter, dated 17 January 2003, established the TABS Group and specified the authority, mission, and responsibilities of the organization.

The TABS Internal Control Plan, dated 4 June 2003, provided information on the TABS Group organization, information, and communication controls to safeguard Army BRAC information and guidance on interactions with stakeholders and Congress. The plan also included addendums that provided specific information on collecting and certifying data through three methods: corporate databases, installations (through ODIN), and hardcopy submissions, as well as for submitting changes to original responses.

The draft TABS Analytical Framework, dated September 2004, described the process the TABS Group followed to support BRAC 2005. The document included an introduction to the group's methods, relationships between models, and data used throughout the process. Its major objectives were to provide an understanding of the analytical process used to develop scenarios and to define the role of TABS analysts within that process. The final analytical framework is scheduled to be completed not later than 16 May 2005 (the date BRAC 2005 recommendations are due to the Commission).

DISCUSSION

In this section, we discuss these five areas:

- Key TABS documents.
- Identifying candidate installations and leased facilities.
- Collecting, certifying, and changing data.
- Assessing installations and leased facilities.
- Management controls.

Key TABS Documents

DA instituted the TABS Charter and the TABS Group developed an internal control plan and draft analytical framework, all of which effectively established:

- The TABS organization and specified its authority, mission, and responsibilities.
- The controls for organization, information, and communication, including controls over the collection, certification, and modification of data.
- A process to develop Army scenarios in support of BRAC 2005.

The TABS 2005 Charter

The TABS Group was established under the Assistant Chief of Staff for Installation Management and is led by the Deputy Assistant Secretary of the Army (Infrastructure Analysis), who also serves as the Director of the TABS Group. The group's mission was to:

- Examine the issues surrounding the realignment and closure of Army installations within the 50 States, the District of Columbia, and the U.S. Commonwealths, territories, and possessions.
- Make recommendations to The Secretary of the Army and Chief of Staff, Army concerning potential closures and realignments.
- Serve as the single point of contact for Army BRAC 2005.

Additional information on the effectiveness of the charter is in Objective D, Assessing Candidate Installations and Leased Facilities, beginning on page 24.

The TABS 2005 Internal Control Plan

The TABS Group developed and used an effective internal control plan for the Army BRAC 2005 process that established a consistent set of key management controls designed to provide an “unbroken chain” of accountability for each subelement of information and analysis used in that process. The plan contained organization, information, and communication controls, as well as guidance on interactions with stakeholders and Congress. Addendums to the plan included collection and certification procedures for data obtained through Army corporate databases, Army installations (via ODIN), and hard copies and certification procedures for changes to submitted data.

Additional information on the effectiveness of these controls during the process is in Objective E, Management Controls, beginning on page 35.

The TABS 2005 Analytical Framework

The TABS Group effectively documented its analytical process for BRAC 2005 in the draft analytical framework. This is the first time any TABS Group outlined its methods, the relationships between models, and the data used throughout the process in an official manuscript for public record. The major objectives of the framework were to provide an understanding of the analytical process used to develop scenarios and to define the role of TABS analysts within the process.

Additional information on the effectiveness of the analytical framework is in Objective D beginning on page 24.

Identifying Candidate Installations and Leased Facilities

The TABS Group had effective procedures for identifying candidate installations and leased facilities to study for possible closure or realignment. The group used reliable data and appropriate methodology based on BRAC law to identify candidate installations and leased facilities for study. It also used two models that appropriately rank-ordered installations and leased facilities based on military value (Military Value Analyzer Model) and identified

potential stationing alternatives for Army units (Optimal Stationing of Army Forces Model). These models provided a starting point in analyses to identify potential candidate installations and leased facilities for possible closure or realignment and potential stationing alternatives for units.

Additional information on the group's procedures is in Objective B, Identifying Candidate Installations and Leased Facilities, beginning on page 12.

Collecting, Certifying, and Changing Data

The TABS Group had effective processes in place to collect, certify, and change data. The group obtained capacity and military value data for the Army and JCSGs through three different processes—corporate databases, ODIN, and hardcopy submissions—that worked as intended and resulted in the submission of certified data to the TABS Group and JCSGs. And, generally, the data the group obtained was adequately supported with appropriate evidentiary matter and was accurate.

However, responses to certain questions frequently were not adequately supported and/or were inaccurate. In these cases, the TABS Group and six JCSGs acted to mitigate the potential risks from using data that may have been systemically problematic by:

- Seeking clarification.
- Reissuing questions to obtain additional data.
- Using more reliable data from other questions.

In addition, controls were in place and operating to ensure that the certified Army data the TABS Group obtained maintained its integrity as it was transferred into:

- The TABS Group data warehouse for use in analyses.
- The COBRA model to determine costs and savings estimates.

Consequently, the TABS Group had reasonable assurance that the integrity of the certified data it collected was maintained throughout the study process.

Additional information on the data processes is in Objective C, Collecting, Certifying, and Changing Data, beginning on page 18.

Assessing Installations and Leased Facilities

The TABS Group had generally effective procedures for assessing Army installations and leased facilities. DA instituted the TABS Charter that effectively established the TABS Group's authority, mission, and responsibilities. The group documented its analytical process for BRAC 2005 in the draft TABS Analytical Framework. The process included developing, reviewing, selecting, and prioritizing proposals. The group also developed PIMS, which tracked proposals to ensure that analysts followed the process in the analytical framework. We confirmed that the analysts followed the process outlined in the framework.

In addition, our review of the COBRA model showed that:

- The model calculated costs and savings estimates as prescribed in the operator's manual.
- The model accurately calculates net present value.
- Enhancements to the model should improve procedures for calculating costs and savings estimates.
- Procedures for developing standard factors used in the model were effective.
- The TABS Group used certified data in the model to support costs and savings estimates.

Additional information on the group's assessment procedures is in Objective D beginning on page 24.

Management Controls

The TABS process had key management controls that were generally in place and operating throughout the process. Our review showed that Army BRAC 2005 management controls were in place and operating at the TABS Group relative to:

- Access and communication.
- Certification requirements.

- Recordkeeping.
- Data collection.

Army BRAC 2005 management controls were also in place and operating at selected installations relative to:

- Certification of data and use of government e-mail for requests by the TABS Group and responses by Army activities.
- Completion of nondisclosure agreements and compliance with DOD public affairs guidance.

Further, the TABS Group had process controls in place and operating within ODIN, the automated tool developed for BRAC 2005 to collect data from Army installations, that minimized the risk of processing corrupted data.

Additional information on management controls is in Objective E beginning on page 35.

B – IDENTIFYING CANDIDATE INSTALLATIONS AND LEASED FACILITIES

OBJECTIVE

Were procedures for identifying candidate installations and leased facilities to study for possible closure or realignment effective?

CONCLUSION

Yes. The TABS Group established and used effective procedures for identifying candidate installations and leased facilities to study for possible closure or realignment. After the group obtained certified data from Army installations and leased facilities, it used two models to establish starting points for BRAC 2005 analyses:

- Output from the Military Value Analyzer (MVA) model, which appropriately rank-ordered installations and leased facilities based on weighted data and algorithms, was used to identify candidate installations and leased facilities to study for possible closure or realignment based on military value.
- The Optimal Stationing of Army Forces (OSAF) model was applied to identify potential stationing alternatives for Army units.

Our detailed discussion of these conditions begins on page 13. Because our results are positive or the TABS Group took corrective actions during the audit, we are making no recommendations.

BACKGROUND

The Office of the Assistant Chief of Staff for Installation Management maintains the Headquarters Executive Information System, which is an Army system that captures all real estate the Army owns. The system database includes Active Army installations, subinstallations, U.S. Army Reserve facilities, and U.S. Army National Guard assets.

U.S. Army Corps of Engineers maintains the Rental Facility Management Information System, which is an Army system that contains all Army leases not located within the National Capital Region. The Space and Building Management Office within the Office of the Administrative Assistant to The Secretary of the Army publishes an annual report that contains all Army leases located within the National Capital Region.

The TABS Group selected the Logical Decision for Windows software to develop the MVA model and conduct the military value analysis, which is a process of rank-ordering installations and leased facilities. The software quantitatively evaluates and rank-orders alternatives based on data, values, functions, and weights for a set of attributes. For its purposes, the TABS Group used certified data obtained through data calls, corporate databases, and open sources in the software to rank-order installations and leased facilities.

The TABS Group used the OSAF model as a starting point for unit-level prioritization. The model prescribes an optimal Army stationing plan for a given force structure, set of installations, available implementation dollars, and stationing restrictions. For its purposes, the TABS Group used certified data obtained through data calls, corporate databases, and open sources in the model to determine the optimal Army stationing plan.

DISCUSSION

In this section we discuss two areas:

- Inventory of candidate installations and leased facilities.
- Starting points for BRAC 2005 analyses.

Inventory of Candidate Installations and Leased Facilities

The TABS Group used reliable data and appropriately applied methodology that was in accordance with BRAC law to identify candidate installations and leased facilities to study for possible

closure or realignment during TABS 2005. The Army's inventory consisted of 99 sites (88 installations and 11 leased facilities).²

The data the TABS Group used came from three reliable sources:

- The Headquarters Executive Information System, which contains a record of all real property the Army owns. The database included 4,703 records as of 30 September 2002.
- Rental Facility Management Information System, which contains a record of all Army leased facilities outside the National Capital Region. The database contained 2,829 records as of October 2004.
- Master Space Plan, which contained all 141 of the Army's leased facilities inside the National Capital Region as of July 2003.

We concluded that the data in the two automated systems was reliable to use to determine the inventory of installations and leased facilities (outside the National Capital Region) because it was complete, competently derived from sources, and contained consistent records. We also concluded that the data in the Master Space Plan was reliable to use to determine the inventory of leased facilities (inside the National Capital Region) because it is published by the Space and Building Management Office within the Office of the Administrative Assistant to the Secretary of the Army, the appropriate source, and the only official available source on the subject.

The methodology the TABS Group followed to determine the inventory of installations and leased facilities for The 2005 Army Basing Study came from BRAC law: 10 U.S.C. sections 2687 and 2901–2926. We confirmed that the group developed its methodology in accordance with the law and concluded that it appropriately applied the methodology to identify the installations and leased facilities in the inventory for study. For example, the group:

² Near the end of our audit, we learned that the TABS Group removed one installation and one leased facility from the Army's inventory. The group removed the installation because it was closed by congressional action (Pub. L. No. 108-375, 28 October 2004). It removed the leased facility because it was double-counted when the group developed the inventory.

- Did not include any Corps of Engineers facilities in its inventory because 10 U.S.C. sections 2901(b) and 2910(4) state that Corps facilities are exempt from BRAC consideration.
- Included only leased facilities and installations that were in the United States, its territories, and its possessions because 10 U.S.C. sections 2901(b) and 2910(7) state that only leased facilities and installations in the United States, its territories, and possessions can be considered for BRAC actions.
- Did not include any installations that were occupied by Defense agencies because 10 U.S.C. sections 2903(c)(5)(A) and 2903(c)(5)(B)(ii) state that any installations on a Services' property list, but controlled and run by a Defense agency, should be excluded.

Starting Points for BRAC 2005 Analyses

Once the TABS Group collected certified data from the inventory of Army installations and leased facilities, it entered the data into two models, MVA and OSAF, to establish starting points for BRAC 2005 analyses as follows:

- Candidate installations and leased facilities for possible closure or realignment based on military value.
- Potential Army unit stationing alternatives.

Additional information on the TABS Groups' analytical procedures is in Objective D, Assessing Candidate Installations and Leased Facilities, beginning on page 24.

MVA Model

The MVA, modeled within the Logical Decisions for Windows software, appropriately rank-ordered installations and leased facilities based on weighted data and algorithms. The software offers three available weight methods (Direct, Smart, and Smarter). We concluded that the method the TABS Group chose to use for MVA (Smart Method) is the more appropriate, given the number of conflicting objectives inherent in the TABS process. The model gave the TABS Group a starting point for analysis by identifying candidate installations and leased facilities for possible closure or realignment based on military value.

We did an audit of the MVA model before the TABS Group began using it. We made one suggested action—that the group document the weights used in the model and how they were determined—which the group agreed to do. The group plans to implement our suggested action in its report to DOD that documents the group’s process and recommendations. More information on the results of our audit is in Audit Report: A-2004-0308-IMT, 20 May 2004, Audit of the Military Value Analyzer Model.

After that audit the TABS Group received actual data from installations and leased facilities in the Army’s inventory for possible closure or realignment and used the MVA model to rank-order the sites. The group then performed a sensitivity analysis on the results to make sure the model was robust. The group tested the sensitivity of the weights and data within the model by varying them up to ± 20 percent and found that the variance in the many rank-order lists produced was not significant. (The greatest change was less than 8 positions out of 99).³ We evaluated the group’s sensitivity analysis and concluded that it was complete and appropriate because of the variance of the percentile, insignificance of changes in the rank order, and the use of data that was certified as accurate and complete.

In addition, after our audit we verified that the:

- Data used to calculate the value of 10 judgmentally selected attributes (those attributes with the highest weight, such as direct fire capability, brigade capacity, and so on) for 11 judgmentally selected installations was the same as the certified data received from the installations.
- Value of 10 judgmentally selected attributes for 11 judgmentally selected installations was calculated correctly.

Although we determined that the TABS Group used the certified data received from sites and correctly calculated the values of the attributes, we suggested that the group provide more specific information in the descriptions of how to calculate the values

³ Near the end of our audit, we learned that the TABS Group removed one installation and one leased facility from the Army’s inventory. The group removed the installation because it was closed by congressional action (Pub. L. No. 108-375, dated 28 October 2004). It removed the leased facility because it was double-counted when the group developed the inventory.

of attributes. The group agreed to implement our suggested action in the report to DOD that documents its process and recommendations.

OSAF Model

The TABS Group's use of the OSAF model was appropriate for BRAC 2005. The group used the model as a starting point to inform analysts of potential Army unit stationing alternatives in the BRAC 2005 round, of which the most feasible would be processed in the COBRA model.

We did an audit of the OSAF model before the TABS Group used it. We did not have any suggested improvements for the group. For more information on the results of that audit, see Audit Report: A-2004-0309-IMT, 20 May 2004, Audit of the Optimal Stationing of Army Forces Model.

After our audit the TABS Group received certified data from installations in the Army's inventory for possible closure or realignment, and it used the OSAF model to generate ideas for installations that could gain or lose units. The group used the information, coupled with capacity and military value analysis, operational consideration, and costs and savings estimates, to determine if the ideas were worth pursuing as closure or realignment proposals. We confirmed that the group used the OSAF tool in this manner after actual certified data was available. In our opinion, the group used the tool appropriately.

C – COLLECTING, CERTIFYING, AND CHANGING DATA

OBJECTIVE

Were the processes for collecting, certifying, and changing data effective?

CONCLUSION

Yes. The TABS Group had effective processes in place to collect, certify, and change data.

The TABS Group obtained capacity and military value data for the Army and JCSGs through three different processes—corporate databases, an online data interface collection tool (ODIN), and hardcopy submissions—that worked as intended and resulted in the submission of certified data to the group and the JCSGs.

In general the data was adequately supported with appropriate evidentiary matter and reasonably accurate based on the criteria we applied, although responses to certain questions frequently were not adequately supported and/or accurate. In those cases, the TABS Group and JCSGs⁴ acted to mitigate potential risks associated with using data that may have been systemically problematic.

In addition, controls were in place and operating to ensure that the certified Army data the TABS Group obtained maintained its integrity as it was transferred into:

- The TABS Group data warehouse for use in analyses.
- The COBRA model to determine costs and savings estimates.

Consequently, the TABS Group had reasonable assurance that the integrity of the certified data it collected was maintained throughout the study process.

⁴ The 2005 TABS Group did not collect capacity or military value data for a seventh group—the Intelligence JCSG. Accordingly, we will report data validation results for that group to the Deputy Chief of Staff, G-2.

Our detailed discussion of these conditions follows on this page. Because the TABS Group took corrective actions during the audit, we are making no recommendations.

BACKGROUND

The Army's inventory included 88 installations and 11 leased facilities⁵ that met the BRAC 2005 threshold for study. The TABS Group required certification of all data from Army installations and leased facilities; Army corporate databases; and open sources. In most cases, data was collected using ODIN, which was an automated tool developed for BRAC 2005 to collect data from Army installations. The TABS Internal Control Plan contains certification procedures to ensure that the information received is accurate and complete to the best of the certifier's knowledge and belief.

Two data calls occurred during BRAC 2005: capacity and military value. The TABS Group sent questions, the majority through ODIN, to installations and leased facilities in its inventory during both data calls. We validated responses to judgmentally and randomly selected questions from both data calls at judgmentally selected installations and leased facilities from April through October 2004. More information on the sample of questions and sites we selected is in Audit Reports: A-2005-0056-ALT, 30 November 2004, Army Capacity Data and A-2005-0083-ALT, 21 December 2004, Army Military Value Data.

DISCUSSION

In this section we discuss these four areas:

- Process of collecting certified data.
- Validation of capacity and military value data.

⁵ Near the end of the audit, we learned that the TABS Group removed one installation and one leased facility from the Army's inventory. The group removed the installation because it was closed by congressional action (Pub. L. No. 108-375, dated 28 October 2004). It removed the leased facility because Army activities no longer occupied the properties.

- Actions to mitigate potential risk.
- Integrity of certified data.

Process of Collecting Certified Data

The TABS Group had a sound process in place to collect certified capacity and military value data for the Army and JCSGs. The group obtained data through three different processes:

- Corporate databases.
- ODIN.
- Hardcopy submissions.

We reviewed these processes, which were outlined in the TABS Internal Control Plan. We concluded that the processes worked as intended and resulted in the submission of certified data to the TABS Group and, subsequently, the six JCSGs.

Additional details on the results of our audit work on the TABS Group's data collection, certification, and change processes are in Audit Reports: A-2005-0056-ALT and A-2005-0083-ALT.

Validation of Capacity and Military Value Data

The TABS Group collected certified capacity and military value data that generally was adequately supported with appropriate evidentiary matter and accurate based on the criteria we applied. Also, during the capacity data call, we found that the "not applicable" responses provided were appropriate.

Responses to questions that were not adequately supported occurred primarily because:

- Army activities submitted answers that differed from supporting evidence.
- Functional responders provided estimates, but did not gather or keep any evidence to support their answers.

Responses to questions that were not accurate occurred primarily because Army activities:

- Excluded or inappropriately included data and attributes needed to correctly answer the questions.
- Used undocumented estimating methods that we could not use to replicate certified answers.
- Made mathematical errors.

The Army activities we visited satisfactorily corrected most of the problems we identified with supporting documentation. In many cases, inaccurate answers were corrected once adequate documentation was available.

Actions to Mitigate Potential Risk

The TABS Group and the JCSGs⁶ acted to mitigate potential risks associated with using data that may have been systemically problematic.

In our opinion, the Army and six JCSGs would have assumed a higher degree of risk if they used in their analyses Army responses that were frequently inaccurate for specific questions or installations and leased facilities. We discussed the potential risk with members of the TABS Group and the six JCSGs to determine what—if any—actions the Army and JCSGs needed to take for the questions we identified with systemic data problems.

We did not identify any systemic issues that would pose a potential risk to the BRAC 2005 process. Various actions the TABS Group and the JCSGs took should help mitigate the potential risk of using inaccurate data responses in the groups' analyses. For example, the groups:

- Elected to not use the data in responses to certain questions or replaced responses with more reliable data from other questions.
- Requested clarification from Army installations for certain questions.
- Reissued certain questions to obtain more accurate data.

⁶ The 2005 TABS Group did not collect capacity or military value data for a seventh group—the Intelligence JCSG. Accordingly, we will report data validation results for that group to the Deputy Chief of Staff, G-2.

Furthermore, during our effort to validate the capacity data, we noted that certain installations had a higher frequency of responses that were inadequately supported and/or inaccurate than other installations. Although the installations corrected nearly all the inaccuracies we identified, our review showed that the magnitude of the errors was not significant enough to pose potential risks to the BRAC 2005 analytical process. In addition, we did not observe this high frequency of inadequate support or inaccuracies during our validation effort of military value data. We attributed the difference to additional guidance from the TABS Group and to the installations and leased facilities overcoming the learning curve for maintaining adequate support for the answers to each question. The TABS Group issued guidance multiple times during both data calls reminding installations to maintain supporting evidence for responses to data call questions.

Additional details on the results of our validation of capacity data are in Audit Report: A-2005-0056-ALT. More information on the results of our validation of military value data is in Audit Report: A-2005-0083-ALT.

Integrity of Certified Data

Controls were in place and operating to ensure that the certified Army data the TABS Group obtained through the three different processes maintained its integrity as it was transferred into:

- The TABS Group data warehouse for use in analyses.
- The COBRA model to determine costs and savings estimates.

We confirmed that the certified data installations and leased facilities submitted to the TABS Group was the same data in the data warehouse. We confirmed that certified changes to the data installations and leased facilities sent to the group were entered into the data warehouse. And we confirmed that the certified data in the data warehouse from installations and leased facilities was the same data entered into COBRA. Additional information on data in the data warehouse is in Objective E, Management Controls, beginning on page 35. Additional information on the data in COBRA is in Objective D, Assessing Installations and Leased Facilities, beginning on page 24.

Consequently, the TABS Group had reasonable assurance that the integrity of the certified data it collected was maintained throughout the process.

D – ASSESSING CANDIDATE INSTALLATIONS AND LEASED FACILITIES

OBJECTIVE

Were procedures for assessing Army installations and leased facilities effective?

CONCLUSION

Yes. Procedures the TABS Group established and used to assess Army installations and leased facilities were effective.

DA instituted the TABS charter that effectively established the TABS Group's authority, mission, and responsibilities. The group effectively:

- Documented its analytical process for BRAC 2005 in the draft TABS Analytical Framework. The framework included a process for developing, reviewing, selecting, and prioritizing proposals.
- Developed a database called the Proposal Information Management System (PIMS) to track proposals and ensure that the TABS analysts followed the process in the draft analytical framework.

Overall, the TABS analysts effectively followed the process outlined in the draft analytical framework during their development of proposals. In addition, our review of the COBRA model showed that:

- The model calculated costs and savings estimates as prescribed in the operators manual.
- The model accurately calculated net present value.
- Enhancements to the model improved procedures for calculating costs and savings estimates.
- Procedures for developing standard factors used in the model were effective.

- The TABS Group used certified data in the model to support costs and savings estimates.

Our detailed discussion of these conditions begins on page 26. Because our results are positive or the TABS Group took corrective actions during the audit, we are making no recommendations.

BACKGROUND

The TABS charter, dated 17 January 2003, established the TABS Group and specified the authority, mission, and responsibilities of the organization.

The draft TABS Analytical Framework, dated September 2004, described the process the TABS Group followed to support BRAC 2005. This included an introduction to the group's methods, model relationships, and data used throughout the process. The major objectives of the framework were to provide an understanding of the analytical process used to develop scenarios and to define the role of TABS analysts within the process.

PIMS tracked proposals TABS analysts developed for BRAC 2005 to ensure that the analysts followed the process in the TABS analytical framework. PIMS contains information such as the proposal number, analyst's name, title of proposal, summary of proposal, and qualitative and quantitative data related to the proposal. The information in PIMS was aligned with the procedures the TABS Group followed to assess installations and leased facilities, such as analyses and consideration of eight selection criteria that DOD published in the Federal Register:

- Military Value:
 - Current and future mission capabilities and effect on DOD's operational readiness.
 - Availability and condition of land, facilities, and airspace at existing and receiving locations.

- Ability to accommodate contingency, mobilization, and future total force requirements at existing and receiving locations to support operations and training.
- Cost of operations and the personnel implications.
- Other Considerations:
 - Extent and timing of potential costs and savings, including number of years for savings to exceed costs.
 - Economic impact on existing communities in the vicinity of military installations.
 - Ability of the infrastructure of both existing and receiving communities to support forces, missions, and personnel.
 - Environmental impact.

The COBRA model is a DOD standard computer model that serves as a consistent method for evaluating realignment and closure options. The model is designed to estimate the costs and savings associated with a proposed realignment or closure alternative. The model is intended to use data that is readily available to the Military Services and Defense agencies without extensive field studies.

In accordance with guidance from the Under Secretary of Defense (Policy Memorandum One, 16 April 2003), DOD Components and the JCSGs must use the COBRA model to calculate the costs, savings, and return on investment of proposed realignment and closure actions. The Army has been responsible for the continued development and modification of the model since 1991.

DISCUSSION

In this section, we discuss these four areas:

- TABS charter.
- TABS Analytical Framework.

- PIMS.
- COBRA model.

TABS Charter

The TABS Group was established under the Assistant Chief of Staff for Installation Management and is lead by the Deputy Assistant Secretary of the Army (Infrastructure Analysis), who also served as the Director of the TABS Group. The mission of the TABS Group was to:

- Examine the issues surrounding the realignment and closure of Army installations within the 50 States, the District of Columbia, and the U.S. Commonwealths, territories, and possessions.
- Make recommendations to The Secretary of the Army and Chief of Staff, Army concerning potential closures and realignments.
- Serve as the single point of contact for Army BRAC 2005.

In addition, the TABS charter contained:

- Principles for complying with provisions of the Defense Base Realignment and Closure Act and with guidance from the Office of the Secretary of Defense, The Secretary of the Army, and the Chief of Staff, Army.
- Leadership guidance for ensuring recommendations are consistent with the Army Stationing Strategy.
- Responsibilities for acting as the single point of contact for Army BRAC 2005 and meeting all congressionally and Office of the Secretary of Defense-directed milestones.
- Organizational structure and personnel requirements for establishing where the TABS Group fits in the BRAC 2005 process and personnel requirements.
- Support for establishing annual operating budgets and requirements for office space, furniture, equipment, and connectivity.

- Coordinating instructions for establishing the responsibility of each Army activity in the BRAC 2005 process.

TABS Analytical Framework The TABS Group effectively documented its analytical process for BRAC 2005 in the draft TABS Analytical Framework. This is the first time any TABS Group outlined its methods, the relationships of the models, and the data used throughout the process in an official manuscript for public record. The major objectives of this living document were to:

- Provide an understanding of the analytical process used to develop scenarios.
- Define the role of TABS analysts within the process.

The analytical framework included sections for the enduring characteristics built within the process, such as who is considered for BRAC actions, the predictability of the process, and how BRAC will enable the transformation of the Army. It also included components within the process, such as data, inputs, guidance, analyses, priorities, and DOD agencies. Furthermore, it included processes for:

- Developing proposals, which included the analysts' tasks, requirements, and coordination.
- Reviewing proposals, which included an internal review, panel review, board review, and summary review.
- Selecting and prioritizing scenarios, which included how scenarios will be packaged for senior leadership.

PIMS

The TABS Group effectively developed the PIMS database to track its proposals and ensure that analysts followed the process outlined in the TABS Analytical Framework. The group's analysts followed the process in the framework by:

- Conducting unit/scenario/installation, capacity, and military value analysis for each realignment or closure idea they came up with.

- Considering each of the eight selection criteria, including military value, costs and savings estimates, and effect on local area, local community, and the environment.

Once the analysts followed the process and received approval from TABS Team Chiefs, PIMS administrators entered proposals into the PIMS database and assigned proposal numbers. The TABS analysts then developed the proposals for review and approval by senior TABS and Army leadership for inclusion in DOD's BRAC 2005 recommendations.

We confirmed that the TABS analysts followed the process outlined in the draft analytical framework for developing proposals. We tested both randomly and judgmentally selected proposals and determined that, in general, the analysts effectively:

- Followed procedures and considered each of the selection criteria.
- Used one-time dynamic costs that were supported by certified data.
- Transferred data correctly from COBRA into PIMS, then into the Optimal Decision Evaluation Model (ODEM) to prioritize proposals.

However, in some cases, minor deficiencies occurred when analysts entered information incorrectly or in the wrong section, or calculated costs incorrectly. The TABS Group took action to correct the problems we identified. The next three subsections provide the results of our review, the deficiencies we identified, and the group's actions.

Procedures and Selection Criteria

We randomly selected 53 of 213 proposals in PIMS (as of 30 November 2004) to determine if the TABS analysts who developed the proposals followed procedures and considered each of the selection criteria. For all 53 proposals, the TABS analysts:

- Conducted unit, scenario, installation, capacity, and/or military value analysis.

- Identified the BRAC objective(s) they tried to achieve with the proposal.
- Received appropriate approval to pursue the proposal.
- Entered proposals into PIMS once they received approval.

For 28 of the 53 proposals, the TABS analysts addressed each selection criteria, coordinated with other military departments and DOD BRAC offices, and made sure data matched the sources, such as corporate databases, COBRA reports, and so on. For the other 25 proposals:

- Eleven proposals were stopped after approval for a variety of reasons, such as a JCSG took it over or the Vice Chief of Staff, Army applied military judgment to halt the proposal.
- Data from the Army Stationing and Installation Plan did not match the information in PIMS for 14 proposals, all of which were proposals from the Reserve Component Process Action Team.

We discussed these results with the TABS Group and determined that the Reserve Component Process Action Team performed sufficient sensitivity analyses of the mismatches and found that they did not materially affect proposal decisions. Therefore, in our opinion, the lack of matching data between PIMS and the Army Stationing and Installation Plan does not affect the viability of the proposals.

One-Time Dynamic Costs

To determine if the one-time dynamic costs were supported by certified data, we reviewed all 43 proposals in PIMS (as of 4 January 2005) that the TABS Group briefed to the Senior Review Group and planned to forward to the Office of the Secretary of Defense as the Army's BRAC 2005 recommendations. We determined that 22 of the 43 proposals used certified data to enter one-time dynamic costs into COBRA. For the other 21 proposals:

- Information was not available for 12 proposals because 1 was overcome by events, 5 were replaced by other proposals, and 6 were turned over to the JCSGs.

- Analysts used either an incorrect number for one-time costs or entered the number in the wrong section for three proposals.
- Analysts incorrectly calculated recapitalization costs for ammunition plants in four proposals.
- Analysts incorrectly entered utility costs twice for two proposals.

We discussed the incorrect items with the TABS Group and determined that it correctly:

- Recalculated or reentered the costs and updated the costs in COBRA and PIMS.
- Recalculated the recapitalization costs and updated the costs in COBRA and PIMS.

In our opinion, these actions corrected the problems we observed.

Transfer of Data

The TABS Group correctly transferred information from COBRA reports into PIMS, then into ODEM to prioritize the individual proposals in PIMS. ODEM, modeled within the Logical Decisions for Windows software, works just like the MVA model by determining a prioritization of proposals based on assessment attributes and weights. We verified that the data used to:

- Calculate costs and savings in the COBRA model was the same as the data entered into the PIMS model.
- Develop scenarios in the PIMS model was the same as the data entered into the ODEM model for prioritization of the proposals.

Although we determined that the information was transferred correctly, we also found that the analysts sometimes did not update data in PIMS after each COBRA update and therefore some information in ODEM was not updated. Consequently, we recommended that the TABS Group emphasize to analysts the importance of updating COBRA data in PIMS to ensure that the

data used in ODEM is the most recent. The group agreed to compare all COBRA reports with PIMS, then to update and run ODEM before submitting proposals to DOD.

COBRA Model

The 2005 COBRA model calculates costs and savings estimates as prescribed in the operators manual and accurately calculates net present value. Enhancements to the 2005 model should improve procedures for calculating cost and savings estimates. In addition, the procedures for developing the standard factors in the 2005 COBRA model were effective. Furthermore, the TABS Group used certified data in the 2005 COBRA model to support costs and savings estimates.

COBRA Algorithms

The 2005 COBRA model calculates costs and savings estimates as prescribed in the operators manual. The model contains 340 algorithms (equations) related to costs and savings that are described in detail in the manual. We tested all 340 algorithms. Our results matched results from the model.

After we issued our audit report on the COBRA model (A-2004-0544-IMT, 30 September 2004), the TABS Group changed two algorithms in the model: TRICARE and Privatization (Family Housing). The changes resulted from actual use of the model by experts in the medical and family housing areas, who identified improvements that could be made. We tested the new algorithms; they calculate costs and savings estimates as prescribed in the operators manual.

COBRA Net Present Value Calculation

The 2005 COBRA model accurately calculates net present value. The algorithm in the model is the standard net present value formula from Office of Management and Budget Circular A-94 (Guidelines and Discount Rates for Benefit – Cost Analysis of Federal Programs) and applies the discount rate at the midyear point. We tested the algorithm using multiple stationing actions and various discount rates. Our results matched the results from the model.

COBRA Enhancements

Planned enhancements for the 2005 COBRA model should improve procedures for calculating costs and savings. In addition to changing operating systems, other enhancements are:

- Additional standard factors for locality pay, storage costs, information technology costs, and facility costs.
- An input screen for enclave costs.
- New documentation for users.

The additional standard factors enable the model to more precisely calculate costs and savings for each stationing action than previous versions. In addition, actions taken by the DOD Infrastructure Steering Group and the Joint Process Action Team for the 2005 model adequately addressed previous recommendations related to military personnel costs and savings, civilian salary savings, and recurring costs.

Additional details on our audit results related to the COBRA model and its algorithms, net present value calculations, and enhancements are in Audit Report: A-2004-0544-IMT, 30 September 2004, Cost of Base Realignment Actions (COBRA) Model.

COBRA Standard Factors

The procedures for developing standard factors used in the 2005 COBRA model were effective. The model included 53 standard factors, such as average officer, enlisted, and civilian salaries. Each standard factor was evaluated and approved by the Joint Process Action Team, a group composed of members from DOD and each of the three Military Services. We validated that all 53 standard factors were derived or obtained from appropriate sources.

Use of Certified Data in COBRA

The TABS Group used certified data in the 2005 COBRA model to support costs and savings. Data used in the COBRA model for Army proposals came from installations and leased facilities through the capacity and military value data calls (which included corporate databases) and was certified by the senior ranking official of the site (or in the case of the corporate databases, the Assistant Chief of Staff for Installation Management).

We confirmed that data from 18 judgmentally selected installations was certified by the appropriate certifying officials (the senior mission commander or the Assistant Chief of Staff for Installation Management).

E – MANAGEMENT CONTROLS

OBJECTIVE

Were key management controls for The Army Basing Study 2005 process in place and operating?

CONCLUSION

Yes. The TABS Group had key management controls that were generally in place and operating throughout the TABS process.

Key Army BRAC 2005 management controls were in place and operating at the TABS Group relative to access and communication, certification requirements, recordkeeping, and data collection. Also, Army BRAC 2005 management controls were generally in place and operating at selected installations and leased sites relative to:

- Certification of data and use of government e-mail for requests by the TABS Group and responses by Army activities.
- Completion of nondisclosure agreements and compliance with DOD public affairs guidance.

When problems were identified, corrective actions were taken. Furthermore, the TABS Group had process controls in place and operating within ODIN that minimized the risk of processing corrupted data.

Our detailed discussion of these conditions begins on page 37. Because our results are generally positive and corrective actions—when needed—were taken, we are making no recommendations.

BACKGROUND

After the Secretary of Defense initiated BRAC 2005 on 15 November 2002, the Under Secretary of Defense issued Policy Memorandum One, dated 16 April 2003, which included the

DOD Internal Control Plan for BRAC 2005. The plan was designed to delineate the broad lines of authority and responsibilities of the Office of the Secretary of Defense approach to BRAC 2005 and to ensure that BRAC analysis and recommendations are based on accurate and complete data and the process is properly documented and auditable. Military departments were responsible for developing specific internal control plans to supplement this guidance.

In accordance with the DOD Internal Control Plan for BRAC 2005, the TABS Group established and documented its management controls in the TABS 2005 Internal Control Plan, dated 4 June 2003. The TABS plan provided guidance on the group's organization, information, and communication controls to safeguard Army BRAC information and guidance on interactions with stakeholders and Congress. The TABS plan also included addendums that provided specific information on collecting and certifying data through three methods: corporate databases, installations (through ODIN), and hardcopy submissions, as well as for submitting changes to original responses. We focused our review on controls related to:

- Access and communication, certification requirements, recordkeeping, and data collection at the TABS Office.
- Certification of data, use of government e-mail, completion of nondisclosure agreements, and compliance with DOD public affairs guidance at selected installations and leased facilities during data validation efforts.

In June 2003 the TABS Group awarded a contract to develop ODIN. The group used the tool to collect data from Army activities during the BRAC 2005 process, which it combined with data from other sources and corporate databases to analyze and develop BRAC recommendations for The Secretary of the Army. The group also used the tool to collect and provide data to the functionally aligned JCSGs for similar analyses using comparable data from the other Services and DOD agencies. We focused our review on the tool's process controls.

DISCUSSION

In this section, we discuss these three areas:

- Management controls within the TABS Group.
- Management controls at installations and leased facilities.
- Process controls within ODIN.

Management Controls Within the TABS Group

Management controls relative to access and communication, certification requirements, recordkeeping, and data collection were generally in place and operating at the TABS Office. The office took corrective action when problems were identified.

Access and Communication

The TABS Group generally protected data, restricted access to facilities, and restricted access to information. Consequently, the group had reasonable assurance that BRAC-related data was protected to prevent unrestricted access or improper dissemination.

We determined that the TABS Group generally:

- Avoided inadvertent dissemination of Army BRAC 2005 information through conversation, facsimile, e-mail, and other means of electronic communication. We did not identify any instances during the audit where BRAC 2005 information was improperly disseminated.
- Stored electronic media relating to the BRAC 2005 process on a file server with controlled access restricted to those individuals officially approved to take part in the process. We confirmed that only personnel officially approved to have access could view or change files on the server.
- Transmitted requests and received responses to those requests through official government e-mail. We did not identify any instances during the audit where TABS Group personnel used nongovernmental e-mail to convey BRAC-related data or information.
- Marked files, data, and materials related to Army BRAC 2005 with appropriate deliberative statements either as a

header or footer, or both. We confirmed that deliberative documents, such as minutes for Senior Review Group and Executive Office of the Headquarters meetings, generally contained the appropriate markings.

However, we found instances where some documentation did not contain the deliberative statements. Also, although the TABS Office was located in a restricted area, we observed instances when deliberative information was left in plain view on unoccupied desks, facsimile machines, or printers. We notified the TABS Group of these control weaknesses and it took immediate action. The office issued additional guidance reminding office personnel of the requirement to mark documents with the deliberative statement and to store deliberative items out of sight when they were not in the area.

Certification Requirements

The TABS Group received BRAC 2005 data from Army activities that a responsible Army official certified as accurate and complete to the best of the certifiers' knowledge and belief. The group had copies in its files of every certification statement for data they received from:

- 88 installations.⁷
- Three Army corporate databases.
- Numerous open sources (such as leases, Army activities, and so on).

We did not identify any instances during our data validation efforts, audit work on the actual use of the analytical tools, and audit work on the development of proposals where the TABS Group received or used any data from any source that was not certified. Consequently, in our opinion, the TABS Group had reasonable assurance it used certified data in its process.

⁷ Near the end of our audit, we learned that the TABS Group removed one installation and one leased facility from the Army's inventory. The group removed the installation because it was closed by congressional action (Pub. L. No. 108-375, dated 28 October 2004). It removed the leased facility because it was double-counted when the group developed the inventory.

Recordkeeping

The TABS Group developed and maintained records properly, generally in a timely manner, and in accordance with guidance in the internal control plan. Consequently, the TABS Group had reasonable assurance that Army decisions affecting its process were properly documented and auditable.

The TABS Group:

- Captured the content of deliberative meetings with the Executive Office of the Headquarters, Senior Review Group, and TABS Group where decisions affecting the TABS process were made, in minutes prepared after the meetings. The minutes we reviewed included such items as the date, time, location, a synopsis of the topics discussed, and electronic presentations used during the meetings.
- Captured the content of oral briefings both inside and outside the Federal Government in minutes prepared after the briefings. The minutes we reviewed included such items as the date, time, location, a synopsis of the topics discussed, and electronic presentations used during the meetings.

In addition, the TABS Group followed security guidelines for technical experts consulted during the Army BRAC 2005 process. This included limiting the experts' access, briefing them on the sensitivity of the information, and obtaining a signed nondisclosure agreement from each expert. Furthermore, the TABS Group:

- Did independent validation and certification of studies and reports from outside the BRAC 2005 process that were used to develop policies or methods for making measurements and evaluations.
- Obtained signed nondisclosure agreements from each person assigned to or connected with the BRAC 2005 process.

All signed nondisclosure agreements were filed and maintained in a single location at the TABS Office.

Consequently, the TABS Group had reasonable assurance that decisions affecting its process were documented and all parties involved in the process signed nondisclosure statements.

Data Collection

The TABS Group collected information that was certified as accurate and complete to use in the Army BRAC 2005 process. Consequently, the group had reasonable assurance that information collected and used for analyses was certified.

We confirmed that the TABS Group:

- Had data in its data warehouse that matched hardcopy reports of the data that was submitted through ODIN and from corporate databases for 18 selected installations.
- Made changes to original submissions of data in the data warehouse using certified data. The changed data in the warehouse matched the hardcopy submissions.
- Considered all installations and leased facilities that it identified as candidate installations for potential closure or realignment.

Consequently, the TABS Group had reasonable assurance that data used in its analyses were certified as accurate and complete.

Management Controls at Installations and Leased Facilities

BRAC 2005 management controls relative to certification of data, use of government e-mail for requests by the TABS Group and responses by Army activities, completion of nondisclosure agreements, and compliance with DOD public affairs guidance were generally in place and operating at selected installations and leased facilities we reviewed during our validations of Army capacity and military value data. Although we found one instance where one installation did not comply with the management controls established for BRAC 2005, the installation and its major command took appropriate action to correct the problem.

More detailed information on the results of our audit work related to management controls at selected installations and leased facilities is in our summary reports on Army capacity data

(Audit Report: A-2005-0056-ALT) and Army military value data (Audit Report: A-2005-0083-ALT).

Process Controls Within ODIN

Process controls within ODIN were in place and operating that minimized the risk of processing corrupted data. Before the TABS Group used ODIN, we reviewed the tool's process controls and concluded that the tool had controls for access, data entry and submission, and data review and certification. We also gave the TABS Group two suggested actions, which it agreed to implement, to ensure the maximum integrity of the data collected.

During our validation of capacity data we determined that the TABS Group implemented our suggested actions by providing instructions to installations on a weekly basis and by periodically reviewing the data before and after certification. However, although we found two problems during the group's actual use of the tool during the capacity data call, the problems were immaterial to the analytical process because they did not have any effect on the:

- Status of data in the data warehouse.
- Ability to use the data for analyses.

Additional information on the audit results for ODIN is in Audit Reports: A-2005-0056-ALT and A-2004-0184-IMT, 20 February 2004, Review of Online Data Collection Tool: Process Controls.

GENERAL AUDIT INFORMATION

SCOPE AND METHODOLOGY

We conducted our audit of the TABS 2005 process, which includes work we did on the analytical tools, data collection and certification procedures, management controls, and the overall study process:

- From September 2004 to March 2005 under project A-2003-IMT-0440.067. This report summarizes all projects from A-2003-IMT-0440.001 through A-2003-IMT-0440.070. (A list of the individual projects is in Annex B beginning on page 49.)
- At The Army Basing Study Group, which was responsible for the Army's overall BRAC 2005 process, and at selected Army installations and leased facilities that were responsible for providing certified Army data for BRAC analyses.

We interviewed key personnel at the TABS Group and selected Army installations and leased facilities where we validated data. We also interviewed:

- Contractors hired by the TABS Group to assist in the process.
- Key Army representatives from the six JCSGs, excluding Intelligence, that will use Army data for BRAC analyses. The six groups were Education and Training, Headquarters and Support Activities, Industrial, Medical, Supply and Storage Activities, and Technical.

In addition, we reviewed BRAC 2005 law; DOD guidance; the TABS Charter, the draft TABS Analytical Framework, the TABS 2005 Internal Control Plan, and other pertinent guidance related to BRAC 2005 to obtain an understanding of the overall BRAC 2005 process. We also attended monthly Joint Audit Planning Group meetings, which were hosted by the Office of the Inspector General, DOD and attended by the U.S. Government Accountability Office, other DOD, U.S. Navy, and U.S. Air Force audit organizations, to plan and discuss appropriate audit coverage for the BRAC 2005 process. And we attended, as observers, the Army's Senior Review Group meetings where

deliberative discussions of Army BRAC 2005 decisions took place.

To determine whether the TABS 2005 process was effective, we determined whether:

- Procedures for identifying candidate installations and leased facilities to study for possible closure or realignment were effective.
- Processes for collecting, certifying, and changing data were effective.
- Procedures for assessing Army installations and leased facilities in the TABS Group's review were effective.
- Key management controls for the TABS process were in place and operating.

To determine whether procedures for identifying candidate installations and leased facilities to study for possible closure or realignment were effective, we:

- Reviewed the BRAC 2005 law and the methodology used to determine the inventory.
- Tested data in the Headquarters Executive Information System and Rental Facility Management Information System for completeness, consistency, and competency.
- Tested whether the MVA model appropriately rank-ordered installations based on weighted data and algorithms. For more information on the scope and methodology used for these tests, see paragraph 3 of Audit Report: A-2004-0308-IMT, 20 May 2004, Audit of the Military Value Analyzer Model.
- Evaluated the TABS Group sensitivity analysis on the actual use of the MVA model after data became available by changing the weights in the model up to 20 percent and by observing any significant changes in the rank order of the installations.

- Tested whether the planned use of the OSAF model in the TABS process was appropriate. For more information on the scope and methodology used for these tests, see paragraph 3 of Audit Report: A-2004-0309-IMT, 20 May 2004, Audit of the Optimal Stationing of Army Forces Model.

To determine whether the processes for collecting, certifying, and changing data were effective, we:

- Reviewed the processes the TABS Group followed to collect, certify, and change data.
- Tested the adequacy of support for responses and the accuracy of responses from the capacity and military value data calls at selected installations and leased facilities.

For more information on the scope and methodology we followed to review the process for collecting, certifying, and changing data, as well as to determine whether the data was adequately supported and accurate, including the reliability of computer-generated data, see Audit Reports: A-2005-0056-ALT, 30 November 2004, Army Capacity Data and A-2005-0083-ALT, 21 December 2004, Army Military Value Data.

To determine whether procedures for assessing Army installations and leased facilities were effective, we:

- Reviewed the TABS Charter and the draft TABS Analytical Framework.
- Tested randomly selected proposals from PIMS to determine if analysts considered analyses and the eight selection criteria.
- Tested judgmentally selected proposals from PIMS to determine if one-time dynamic costs were supported by certified sources.
- Tested the 2005 COBRA model to determine whether the model calculates costs and savings estimates as prescribed in the operator's manual and accurately calculates net present value, and whether planned enhancements to the model improve procedures for calculating costs and savings.

For more information on the scope and methodology we followed for the tests on the COBRA model, see Audit Report: A-2004-0544-IMT, 30 September 2004, Audit of the Cost of Base Realignment Actions (COBRA) Model.

- Reviewed procedures for developing the standard factors in COBRA and confirmed the factors to their sources.
- Tested whether the TABS Group used certified data in the COBRA model by verifying that 36 data elements for each of 18 selected installations was certified by the appropriate senior mission commander.

To determine whether management controls for the TABS process were in place and operating, we reviewed the TABS Internal Control Plan and addendums and identified key controls for the TABS Group, installations, and leased facilities. We tested key controls relative to:

- Access and communication, certification requirements, recordkeeping, and data collection at the TABS Office.
- Certification of data, use of official government e-mail, completion of nondisclosure agreements, and compliance with DOD public affairs guidance at selected installations and leased facilities during our validation efforts.

We also reviewed process controls within ODIN.

For more information on the scope and methodology we followed for testing management controls at installations and leased facilities, see Audit Reports: A-2005-0056-ALT and A-2005-0083-ALT. For more information on the scope and methodology we followed for testing process controls within ODIN, see paragraph 3 of Audit Report: A-2004-0184-IMT.

RESPONSIBILITIES AND RESOURCES

The Office of the Assistant Secretary of the Army (Installations and Environment) is responsible for policy development, program oversight, and coordination of Army activities related to Army installations; privatization of the Army infrastructure;

environmental programs; and safety and occupational health programs.

The Deputy Assistant Secretary (Infrastructure Analysis), who reports to the Assistant Secretary, oversees the TABS Group. The TABS Group is responsible for:

- Examining the issues surrounding the realignment and closure of Army installations within the 50 States, the District of Columbia, and U.S. Commonwealths, territories, and possessions.
- Making recommendations to The Secretary of the Army and Chief of Staff, Army concerning potential realignments and closures.
- Serving as the Army's single point of contact for BRAC 2005.
- Establishing processes to collect and certify data from Army installations and leased facilities, and establishing management controls over the TABS process.
- Reviewing certified responses and having Army activities make changes when corrections are needed.
- Providing applicable certified responses to the six JCSGs and having Army activities revise responses when corrections are needed.

The Office of the Assistant Chief of Staff for Installation Management, who is the proponent of the Army Stationing and Installation Plan, Real Property Planning Analysis System, and Installation Status Report, was responsible for signing and forwarding an overall certification statement to the TABS Group attesting that corporate database information received from the U.S. Army Installation Management Agency was certified.

Installation Management Agency, which manages Army installations through seven region offices, was responsible for regionally reviewing and certifying corporate database information received from installations and base sites. The agency was also responsible for:

- Providing a certification document for corporate database information to the Office of the Assistant Chief of Staff for Installation Management.
- Reviewing precertified military value data collected through ODIN.

Major commands, such as U.S. Army Materiel Command, U.S. Army Forces Command, and U.S. Army Training and Doctrine Command, were also responsible for reviewing precertified mission related data collected through ODIN.

Army installations and leased facilities were responsible for providing certified military value data for the BRAC 2005 process. Specifically, Army installations were responsible for:

- Collecting and reviewing data to answer questions received through ODIN, precertifying responses, and making responses available for higher headquarters review. After precertification review, the senior mission commander was responsible for certifying the responses in the tool and submitting the certified responses to the TABS Group.
- Updating, reviewing, and certifying information in three Army corporate databases—Army Stationing and Installation Plan, Real Property Planning Analysis System, and Installation Status Report—and forwarding a certification statement to the appropriate Installation Management Agency region office.
- Changing submitted responses when corrections were needed. The senior mission commander also was responsible for preparing a memorandum recertifying the response and resubmitting the information to the TABS Group.

Army activities in leased facilities, such as U.S. Army Test and Evaluation Command and U.S. Army Human Resources Command, were responsible for:

- Answering questions received from the TABS Group using a hardcopy format. The senior ranking official certified the responses via memorandum and forwarded the information to the TABS Group.

- Making changes to submitted responses when corrections were needed. The senior ranking official recertified corrected responses when necessary and forwarded the information to the TABS Group.

The six JCSGs (Education and Training, Headquarters and Support Activities, Industrial, Medical, Supply and Storage Activities; and Technical) were responsible for using certified data from Army installations and leased facilities, as well as certified data from the other Military Services and Defense agencies, to make recommendations to the Secretary of Defense concerning potential realignments and closures.

ACKNOWLEDGMENTS

These personnel contributed to the report: Clarence Johnson (Audit Manager), Oscar Pinckney and Lawrence Wickens (Auditors-in-Charge), Kathleen Anshant (Editor), and Andrea Beck, Angelika Bryant, James Davis, Richard Gladhill, Philip Hart, Steven Hite, Donna Horvath, and David Krieg (Auditors)

We are sending copies of this report to the:

Assistant Secretary of the Army (Installations and Environment)
Comptroller General, U.S. Government Accountability Office
Inspector General, DOD
Auditor General, Air Force Audit Agency
Auditor General, Naval Audit Service

ACTIVITIES INCLUDED IN THE AUDIT

Reports on Audits of Tools	Audit Report Number	Date
Review of Online Data Collection Tool: Process Controls	A-2004-0184-IMT	20 Feb 04
Audit of the Military Value Analyzer Model	A-2004-0308-IMT	20 May 04
Audit of the Optimal Stationing of Army Forces Model	A-2004-0309-IMT	20 May 04
Cost of Base Realignment Actions (COBRA) Model	A-2004-0544-IMT	30 Sep 04
Reports on Validation of Capacity Data	Audit Report Number	Date
Headquarters, U.S. Army Test and Evaluation Command	A-2004-0360-IMT	28 Jun 04
Schofield Barracks	A-2004-0366-IMT	29 Jun 04
Fort McCoy	A-2004-0376-IMT	29 Jun 04
Aberdeen Proving Ground	A-2004-0377-IMT	29 Jun 04
Fort Shafter	A-2004-0379-IMT	29 Jun 04
Tripler Army Medical Center	A-2004-0380-IMT	29 Jun 04
Tobyhanna Army Depot	A-2004-0381-IMT	30 Jun 04
Corpus Christi Army Depot	A-2004-0383-IMT	30 Jun 04
Picatinny Arsenal	A-2004-0384-IMT	30 Jun 04
Fort Drum	A-2004-0385-IMT	30 Jun 04
Detroit Arsenal	A-2004-0386-IMT	30 Jun 04
Fort Eustis	A-2004-0391-IMT	12 Jul 04
Fort Gordon	A-2004-0392-IMT	12 Jul 04
Fort Campbell	A-2004-0393-IMT	12 Jul 04
Fort Lee	A-2004-0396-IMT	13 Jul 04
Fort Bragg	A-2004-0397-IMT	13 Jul 04
Blue Grass Army Depot	A-2004-0398-IMT	13 Jul 04
Fort Stewart/Hunter Army Airfield	A-2004-0399-IMT	13 Jul 04
Lima Army Tank Plant	A-2004-0402-IMT	15 Jul 04
Redstone Arsenal	A-2004-0404-IMT	16 Jul 04
McAlester Army Ammunition Plant	A-2004-0405-IMT	19 Jul 04
Red River Army Depot	A-2004-0406-IMT	19 Jul 04
Fort Hood	A-2004-0407-IMT	20 Jul 04
Anniston Army Depot	A-2004-0411-IMT	20 Jul 04
Headquarters, Human Resources Center	A-2004-0412-IMT	20 Jul 04
Fort Lewis	A-2004-0413-IMT	20 Jul 04
Fort Huachuca	A-2004-0415-IMT	20 Jul 04
Radford Army Ammunition Plant	A-2004-0418-IMT	21 Jul 04
Fort Rucker	A-2004-0419-IMT	23 Jul 04
Fort Benning	A-2004-0420-IMT	23 Jul 04
Fort Sam Houston	A-2004-0421-IMT	22 Jul 04
Fort Bliss	A-2004-0422-IMT	26 Jul 04
Fort Belvoir	A-2004-0425-IMT	27 Jul 04
Medical Joint Cross-Service Group	A-2004-0441-IMT	5 Aug 04

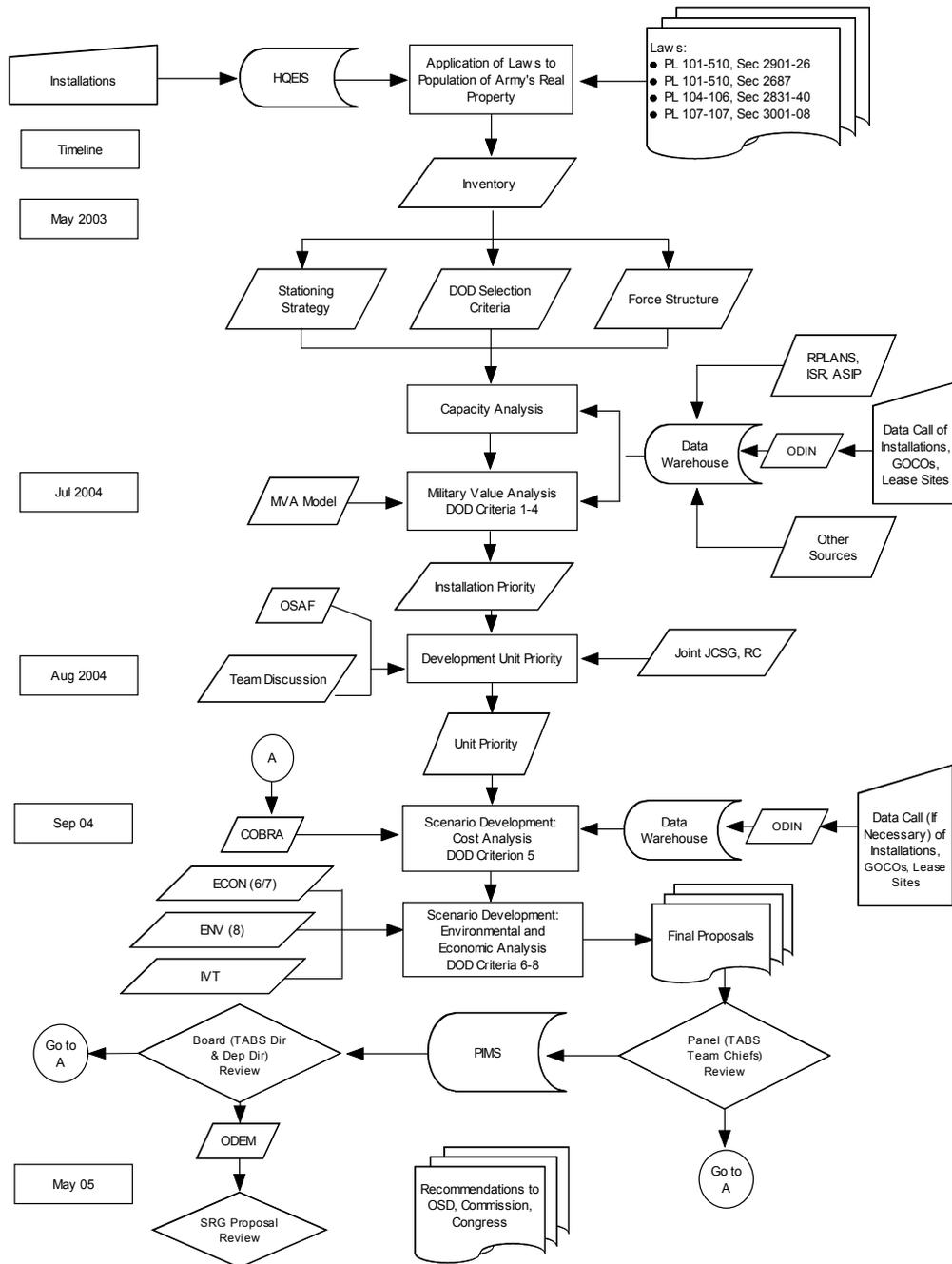
Reports on Validation of Capacity Data	Audit Report Number	Date
Supply and Storage Activity Joint Cross-Service Group	A-2004-0453-IMT	16 Aug 04
Education and Training Joint Cross-Service Group	A-2004-0456-IMT	17 Aug 04
Industrial Joint Cross-Service Group	A-2004-0459-IMT	24 Aug 04
Technical Joint Cross-Service Group	A-2004-0476-IMT	30 Aug 04
Headquarters and Support Activities Joint Cross-Service Group	A-2004-0484-IMT	2 Sep 04
Army Capacity Data	A-2005-0056-ALT	30 Nov 04

Reports on Validation of Military Value Data	Audit Report Number	Date
Radford Army Ammunition Plant	A-2004-0475-IMT	30 Aug 04
Tobyhanna Army Depot	A-2004-0509-IMT	14 Sep 04
Army Research Office - Lease	A-2004-0521-IMT	23 Sep 04
Lone Star Army Ammunition Plant	A-2004-0522-IMT	24 Sep 04
McAlester Army Ammunition Plant	A-2004-0524-IMT	27 Sep 04
Fort Eustis	A-2004-0525-IMT	27 Sep 04
Fort Campbell	A-2004-0536-IMT	29 Sep 04
Fort Stewart/Hunter Army Airfield	A-2004-0537-IMT	29 Sep 04
Fort Hood	A-2004-0539-IMT	29 Sep 04
Fort Huachuca	A-2004-0542-IMT	30 Sep 04
Fort Lee	A-2004-0543-IMT	30 Sep 04
Anniston Army Depot	A-2005-0008-ALT	5 Oct 04
Corpus Christi Army Depot	A-2005-0010-ALT	5 Oct 04
Aberdeen Proving Ground	A-2005-0011-ALT	5 Oct 04
Redstone Arsenal	A-2005-0013-ALT	5 Oct 04
Fort Belvoir	A-2005-0014-ALT	7 Oct 04
Fort Sam Houston	A-2005-0021-ALT	13 Oct 04
Fort Lewis	A-2005-0023-ALT	13 Oct 04
Fort Rucker	A-2005-0022-ALT	14 Oct 04
Army Military Value Data	A-2005-0083-ALT	21 Dec 04

Other Report*	Audit Report Number	Date
Validation of Army Responses for Joint Cross-Service Group Questions	A-2005-0169-ALT	22 Apr 05

* In February 2005 the Inspector General, DOD asked us to validate additional Army data that the six JCSGs requested for BRAC 2005 analyses. The JCSGs request the data from December 2004 through March 2005, and we validated a sample of the data from February through April 2005.

FLOWCHART OF THE ARMY BASING STUDY 2005 PROCESS



VERBATIM COMMENTS BY COMMAND

REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
 OFFICE OF THE DEPUTY ASSISTANT SECRETARY OF THE ARMY
 (INFRASTRUCTURE ANALYSIS)
 1400 KEY BLVD
 ARLINGTON, VA 22209

SAIE-IA

19 April 2005

MEMORANDUM FOR Office of the Deputy Auditor General, Acquisition and Logistics
 Audits, 3101 Park Center Drive, Alexandria, VA 22303-1596

SUBJECT: Draft Audit of The Army Basing Study 2005 Process

1. Reference: Audit Report A-2005-0164-ALT, The Army Basing Study 2005 Process, April 2005.
2. We concur with the audit report in its entirety and consider the report to be accurate and factual.
3. POC for capacity data is Mr. Larry Wright. He can be reached at larry.wright@hqda.army.mil, or by telephone (703) 696-9588, DSN 426-9588.


 Craig E. College
 Deputy Assistant Secretary of the Army
 Infrastructure Analysis

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