

United States General Accounting Office Washington, D.C. 20548

National Security and International Affairs Division

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The Honorable Colin McMillan Assistant Secretary of Defense (Production and Logistics)

Dear Mr. McMillan:

I am writing to express support for the Department of Defense's efforts to improve the Cost of Base Realignment Action (COBRA) model used in the base realignment and closure cost-estimating process. The enhancements being considered by the Department should improve the process in the future. However, we believe that the process can be improved even further.

First, we believe that cost and savings criteria should be a major consideration when the Department evaluates industrial activities such as maintenance depots. Second, the Cobra model can be improved by: (1) basing its standard factors on the most recent base closure experience and differentiating between facility type and region, (2) capturing all government costs, (3) fully documenting the model and independently verifying its programming and algorithms and (4) modifying it to handle simultaneous realignment of multiple organizations. Finally, we believe that oversight of the cost-estimating process can be strengthened. Our observations and suggestions are based on our recent survey of DOD maintenance depot capacity issues and our prior reports on the 1988 and 1991 base closure rounds.

## COST AND SAVINGS CRITERIA FOR INDUSTRIAL ACTIVITIES

In considering military industrial activities for closure or realignment in the upcoming rounds, we believe that cost and savings criteria should be given more emphasis. In

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<sup>&</sup>lt;sup>1</sup>Military Bases: An Analysis of the Commission's Realignment and Closure Recommendations (GAO/NSIAD 90-42, Nov. 29, 1990) and Military Bases: Observations on the Analyses Supporting Proposed Closures and Realignments (GAO/NSIAD 91-224, May 15, 1991).

1988 and 1991, DOD developed criteria that emphasized military value. Cost and savings estimates were used only to ensure that closure decisions would lead to savings and provided a means to estimate closure costs.

Ranking operational bases according to their military value makes sense. However, industrial activities such as laboratories and maintenance depots are less likely to have military value differences that are not captured in cost differentials, such as transportation costs. We believe that for these activities, cost and savings estimates should carry more weight.

## CHANGES TO COBRA MODEL AND USER REQUIREMENTS

Our 1991 report to the Base Closure and Realignment Commission and Congress noted that the COBRA model used in the 1991 round had limitations. Users experienced difficulties entering data into the model, model assumptions were not always realistic, and some government costs were ignored. We believe that the credibility of the 1993 base realignment and closure recommendations can be enhanced by making several improvements.

First, the COBRA model's standard factors should be based on DOD's most recent base closure experience. model relies primarily on standard cost factors to calculate construction, moving, personnel, and overhead costs and savings. The 1991 closure round used information from the closure of Pease Air Force Base to establish some of the factors. As DOD gains experience with closures and realignments during each round, the standard factors should be updated to reflect that experience. Additionally, these factors are based on operational facilities and may not be relevant for industrial activities. During our recent survey of maintenance depot capacity issues, depot personnel challenged COBRA's applicability to industrial activities because the model does not account for cost and savings factors unique to depots (for example, economy of scale costs and savings due to changes in workload volume and geographic differences in wage rates).

Second, the COBRA model should compute all government costs that accrue as a result of base closures and realignments and DOD should forward these costs to the Base Closure Commission. In 1988, the Commission excluded costs of the Department of Interior, Medicare costs, and the costs of economic adjustment and assistance because they are not costs to DOD. In 1991, although COBRA model calculations included unemployment compensation costs, and in some instances Homeowners Assistance Program costs, other

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government costs still were ignored. A reasonable approach would be for the COBRA model to calculate cost, savings, and payback for DOD and then separately calculate the same for the federal government. Having both calculations would provide a more complete picture of the fiscal impact of base closures and realignments.

Third, the COBRA model documentation needs to be updated and available to service personnel who should be trained in using the model. Each service analyst should be cognizant of the model's algorithms so that the COBRA model is not treated as a "black box" program. Also, to ensure the integrity of the cost and savings estimates, the model's programming and algorithms should be independently verified.

Finally, as noted by the Institute for Defense Analysis, the model needs to be modified so it can handle simultaneous realignment of multiple organizations. Currently, the model treats each realignment as separate and independent. Summing the parts of a multiple installation realignment does not necessarily give an accurate estimate of realignment costs.

## OVERSIGHT OF THE PROCESS

We believe that DOD should strengthen its oversight of the cost-estimating process to ensure that all of the services use the same approach in making their estimates. For the 1991 round, the services used different fiscal year baselines, did not always use constant fiscal year data, and did not consistently consider DOD costs such as the Homeowners Assistance Program and the possible inclusion of land sale revenues in payback calculations. These problems could be avoided in future rounds with additional OSD oversight and coordination among the services. Also, the services should clearly identify input data used in the model, and it would be helpful if the model printouts identified the source of all input data. This would assist DOD in exercising its oversight and improve the Commission's understanding of the model's input data.

We encourage you to incorporate our suggestions and to monitor the efforts of the interservice group, led by the Army, to enhance the COBRA model. We believe that timely

<sup>&</sup>lt;sup>2</sup>Costs and Cost Savings Due to Laboratory Realignments, IDA Paper P-2645, Oct. 1991.

implementation of our suggestions and the enhancements already planned will make the 1993 base closure and realignment process more effective.

Sincerely yours,

Donna M. Heivilin

Director, Logistics Issues