

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

National Security and International Affairs Division

B-275915

January 13, 1997

The Honorable William J. Perry The Secretary of Defense

Dear Mr. Secretary:

As part of our ongoing review of the C-17 Airlifter's performance in the Bosnia deployment, we analyzed data in the Air Mobility Command's (AMC) Military Airlift Integrated Report System (MAIRS) and the AMC History System (AHS). Our preliminary findings indicate that these systems contain significant quantities of inaccurate and unreliable data. Consequently, we are concerned that this could undermine the Department of Defense's (DOD) ability to (1) develop appropriate airlift billings; (2) make fully informed command and control decisions; (3) develop plans for future operations based on empirical information; and (4) develop reasonable budget estimates. AMC representatives and contractors acknowledge the problems with the data in the systems. AMC hired a contractor to resolve these problems. However, no effort is being made to enhance the overall reliability of the systems.

The purpose of this letter is to summarize our preliminary findings and elicit your views on the extent and consequences of the problems with these systems and on the actions you have taken, or plan to take, regarding the overall reliability of the MAIRS and AHS. To that end, we are asking that you or your designee respond to the questions at the end of this letter within 30 days of its date.

### RELIABILITY CONCERNS ACKNOWLEDGED BY AMC BUT NOT RESOLVED

On several occasions during the course of our review, we requested access to AMC information and/or data that substantiates AMC's characterizations regarding the use of the C-17 aircraft in support of the Bosnia deployment. In response, AMC provided data from a number of its information systems, including AHS and MAIRS. (The AHS is an on-line repository for up to 12 years of on-line history on both airlift and tanker missions.) However, representatives of AMC and of outside contractors hired by AMC told us that data derived from these systems are not reliable. Some suggested that personnel completing forms or adding data to the system are not held accountable for the accuracy of their input. Others said that some data were never put in the system. And still others suggested that a lack of system edits and

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an improperly configured command and control work station contributed to data inaccuracies.

AMC is aware that AHS data is unreliable and incomplete and has taken steps to obtain the missing data it needs for various purposes. It has continued to maintain the MAIRS, which was slated to be eliminated more than a year ago, as an alternate source of data. It has engaged at least two outside contractors to compare data from AHS to MAIRS in an attempt to create a single source of the most complete airlift data. However, neither AMC nor the contractors could state whether the alternate sources of data were any more reliable than AHS. Furthermore, contractor representatives we spoke to said that there is no single comprehensive source of airlift data, either in hard copy or electronic format. As a result, when a data element cannot be found in any of the systems, the contractor calls AMC staff and together they attempt to determine what that data element "should be."

We asked AMC for reliability assessments of these data systems, but AMC has neither provided us with them nor acknowledged whether any such reliability assessments have been made. Without adequate reliability assessments, DOD has no assurance that the output from these systems is sound.

## RELIABILITY AND ACCURACY OF AIRLIFT INFORMATION ARE QUESTIONABLE

Our analysis of AHS revealed a number of records containing questionable information. We obtained 5,000 AHS records representing 5,000 airlift sorties flown in support of Operation Joint Endeavor during December 1995 through February 1996. Of those 5,000 records, 438 records indicate that airlift aircraft flew missions into Bosnia and/or Hungary during the deployment period but carried no cargo or passengers, 57 indicate that aircraft took off but never landed, and 11 indicate sorties that had negative flying hour lengths. While our analysis does not represent a complete reliability assessment, it does corroborate the comments made by several AMC and contractors regarding the accuracy and reliability of airlift data.

# UNRELIABLE AND INACCURATE AIRLIFT DATA RAISE QUESTIONS ABOUT OTHER DEFENSE INFORMATION MANAGEMENT SYSTEMS

Data in AHS comes from the Global Decision Support System (GDSS), which is the worldwide command and control system for strategic airlift and air refueling during peacetime, contingencies, and war. We have not specifically reviewed the GDSS system, but are concerned that the data in this system may also be unreliable. This could affect numerous other activities. For example, GDSS data are intended to be used for controlling and coordinating all mission movements and reporting their current status during execution to command and control agencies and all affected en route locations for each mission. In addition, AMC has used GDSS data for airlift billing.

GDSS will be the airlift information portion of the Global Transportation Network (GTN). GTN is intended to provide transportation users and planners throughout DOD with detailed information about the status of current operations and historical information that can be used to plan future operations. Ultimately, GTN data is intended to interface with the Global Command and Control System, which is intended to support the Joint Chiefs of Staff and the commanders in chief in managing all military assets.

### Questions

We are asking that you respond to the following questions:

- 1. What, from your perspective, are the consequences of using inaccurate and unreliable data on airlift operations?
- 2. Have specific studies been done to assess the impact of inaccurate and incomplete data on the accuracy of military airlift service billings, the basis for command and control decisions affecting the need for airlift aircraft, and the justification for operational and budget decisions relative to military airlift?
- 3. What actions have you taken or do you plan to take to remedy these concerns?

We are providing copies of this letter to congressional committees of jurisdiction, the Secretary of the Air Force, and the Director of the Office of Management and Budget. Your response to our inquiry will be given the same distribution. This letter and your response will be provided to others upon request. If you have any questions, please contact me or William C. Meredith, Assistant Director, at (202) 512-5140.

Sincerely yours,

Mark E. Gebicke

Director, Military Operations and Capabilities Issues

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