



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

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NATIONAL SECURITY AND  
INTERNATIONAL AFFAIRS DIVISION

September 26, 1985

B-210041

The Honorable Wayne Grant  
Acting Assistant Secretary of the Army  
(Financial Management)

Dear Mr. Grant:

Subject: Status of Efforts to Estimate and Budget  
for Army Weapon System Sustainment Costs  
(GAO/NSIAD-85-157)

We have evaluated Army efforts to improve the accuracy and use of sustainment cost estimates in weapon system budgeting. Sustainment costs are one aspect of a weapon system's life cycle costs. They are the costs incurred to sustain a weapon system throughout its useful life. It is important that the Army plan and budget for the large resource outlays necessary to sustain the weapon systems.

The Army does not have a good data base of historical weapon system sustainment costs to use as a basis in preparing budget estimates. Also, the program manager's cost estimates often differ substantially from the budget estimates. The Army has initiated programs which, we believe, have potential to improve the accuracy of and more directly link weapon system cost estimates and congressional budget submissions.

IMPORTANCE OF SUSTAINMENT COST ESTIMATES

Sustainment costs are the sum of all weapon system costs resulting from the operation, maintenance, and support over the life of the system. Although sustainment costs are difficult to estimate, they are an important planning tool for Army management. Better estimating procedures will allow the Army to more accurately identify the future budget impact of its current procurement decisions, will help the Congress in deciding on budget requests for new system support dollars, and will provide a better basis for deciding between various weapon systems with similar capabilities.

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IMPROVING SUSTAINMENT COST ESTIMATING AND BUDGETING

Two important elements needed to improve the accuracy and usefulness of the Army's cost estimates and program and budget documents are a good data base of historical weapon systems sustainment costs and standard cost elements and definitions.

The Army has historically collected costs by functions (e.g., training) or organizational units (e.g., Army divisions) rather than by individual weapon systems. It is appropriate that the Army use management information systems that are aligned with the way it operates, by organization and function. However, it is also important that data be collected by weapon system so managers can see what weapon systems cost to operate and maintain and can then better predict what those costs will be in the future. Also, historical cost data on weapons already deployed can often be useful in making estimates on future systems.

There are several ongoing Army efforts to collect cost data on weapon systems. Each one uses a different method to collect and estimate sustainment costs. For example, the Operating and Support Cost Management Information System (O&SCMIS) tries to collect sustainment costs from existing data sources and then allocate them to specific weapon systems. Another system, called Sample Data Collection (SDC), uses sampling to collect actual consumption data. Further, the U.S. Army Forces Command (FORSCOM) has its own system for collecting and estimating weapon system sustainment costs from its subordinate commands, which includes cost factors provided by the Army Materiel Command and the subordinate commands' experience in operating the systems.

Despite these cost data collection efforts, the Army still lacks a solid basis for budgeting sustainment costs because of the different results each effort produces. For example, O&SCMIS reported that petroleum, oil, and lubricant costs would be \$178 per hour for a particular helicopter. FORSCOM cost factors showed the same helicopter would cost \$128 per hour, and SDC showed the cost would be \$111 per hour.

In addition, the sustainment cost estimate prepared by the weapon system program manager generally does not agree with the budget analyst's estimate for the planning, programming, and budgeting process. Sustainment costs for one particular weapon system in fiscal year 1990 were estimated to be \$65 million for programming and budgeting purposes, but the program manager's cost estimate for that year was \$146 million. This happens because the two estimates are prepared by individuals with different disciplines, at different times, using different methodologies. For example, the spare parts requirement for one

estimate may be based on an engineer's usage factor developed from test data, and the other may be based on sample data from system users located where the system is operating. One estimate may have been prepared this year for the budget cycle, while the other may have been done several years ago at the program's last major decision milestone.

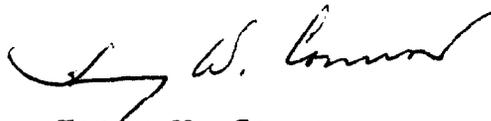
In February 1985, the Army created the Program Resources Methodology Division (PRMD) in the Office of the Comptroller to address these problems. PRMD is to develop a consolidated sustainment costing methodology and integrate it into the budget process. This effort is still in the early stages, and we believe it is an important initiative.

PRMD is implementing resource management initiatives intended to make project office cost estimates and budget estimates consistent. These initiatives include reformatting the life cycle cost estimate and more clearly defining cost elements for both the life cycle cost estimate, which is prepared by the Project Manager, and the budget estimate, prepared by the Director of the Army Budget, so the two will be comparable and the Army will have a single cost position. Also, PRMD is requiring that the project office update cost estimates at least annually rather than only at major milestones and that both cost estimators and budget estimators use the same historical cost data. In addition, three times each year, a comparative analysis will be done of the cost estimate and the budget estimate for each major weapon system. Any differences in the two estimates will be identified and explained.

The Army initiatives discussed in this letter offer the potential for better financial management by improving cost estimates and linking them to the budget process. These proposed improvements will require a long-term sustained effort to develop and, therefore, will need the continued top management support they are now receiving.

We want to acknowledge the cooperation we received on this review and would appreciate your views on the matters discussed in this report.

Sincerely yours,



Henry W. Connor  
Senior Associate Director