COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

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The Honorable Les Aspin
House of Representatives

Dear Mr. Aspin:

Your letter of October 2, 1973, asked us to examine the cost growth on the Department of the Navy's contract with the Newport News Shipbuilding and Dry Dock Company, Newport News, Virginia, for the Nimitz and Eisenhower aircraft carriers (CVANs 68 and 69). This cost growth, appearing in the Selected Acquisition Report (SAR), was projected at $56 million. You noted that this amount included a $28 million increase in overhead and a $5 million increase related to "other variables"; you specifically asked us to determine (1) what items were considered overhead, (2) what caused the overhead increase, (3) whether charging this contract with increased overhead was justified, and (4) what the other variables were and whether they too were a proper charge to the contract.

A Navy audit, late in 1973, projected a cost growth of $75.2 million at March 31, 1973, of which $64.1 million was overhead. As agreed with your office, we are addressing the $75.2 million cost growth rather than the $56 million figure cited above.

It should also be noted that the contractor, in its September 1973 quarterly report to the project manager, projected a cost growth (before adjustment of the incentive fee) of about $40 million greater than that projected by the Navy auditors. This difference is largely the result of (1) differences in the method used to project direct labor, including applicable overhead, accounting for $29 million, (2) overhead charges which the Navy anticipated would be disallowed in subsequent Government audits, accounting for another $2 million, and (3) differences in projected material cost, accounting for $9 million.

In view of the considerable audit work done by both the Defense Contract Audit Agency and the Navy in each of

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the past 3 years, we used the contractor's records and audit workpapers in making our review. In addition, we discussed cost projections, contractor data, and other pertinent matters with the audit teams and held discussions with officials of both the Navy Project Office and the contractor.

We found that the increased charges represent valid costs incurred by the contractor and were allocated to the contract in accordance with accounting practices approved by the Government a number of years ago.

The contractor's overhead costs increased from 1970 through 1972 primarily because of an increase in (1) the number of indirect employees, (2) employer contributions towards personnel-related costs, and (3) costs incurred for training new employees. This also caused an upward revision in the overhead rate projected for the balance of the contract. The increase projected for "other variables" consisted primarily of direct labor costs.

A substantial portion of the increase in indirect labor costs was due to contractor attempts to improve management controls in the shipyard. Such expenditures, if properly applied, could lead to reduced direct costs, but it is difficult, if not impossible, to evaluate how effective those measures were.

BACKGOUND

On September 14, 1970, the Navy and the contractor agreed on a fixed-price incentive contract calling for construction of the Nimitz and Eisenhower vessels with an option for construction of a third vessel, the CVN 70. The contract provided for a two-ship target cost of $570.0 million, a target profit of $68.4 million (12 percent of target cost), for a target price of $638.4 million. The contract ceiling price is $760.0 million, or $121.6 million (approximately 19 percent) above the target price. Supplemental agreements to the contract provided for additional payments to cover escalation.

As of September 30, 1973, the SAR showed the Nimitz to be 94-percent complete and the Eisenhower 42-percent complete. At this date the contractor's quarterly cost report projected a final cost (excluding escalation) of $687 million, or $117 million higher than the target cost.

So long as final contract costs are estimated to fall between the contract target price ($570 million) and the contract ceiling price ($760 million), the Government and the contractor share in absorbing the increased costs--the contractor's share coming from profits that would have been earne if target costs had not been exceeded. The rate of sharing th increased costs depends on the extent of increase. For exampl for the portion of final cost exceeding the target cost by 5 percent, 95 percent of the increase will be paid by the Government, 5 percent by the contractor. The sharing ratio is 90 to 10 for actual costs exceeding the target cost by 5 to 15 percent. For the portion of the final cost exceeding the target cost by more than 15 percent, the contractor will bear 15 percent of the excess until costs plus the reduced profit equal the ceiling price. From that point on, the contractor bears all the cost. On the basis of current estimates of the final contract costs, the contractor will lose $6.8 million of the target profit because of the cost increases.

ITEMS INCLUDED IN OVERHEAD

At the Newport News shipyard overhead includes all costs other than direct labor and direct material. The principal item is indirect labor, which includes supervisory, clerical, and support personnel. It also includes the salaries of direc employees during periods they are undergoing training. Other overhead items are personnel-related costs (old age benefits payments, workmen's compensation, and unemployment compensation), indirect material, utilities, depreciation, and other fixed charges.

Overhead is allocated to each contract on the basis of direct labor costs charged to the contract.

CAUSES OF OVERHEAD INCREASE

When the original contract estimate was made in 1970, actual shipyard overhead and direct labor costs for 1969 were used in establishing the overhead rate projected for the duration of the contract. Since 1969, overhead cost at the shipyard has increased, particularly in the areas of indirect labor and personnel-related items. Also, the amount for direct labor incurred to date and projected for the balance of the contract has increased since the original estimate was made. This increased the percentage of overhead allocable to the CVAN contract.

Increase in labor force

In 1971, the contractor began to increase its total labor force as shipyard work rose. By 1972 the labor force stood at about 25,700--an increase of about 6,500 since 1970. This increased employment trend continued through early 1973. Indirect labor cost, which had been rising progressively since 1969, increased at a rate faster than direct labor cost, causing the overhead rate to increase each year. Increases in personnel-related costs, including employer contributions on behalf of the employees, and the cost of training new employees also increased the overhead rate. The overhead rate projected for the contract by the Navy in 1973 was 18 percentage points higher than the rate it had projected in 1970.

New departments established to improve management

The contractor explained that indirect labor rose because a number of departments and groups intended to improve shipyard management were established between 1969 and 1972. Four such groups specifically identified by contractor officers were Progress Analysis, Manpower Planning, Material Budgeting, and Cost Schedule Control.

According to these officials, the groups and departments were organized in response to reviews and observations by Navy officials who believed that the contractor lacked an adequate management overview of some activities. In some instances, the new organizations achieved the desired results. In others, the contractor found that their efforts were not cost effective, and these departments or groups have since been deemphasized and reorganized with reduced strengths. In all instances, the new groups or departments required increasing the number of indirect employees.

Navy officials agreed that they stressed the need for good management practices at Newport News and that this undoubtedly required establishing or expanding departments or groups concerned with improving shipyard management. However, they did not consider themselves responsible for the increase in personnel because the shipyard also recognized that controls were lacking and that the need for better management dictated the increase.

If effectively applied, the attempts to improve management could significantly reduce direct costs. However, we have no way of determining to what extent these expenditures for indirect labor led to reduced direct costs on the CVAN contract.

Other factors increasing overhead

Many of the new employees hired in 1971 and 1972 were unskilled in shipyard work. The cost of training, therefore, increased by 395 percent in that period.

Since the time the contract was awarded, the contractor's other personnel-related costs have increased about 72 percent. The increase was caused by the payment of higher employees' benefits and by increases in the number of employees for whom the employer made contributions towards old age benefits, unemployment insurance, workmen's compensation, etc.

JUSTIFICATION OF OVERHEAD CHARGES

The overhead costs were charged to the contract in a manner consistent with the contractor's past practice of charging overhead to all its contracts. The Defense Contract Audit Agency has audited the overhead charges on a continuing basis and has not taken any exception to the method used to allocate overhead.

Both the Navy and the contractor have demonstrated their concern about rising costs on this and other ship contracts--the Navy due to the necessity of justifying increased program costs and the contractor due to shrinking profits and potential losses. Therefore, in 1973, the contractor undertook a "belt-tightening" program to reduce costs, particularly in the controllable overhead cost area.

This program has affected all departments but has had an impact particularly on some of the management groups and positions created between 1969 and 1972 to achieve better management control. For example, the contractor has reported that the Cost Schedule Control group, once comprising 40 people, is currently functioning with 6.

According to the contractor's quarterly cost report to the Navy, by September 30, 1973, the projected total costs for the two carriers had decreased by $4.8 million from the estimate made at March 31, 1973. Contractor officials said they had reduced the ratio of indirect employees to direct employees but would not be able to bring the ratio down to its 1969 level because of the departments and employees added to comply with Navy requirements.

OTHER VARIABLES INCLUDED IN COST GROWTH

Included in the Navy's projected cost growth was $14.5 million for direct labor and a small amount for materials, both of which were labeled in the SAR as "other variables."

With the increase in employment throughout the shipyard the contractor encountered a decrease in productivity which resulted in an increase in the estimated hours to complete the contract. The Navy attributed the productivity decrease to technical problems, inexperienced labor, a heavy turnover of employees in 1972, and increased absenteeism. Contractor officials agreed that these had had an effect, but they also believed that stricter standards required by the Navy in matters such as fabricating, welding, and inspecting were partly accountable for the longer time needed to complete some tasks in 1972 when compared with time to complete similar tasks in earlier years.

In accordance with your wishes, we have not followed our usual policy of obtaining advance review and comments by the Navy and the contractor. Also, as agreed with your office, we are furnishing copies of this report today to the Chairmen of the Armed Services and Appropriations Committees of the Senate and the House of Representatives.

We do not plan to distribute this report further unless copies are specifically requested and then only after you agree or publicly announce its contents. If we can be of further assistance, please let us know.

Sincerely yours,

Elmer B. Staats

Comptroller General
of the United States