





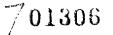
# Assessment Of Army Should-Cost Studies B-159896

Department of the Army

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# UNITED STATES GENERAL ACCOUNTING OFFICE

\*0SD Case #\_\_\_\_\_; OCT. 30, 1972





UNITED STATES GENERAL ACCOUNTING OFFICE

WASHINGTON, D.C. 20548

PROCUREMENT AND SYSTEMS ACQUISITION DIVISION

B-159896

Dear Mr. Secretary:

This is our report on our assessment of the Army's should-cost studies. The significant contents of the report are summarized in the digest.

Our review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C 67).

Copies of this report are being sent to interested congressional committees; the Director, Office of Management and Budget; and the Secretary of the Army.

Sincerely yours,

Jutmann

Director

The Honorable The Secretary of Defense

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## ABBREVIATIONS

AMC	Army Materiel Command
DOD	Department of Defense
GAO	General Accounting Office

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GENERAL ACCOUNTING OFFICE REPORT TO THE SECRETARY OF DEFENSE

### DIGEST

#### WHY THE REVIEW WAS MADE

The use of should-cost studies is one of several actions taken to improve Department of Defense (DOD) procurement practices. A shouldcost study is a method of cost analysis made by a team of Government specialists in engineering, pricing, procurement, auditing, and management. The should-cost approach differs from the traditional approach in that it involves a more in-depth analysis of the contractor's proposal and a more extensive review of the contractor's operations to identify potential cost reductions.

These studies have been discussed in hearings before the House Committee  $\mathcal{L}^{\circ}$  $\mathcal{L}^{\circ}$  Government Operations and the  $\mathcal{H}^{\circ}$ Lon Government Operations and the  $\frac{\mu}{10}$  Although the impact of the should-Subcommittee on Priorities and Econ- $\frac{1}{10}\frac{1}{9}$  cost studies on price negotiations omy in Government, Joint Economic Committee. In hearings before the Subcommittee in December 1969, the General Accounting Office (GAO) stated that it would make follow-up reviews of DOD should-cost studies.

This report concerns the first nine studies used by the Army Materiel Command in contract negotiations. GAO's primary objectives were to examine the manner in which the should-cost studies were conducted and to identify areas in which improvements could be made to increase the studies' usefulness and the benefits derived from them. In making its assessment, GAO did not attempt to evaluate the overall conduct of contract negotiations.

ASSESSMENT OF ARMY SHOULD-COST STUDIES ( Department of the Army B-159896 \*

#### FINDINGS AND CONCLUSIONS

GAO believes the should-cost teams gave insufficient attention to ide tifying ways to improve the contra tors' efficiency and economy of op erations. Therefore, some of the benefits which GAO believes should have been obtained from these stuc ies were not obtained.

The teams made in-depth analyses c the contractors' proposals and arrived at cost estimates which were much lower than those of the contractors. In each case the Goverr ment negotiated price reductions greater than those realized on pri procurements of the same or simila equipment from the nine contractor cannot be determined for a number reasons (see pp. 8 and 9), GAO believes the studies strengthened the Army's bargaining position.

For the most part, the should-cost teams tested and evaluated the daand the rationales used by the cou tractors in developing their price proposals. Although such work is important, GAO believes the benef from the should-cost studies can | increased substantially by placing greater emphasis on analyzing the contractors' manufacturing proces and practices to identify specifiactions needed to improve efficie and economy.

For example, one team recommended

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gross reduction in the contractor's overhead costs but did not identify the specific improvements which the contractor could make to achieve the desired reductions.

The contractors often disagreed with the study findings during negotiations, and this contributed to extensive delays in negotiations. GAO believes that improving communication between the contractors and the teams during the studies can increase benefits from the studies. This would encourage greater contractor participation and better understanding of the findings and the specific actions needed to improve efficiency and to reduce costs. Further, it would provide the Government with a better opportunity to get its recommendations accepted. (See p. 20.)

GAO found little evidence that the teams had considered changing Government policies, procedures, or practices to reduce the costs of contractor operations. The Navy study of the TF-30 engine and GAO's reviews have identified areas in which such changes could reduce costs substantially. (See p. 21.)

In addition to agreeing to the contract price reductions negotiated, six of the nine contractors agreed to apply their best efforts toward attaining a number of improvement goals in areas which the should-cost teams felt had potential for improvement. (See p. 14.) For the most part, however, the studies did not identify specific actions which the contractors should take to improve the efficiency or economy of their operations.

In some cases, when contractors agreed to work toward improving their operations, the local Government representatives were not provided with copies of the should-cost reports or specific instructions on the areas to be monitored until several months after final negotiations. GAO believes these representatives should be fully aware of the teams' findings to effectively monitor the contractors' actions to improve operations. The Army has taken action to improve this matter. (See p. 22.)

Local representatives experienced difficulty in monitoring contractors' progress toward improvement goals for certain indirect expenses. These goals were expressed as percentages and, as such, were subject to change as the base costs changed, irrespective of actual improvements. GAO believes that, to monitor contractors' progress, the goals should be expressed in terms which can be readily traced during contract performance. (See p. 24.)

#### RECOMMENDATIONS OR SUGGESTIONS

To increase the benefits from future should-cost studies, the Secretary of the Army should insure that should-cost teams:

- --Place increased emphasis on analyzing the contractors' operations, to identify specific actions needed to improve efficiency and to reduce costs. (See p. 19.)
- --Make a greater effort to encourage the contractors' increased cooperation through earlier discussions of the teams' findings. (See p. 20.)
- --Give sufficient attention to identifying opportunities for savings through modifications in Government policies, procedures, and practices. (See p. 21.)

--Define improvement goals, whenever possible, in terms which will permit meaningful evaluations of contractors' progress toward the goals. (See p. 24.)

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#### CHAPTER 1

#### INTRODUCTION

Department of Defense (DOD) procurement has captured the attention and criticism of the Congress and the public because of the increasing cost of defense hardware. Many contracts are awarded on a negotiated, noncompetitive basis without the benefit of competition to insure that the prices are fair and reasonable. Therefore, the Government must analyze the contractors' proposal prices to arrive at fair and reasonable price objectives for negotiations.

#### TRADITIONAL APPROACH VERSUS SHOULD-COST APPROACH

In a negotiated, noncompetitive situation, the traditional practice in arriving at a contract price is to obtain audit and technical evaluations of the contractor's cost history and estimating rationale relating to the current proposal. The results of these evaluations are used to develop a Government negotiating objective. Negotiations are then held to arrive at agreement on the contract price. However, by using the contractor's prior cost history and estimating rationale as a basis for negotiations, the Government implicitly accepts the contractor's mode of operation, regardless of how efficient or inefficient it might be. Often the resultant price represents what hardware "will cost" instead of what it should cost to be produced, and the inefficiencies in the historical base may be perpetuated.

The Army defines "should cost" as a method of cost analysis made by the fully coordinated efforts of a team of Government specialists in engineering, pricing, auditing, procurement, and management. The analyses are used to identify uneconomical or inefficient practices in the contractor's operations and to formulate the Government's negotiation positions on the basis of the should-cost teams' estimates of what the contracts should cost to perform, assuming reasonably achievable economies and efficiencies. In addition to making the studies, the teams participate in negotiating the contract prices. The should-cost approach differs from the traditional approach to cost analysis principally in (1) the depth of the analyses and (2) the extent to which the Government challenges inefficiencies in contractors' operations. The principal objectives of should-cost analyses are (1) to facilitate the negotiation of realistic contract prices and (2) to bring about both short-range and long-range improvements in the efficiency and economy of contractors' operations.

#### SHOULD-COST STUDIES IN THE ARMY

In late 1967 DOD, concerned about the sharp cost increases for the TF-30 jet engine, directed that the Navy form a team to make an in-depth evaluation of the contractor's operations and to identify areas for cost reductions. This evaluation became known as a should-cost study. The significant results of the study demonstrated its usefulness both for lowering costs on the current contract and for identifying the potential for long-range improvements in the contractor's operations.

In a July 1969 memorandum to the Secretaries of the Army, Navy, and Air Force, the Deputy Secretary of Defense expressed his concern over problems associated with weapon system acquisitions. He suggested the use of should-cost studies as one of several actions for improving current practices. In late 1969 the Army began to develop plans for conducing should-cost reviews. Having responsibility for procurement of most of the Army's hardware, the Army Materiel Command (AMC) was assigned primary responsibility for implementing the should-cost approach.

The first Army study, conducted in March 1970, convinced the Army of the value of the should-cost approach. Since that time AMC has made a number of studies, and it plans to continue to make them.

#### CONGRESSIONAL INTEREST

The use of should-cost techniques by the General Accounting Office (GAO) and DOD has been discussed in several hearings before the Subcommittee on Priorities and Economy in Government, Joint Economic Committee. In hearings before this Subcommittee in December 1969, we stated that we would make follow-up reviews of the DOD should-cost studies.

In its report dated December 10, 1970, on policy changes in weapon system procurement, the House Committee on Government Operations made certain recommendations to DOD. One recommendation was that DOD develop a special competence in making should-cost studies. During later hearings before the Subcommittee on April 29, 1971, the Chairman of the Subcommittee on Priorities and Economy in Government expressed concern regarding the application of the should-cost approach within DOD and recommended that GAO make follow-up reviews of the DOD should-cost studies.

#### SCOPE OF OUR ASSESSMENT

This assessment covers the first nine should-cost studies used by the Army in contract negotiations. We examined the reports prepared on the nine studies and AMC regulations and directives, and we discussed the studies with AMC personnel. In addition, we selected three studies for detailed examination.

For the three studies we reviewed the study reports, analyzed the scope and methodology of the studies, reviewed price negotiation memorandums and the negotiation minutes, reviewed contractor and agency files, and interviewed contractor and agency officials who were involved in the studies and in ensuing negotiations.

Our purpose was not to review and evaluate the overall conduct and success of the price negotiation process. Although the should-cost studies play an important part in negotiations, other factors, such as those listed below, can affect the success achieved during negotiations.

- 1. The contractor's desire for the work.
- 2. Urgency of the Government's need for the item.
- 3. Potential for follow-on contracts.
- 4. Type of contract to be negotiated and related risk to the contractor.
- 5. Willingness and capability of the contractor to take the steps necessary to reduce costs.
- 6. Competitive influences.

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- 7. Extent of hard data versus judgments to support cost estimates.
- 8. Relative ability of the negotiating parties.

#### CHAPTER 2

#### SHOULD-COST RESULTS

#### IMPACT ON NEGOTIATIONS

The impact of the should-cost studies on contract negotiations can be summarized as follows:

- --The Government and the contractor price objectives differed widely at the start of negotiations.
- --Negotiations lasted much longer than usual, and a significant portion of the differences in the initial cost positions was settled on a lump-sum basis.
- --The price reductions achieved were greater than had been experienced in past negotiations with the same contractors. However, the extent to which the should cost studies contributed to this cannot be measured.

Although no two studies were the same in areas covered, depth of review, findings, or recommendations, on the whole we believe the studies strengthened the Army's bargaining position in contract negotiations.

#### Potential price reductions identified

The nine Army should-cost studies evaluated contractors' proposals totaling \$299.2 million and, according to the Army, identified potential reductions of \$97.8 million. (See table below.)

Study	Contractors' proposals	Should-cost <u>estimates</u>	Difference		
		(millions)			
А	\$ 95.8	\$ 58.2	\$37.6		
В	44.9	33.6	11.3		
С	24 9	17.0	7.9		
D	24.1	19.4	4,7		
E	20.1	13.2	6,9		
ŀ	29.7	21.5	8.2		
G	13.5	9.1	4,4		
Н	7.5	5.2	2.3		
I	38 7	_24.2	14.5		
lotal	\$299.2	\$201.4	\$97.8		

Potential Price Reductions Identified

The potential price reductions represent the differences between the contractors' proposed prices and the estimates developed by the teams. The teams' estimates were the quantified results of eliminating from the proposed prices the effects of inaccurate, noncurrent, or incomplete factual data and of applying different judgments to contractors' data; when the teams identified a need for improved efficiency or economy, they estimated the probable effect of improvement on costs.

#### Negotiated price reductions

The price reductions realized by the Army in negotiations, based on information from the nine studies, totaled \$46.7 million as shown below.

Study	Potential price reductions	Reductions <u>achieved</u>	Percent of reductions from contractor's <u>proposal</u>
	(milli	ons)	
A B C D F G H	\$37.6 11.3 7.9 4.7 6.9 8.2 4.4 2.3	\$13.7 5.7 4.4 1.9 3.4 5.7 4.0 .9	14.3 12.7 17.7 7.9 16.9 19.2 29.6 12.0
I Total	<u>14.5</u> \$ <u>97.8</u>	_ <u>7.0</u> \$ <u>46.7</u>	<u>18.1</u> <u>15.6</u>

The Army's analysis of the reductions showed that in each case the price reduction was greater than that realized on prior procurements of essentially the same hardware from the same contractor. Our analysis of three selected studies confirmed this. For example, on three previous procurements of one of the items, the Army had negotiated an average price reduction of 7.1 percent, whereas a reduction of 12.7 percent was realized on the contract evaluated by the team. Although the Army negotiated contract price reductions greater than those on prior procurements, actual savings will not be known until work is completed and final costs on the contracts have been determined, since seven of the nine contracts were fixed-price-incentive contracts.

The Army did not realize a greater portion of the potential savings for a variety of reasons. In one case the negotiator was unable to convince the contractor of the validity of the team's estimate of direct labor hours because the Army's sample was insufficient to support the reduction. In another case the chief negotiator cited the following reasons for not realizing a greater portion of the team's potential price reductions.

- 1. Some of the team's findings were based on opinion and experience. One contractor opposed the team's opinion on how the contractor's move to a new plant would affect its operation.
- 2. Some of the team's findings could not be implemented overnight, even though they were firm and properly supported.
- 3. Contract negotiations are a two-way street involving compromise by both parties.

We could not determine the full extent of the cost reductions for each cost element because the parties concluded negotiations on a lump-sum basis. In one instance, after 44 negotiation sessions, an impasse was reached when the parties could not resolve a \$6 million difference in their respective positions; the parties concluded negotiations on a lump-sum basis with an additional reduction in costs of \$3 million.

#### BENEFITS BEYOND NEGOTIATIONS

In addition to negotiating more realistic contract prices, the teams' objective was to bring about short- and long-range improvements in the efficiency and economy of contractor operations. To this end the Army negotiated management improvement programs with six of the nine contractors. The programs included in the contracts concerned accomplishing such tasks as preparing estimating manuals or improving material control. Also, in some cases specific values were established for such areas as labor efficiency, labor hours, and indirect expenses.

Only one of the three studies reviewed in depth had specific labor efficiency, labor hour, and indirect expense rate goals. The Army estimated that, if this contractor achieved the established goals, the Government would save about \$4 million and the contractor would save about \$2 million during the life of the contract.

In this case the improvement program contained no penalties or rewards related to the goals; it provided only that the contractor make its best effort. The contractor was to report the results of the program quarterly; however, the program required no specific quantified actions that could be measured in evaluating progress toward the established goals.

Although development problems and fund restrictions made it necessary to negotiate a stretchout in production and a revision of the goals under this contract, the contractor made some progress toward most of the goals. The contractor's latest progress report indicates a favorable outlook for attaining the goals of increased labor efficiency and reduced indirect expense rates. The Army stated that as of August 1972 the contractor anticipated that final costs would not exceed the contract target costs.

In one case the team proposed several significant improvements, such as achieving a minimum of (1) 90-percent compliance with work standards, (2) 80-percent labor effectiveness, and (3) 80-percent machine efficiency. The Army did not discuss an improvement program with the contractor until final agreement was reached on a firm fixed price of \$6.9 million for production of the principal hardware and on an incentive target price of \$2.6 million for development, test, data, and test sets.

The contractor refused to accept a management improvement program incorporating the above goals because (1) the program was not a part of the request for proposal, (2) the contractor was not fully aware of the program until price negotiations were concluded, (3) the contractor believed the program would limit management flexibility, and (4) the program had no provision for recovering costs of implementation.

The contractor agreed to some procedural improvements suggested by the team; it agreed to prepare accounting, estimating, and pricing manuals in accordance with the Armed Services Procurement Regulation. Although these improvements are not likely to lower costs of current contracts, they can improve the preparation and review of price proposals for subsequent contracts.

The Army did not negotiate a management improvement program with specific goals on the third contract; however, the contractor signed memorandums of agreement concerning changes in labor-estimating practices, make-or-buy pricing policies, material control and cost accounting procedures, and allocation of tooling and engineering maintenance costs. All the memorandums of agreement related to longstanding problems which had not been resolved in past negotiations.

#### CHAPTER 3

#### COSTS OF SHOULD-COST STUDIES

We inquired into the costs of making the three studies we selected for in-depth review. The direct costs incurred by the teams ranged from \$55,500 for a 15-man Government team to \$230,228 for a 19-man Government team assisted by consultants. Our estimates of the costs of the three studies follow.

	Study		
	A	<u> </u>	С
Salaries: Team members Support assistance (professional and	\$ 91,863	\$41 <b>,</b> 300	\$ 98,743
clerical) Overtime	19,155 15,778	-	37,275 10,390
Travel, per diem, and miscellaneous	35,162	14,200	51,464
Subtotal	161,958	55,500	197,872
Consultant fees	32,064 <sup>a</sup>	<u>(b)</u>	32,356
Total cost	\$ <u>194,022</u>	\$ <u>55,500</u>	\$230,228
Period of in-plant review (weeks)	6	5	8

<sup>a</sup>Includes a \$16,535 fee for preparing documents that assessed the lessons learned and a should-cost guide.

<sup>b</sup>Not applicable.

The cost of each study includes the time and expenses of personnel to

--plan the detailed study, --perform the in-plant review, -- analyze data and prepare the negotiation objective,

--write the study report, and

--participate in contract negotiations.

We recognize that the costs shown above do not include all expenses associated with this type of study. Additional clerical and printing expenses are involved, although the exact amounts of these expenses are not readily available. Also, the contractors are expected to incur additional costs in supporting the teams while in the plants.

An additional unquantifiable cost to the Government for a should-cost study is the time lost from, and effect on, the routine work of team members when they are absent from their normal duties for extended periods.

We found that the Army had used consultants for its earlier studies but had made limited use of consultants for its later studies. The Army has established a cadre of specialists, in lieu of consultants, at the Army Research Center to assist its teams.

We found that \$16,535 of the consultant fees of \$32,064 paid by the Army for the initial should-cost study covered writing the first draft of the Army's should-cost guide and analyzing the lessons learned from the study. The remainder of the consultant fees covered the time spent assisting the team.

#### CHAPTER 4

#### OPPORTUNITIES FOR IMPROVEMENT

#### GREATER EMPHASIS ON IDENTIFYING WAYS TO IMPROVE CONTRACTOR EFFICIENCY AND ECONOMY

The three studies we reviewed had few suggestions for specific changes in the contractors' operations to improve efficiency or economy. The teams made in-depth evaluations of the contractors' proposed prices by using primarily the same techniques used in traditional preaward analyses by audit and technical personnel. We estimated that one team arrived at about 75 percent of the potential reductions by using traditional cost analysis techniques. The traditional approach places primary emphasis on reviewing contractors' records and rationales, to evaluate the contractors' cost estimates.

The most marked departure from normal cost analysis techniques was in the teams' evaluations of the contractors' proposed labor hours. One team prepared its estimate on the basis of the contractor's labor standards, although the contractor had estimated its labor hours by projecting its prior experience. Another team compared the contractor's labor standards and labor efficiency with industry norms and took a limited sample of actual operations. Almost half of the contractor's direct labor costs were questioned by the should-cost team.

The teams used, to a limited extent, accepted industrial management techniques, such as ratio delay and work sampling, for evaluating the efficiency and economy of a contractor's operations but did not use these techniques to quantify should-cost positions. When the teams made samples of actual operations, the samples were limited and not sufficient to support general reductions of costs in the sampled areas. The teams relied principally on in-depth analyses of the contractors' records and on the teams' judgments.

One team did not make a sample of actual operations because of time constraints and the contractor's involvement in labor union negotiations. We believe that the best means to challenge the efficiency of a contractor's operations is to identify the specific practices which need improvement. Our own experience indicates that the greatest potential cost reductions were identified, quantified, and agreed to by the contractors as a result of evaluations of manufacturing operations in such areas as plant layout, production control, preventive maintenance, equipment modernization, and quality assurance. For example, observations of one plant's problems in production control resulted in an improvement program which, for an investment of \$580,000, would bring about an estimated annual reduction in production costs of \$3.1 million. The contractor would achieve these savings by a reduction of 139 indirect labor positions and a reduction of about 10 percent in the direct labor force.

#### Recommendation

We recommend that the Secretary of the Army insure that future should-cost teams place increased emphasis on analyzing the contractors' operations, to identify specific actions needed to improve efficiency and to reduce costs.

#### EARLIER DISCUSSION OF FINDINGS

Our analyses of the negotiations for the three studies showed that the teams chose not to discuss specific findings with the contractors prior to negotiations for fear of jeopardizing their negotiation positions. One team questioned the contractor's standard labor hours after comparing a sample of those standards with industry norms and making limited observations of actual operations. During negotiations the contractor contended, and the negotiator agreed, that the contractor had used an accepted method of establishing standards and that the team's sampling techniques might be in error.

We believe that open and frank discussions throughout the studies will help to develop strong bargaining positions and will reduce the time required to reach agreement on contract prices.

It is unrealistic to expect the contractors to agree completely with the teams' findings. However, we believe that contractor receptivity can be improved in future studies by discussing the teams' findings and the rationales for them with the contractors prior to the start of price negotiations. This would enable the teams to isolate areas of agreement and disagreement earlier; to undertake additional work, when necessary, to deal with dissenting views of the contractors; and to refine their positions when justified by information provided by the contractors. Such discussions would also allow greater contractor participation in determining actions needed to improve their efficiency and would lead to quicker agreements on contract prices during negotiations.

#### Recommendation

We recommend that the Secretary of the Army instruct future should-cost teams to make greater efforts to encourage the contractors' increased cooperation through earlier discussions of the teams' findings.

#### IMPROVING GOVERNMENT POLICIES AND PROCEDURES

It appears that the teams gave little attention to improving Government policies and procedures which affect the cost of contractor operations.

The Navy study of the TF-30 engine, as well as our own reviews, found that improving Government procurement policies and practices imposed upon the contractors could substantially reduce costs. Following are examples of improvements we found in Government procurement policies and practices that substantially reduced costs.

- 1. Eliminating Government overseas packaging requirements for spare parts scheduled for use in the continental United States.
- 2. Reducing the number of tests required by the Government according to the quality of the products being tested and the reliability reported by the field.
- Consolidating Government procurements to allow contractors the maximum benefits from economic orders.

#### Recommendation

We recommend that the Secretary of the Army insure that should-cost teams give sufficient attention to identifying opportunities for savings through modifications in Government policies, procedures, and practices.

#### IMPROVED COORDINATION WITH LOCAL GOVERNMENT REPRESENTATIVES

Realization of the should-cost potential requires continued attention to the contractors' progress toward improvements suggested by the teams. When improvement goals were included in the contracts, the contractors agreed to submit quarterly progress reports to the procuring agencies. Our review of the three studies indicated that, although local Government audit and technical representatives were present to monitor the contractors' day-to-day operations, they were not fully aware of the study findings at two plants and had not been provided with specific instructions on the areas to be monitored at all three plants until several months after final negotiations.

The procuring agencies, with limited participation by responsible local Government representatives, formed and directed the teams. The teams analyzed the data collected ,during the in-plant reviews and formulated the final negotiation positions. As a consequence, responsible local representatives were not aware of the teams' findings or the bases for suggested improvements until after award of the contracts, when the procuring agencies gave them copies of the study reports or extracts from them.

We found that, for two of the three contracts, the local representatives had not been provided with copies of the reports until several months after final negotiations. For example, negotiations on one contract were completed on May 13, 1971, but the cognizant administrative officer did not receive a copy of the report until January 3, 1972.

In the one instance in which goals were established as specific values, procuring agency personnel initially monitored operations by visiting the contractor's plant, reviewing the contractor's reports, and preparing trend analyses for indications of achieving or not achieving a goal. About 10 months after the contract award, the procuring agency requested the resident administrative and audit offices to review and analyze the contractor's reports and to submit the analyses to the procuring agency. The resident engineer submitted the first analysis of the goals for labor hours and efficiency 6 months later, but it contained only limited information. As a result, the procuring agency issued specific directions for the resident engineer to observe (1) scrap and rework, (2) fabrication and assembly operations, and (3) test and inspection activities. These specific instructions were not issued until about 16 months after the contract was awarded.

We believe that responsible local representatives should be fully informed of the teams' findings, the recommended improvements, and any agreements made with the contractors to implement improvements. This information is necessary to effectively monitor the day-to-day progress toward the management improvement goals. We also believe information in the should-cost reports could be used by local representatives in reviewing proposals for other procurements or contract changes.

As soon as possible after final negotiations, the responsible audit and administrative officials should be provided with copies of the should-cost reports and with specific instructions concerning the areas to be monitored.

#### Agency actions

AMC signed memorandums of agreement with the Defense Contract Audit Agency in March 1971 and with the Defense Supply Agency, Contract Administration Services, in February 1972 to clarify the roles of these agencies in future should-cost studies. Under these agreements the local audit and administrative representatives will participate more fully in the studies. The responsible administrative contracting officers will also serve on the should-cost teams in an advisory capacity. The agreements recognize that administrative personnel who participate in the studies will be thoroughly familiar with areas needing improvement and therefore can more effectively monitor the contractors' actions.

#### BETTER DEFINITION OF IMPROVEMENT GOALS

The resident audit office at one location has had problems in measuring the contractor's progress toward the goals established for certain categories of indirect expenses, because of the impact on the rates of cost accounting changes or fluctuations in the base costs. The goals were expressed as percentage reductions or percentage levels to be attained at either the end of a particular year or by the end of the contract. Representatives of the procuring agency have held meetings with the resident audit staff and the contractor to arrive at a method of monitoring changes in indirect expenses. The resident auditor has suggested that the goals be expressed in absolute dollars. Although this matter had not been resolved at the end of our review, the contractor had agreed to study the relationship of fixed and variable expenses in an attempt to define goals in absolute dollars.

#### Recommendation

We recommend that the Secretary of the Army insure that should-cost teams define improvement goals, whenever possible, in terms which will permit meaningful evaluations of contractors' progress toward the goals.