United States General Accounting Office

**GAO** 

Report to the Chairman, Legislation and National Security Subcommittee, Committee on Government Operations, House of Representatives

September 1990

# CONTRACT PRICING

Implementation of Cost Estimating Regulations





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

National Security and International Affairs Division

B-241017.1

September 28, 1990

The Honorable John Conyers, Jr.
Chairman, Legislation and
National Security Subcommittee
Committee on Government Operations
House of Representatives

Dear Mr. Chairman:

As you requested, we reviewed contract auditors' and administrative contracting officers' compliance with Department of Defense (DOD) regulations for reviewing contractor estimating systems. Our objectives were to determine whether (1) DOD estimating system reviews were conducted as joint contract audit and contract administration team efforts as required, (2) estimating system reports prepared by Defense Contract Audit Agency (DCAA) personnel contained appropriate recommendations for disapproving all or parts of contractor systems as called for by the DOD regulations, and (3) DOD administrative contracting officers followed the procedures prescribed for correcting identified deficiencies.

### Results in Brief

DOD revised its procurement regulations in March 1988 to establish more stringent requirements governing contractor estimating systems, and DCAA has devoted significantly more resources to reviewing contractor cost estimating systems. Although DOD has revised its regulations, contract auditors and administrative contracting officers have not fully complied with them. For example:

- Contract administration personnel did not participate as a team member in 10 of the 16 reviews we examined even though their participation is essential in evaluating certain costs generated by contractor estimating systems and included in contract proposals.
- Only 1 of the 16 DCAA reports that we examined recommended disapproval of all or part of a contractor's system, although all 16 reports identified potentially significant deficiencies.
- Administrative contracting officers generally did not follow the regulatory process for correcting identified estimating deficiencies.

### Background

When DOD awards contracts noncompetitively, it lacks the economic safeguards normally found in the competitive marketplace and must

- contract prices because the contractors had not evaluated the subcontracts as required by procurement regulations.
- In January 1988, we reported that the prices of 17 noncompetitive DOD contracts were overstated by \$21 million because contractor labor estimates had not considered actual labor experience on prior contracts.<sup>3</sup> Rather, contractors' proposed labor estimates were based on judgment and lacked verifiable support. The actual labor cost incurred on the 17 contracts was about 22 percent below the estimates proposed by the contractors.
- In January 1988, we also reported that contractors had proposed about \$135 million (on eight noncompetitive contracts) for scrap, raw materials, engineering changes, and other items. The estimates were based on rates, percentage factors, and cost estimating relationships without verifiable data because contractors had not accounted for such costs. However, DOD contracting officers negotiated \$95 million in the contract prices.

Our prior work and hearings by the House Government Operations' Legislation and National Security Subcommittee had revealed a number of problems with DOD's oversight of contractor estimating systems: (1) estimating deficiencies remained uncorrected for long periods; (2) the elements of an acceptable estimating system were not well defined; (3) responsibility for resolving deficiencies was not clear; and (4) contract audit and administration team reviews of contractor estimating systems generally had not been conducted since the early 1970s. The March 1988 revision to DOD's regulations was designed to overcome these shortcomings.

Revised Regulations Provide for Identifying and Resolving Estimating System Deficiencies According to DOD's revised regulations, contractor estimating systems should consistently produce well-supported proposals that are acceptable to the government as a basis for negotiating fair and reasonable contract prices. To ensure that a contractor meets this criterion, the regulations require that the DCAA contract auditor lead a team effort, along with the contract administration office, to regularly review (generally every 3 years) the adequacy of each contractor's estimating system. DCAA should then document the review results in a report to the administrative contracting officer. If the review finds "significant" estimating

<sup>&</sup>lt;sup>3</sup>Contract Pricing: Defense Contractor Cost Estimating Systems (GAO/NSIAD-88-7, Jan. 5, 1988)

For 6 of the 16 DCAA estimating system reports we reviewed, DCAA and contract administration personnel had made team reviews. However, in the other 10 cases, contract administration personnel did not participate as team members in reviewing contractor estimating policies, procedures, and practices. We found essentially the same situation in our 1985 review.

System Review Reports Did Not Identify the Significance of Deficiencies or Recommend Disapproval Although DCAA has significantly increased the time it devotes to reviewing contractor estimating systems (from 37,566 hours in 1986 to 114,121 hours in 1989), its system review reports to administrative contracting officers have not fully met the requirements of the revised regulations. While all 16 estimating system reports that we reviewed identified potentially significant deficiencies, only 1 report recommended disapproval of all or a part of the contractor's estimating system as required.

When we brought this matter to the attention of the DCAA auditors responsible for conducting the estimating system reviews, they told us that, at the time they had prepared the reports, they were not aware of the regulatory requirement to recommend system disapprovals. Rather, they had followed the DCAA audit manual, which did not contain guidance on disapproval recommendations. DCAA notified its auditors of the estimating system regulations in May 1988 but did not provide guidance in its audit manual until July 1989. At that time, the manual was revised to state that deficiencies should be identified as minor or significant and that, if significant, the auditors should recommend system disapproval in whole or in part.

Administrative
Contracting Officers
Generally Did Not
Follow Procedures for
Correcting
Deficiencies

Administrative contracting officers frequently did not follow the procedures established to ensure the timely correction of identified deficiencies in contractor estimating systems. For example, administrative contracting officers had not provided 10 of the 16 reports we reviewed to the contractors for their comments. This omission short-circuited the regulatory process that is aimed at placing administrative contracting officers in positions to determine the adequacy of contractor systems. Of the 10 reports, 3 were provided to the contractors after we visited the contract administration offices.

Also, for 12 of the 16 reports, administrative contracting officers had not determined, as required by the regulations, whether (1) the estimating systems contained deficiencies that needed correction, (2) any

Please contact me at (202) 275-8400 if you or your staff have any questions concerning this report. Other major contributors to this report are listed in appendix II.

Sincerely yours,

Paul F. Math

Director, Research, Development, Acquisition,

and Procurement Issues



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## Scope and Methodology

Using Defense Federal Acquisition Regulation Supplement 215.811 and related DOD guidance on cost estimating system reviews as criteria, we reviewed 16 estimating system reports, all of which were issued after March 18, 1988, the effective date of DOD's regulations. We also analyzed related documents prepared by DCAA and contract administrators and interviewed DCAA and contract administration officials about their system review activities and actions regarding the selected reports. The 16 reports we reviewed were judgmentally selected and addressed the estimating systems of the following 16 defense contractors:

- E-Systems, Incorporated, St. Petersburg, Florida;
- General Dynamics Corporation, Groton, Connecticut;
- GTE Communication Systems Division, Needham, Massachusetts;
- GTE Strategic Systems Division, Westborough, Massachusetts;
- · Harris Corporation, Melbourne, Florida;
- Hazeltine Corporation, Greenlawn, New York;
- · Hercules, Incorporated, Clearwater, Florida;
- Honeywell, Incorporated, Clearwater, Florida;
- Raytheon Company, Equipment Division, Marlborough, Massachusetts;
- Raytheon Company, Submarine Signal Division, Portsmouth, Rhode Island:
- · Rockwell International Corporation, Duluth, Georgia;
- Lockheed Corporation, Nashua, New Hampshire;
- SCI Technology, Incorporated, Huntsville, Alabama;
- United Technologies Corporation, Hamilton Standard Aircraft Systems and System Controls and Accessories, Windsor Locks, Connecticut;
- United Technologies Corporation, Hamilton Standard Space and Sea Systems, Windsor Locks, Connecticut; and
- United Technologies Corporation, Pratt & Whitney, West Palm Beach, Florida.

We made our review between January 1989 and July 1990 in accordance with generally accepted government auditing standards.

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#### **Abbreviations**

DCAA	Defense Contract Audit Agency
DOD	Department of Defense
GAO	General Accounting Office

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deficiencies were significant enough to warrant disapproving all or a portion of the systems, or (3) any contractor-proposed corrective actions were adequate to correct the deficiencies. At the completion of our review, 11 of the 12 reports contained one or more significant deficiencies that had been uncorrected for at least 2 years.

Administrative contracting officers had followed procedures for correcting identified estimating deficiencies in 4 of the 16 reports we reviewed. As a result, two contractors had corrected the deficiencies, and two contractors had their estimating systems disapproved.

#### Conclusions

Our prior work has shown that millions of dollars could be saved if DOD identified and promptly corrected inadequate contractor estimating systems. We support DOD's emphasis on contractor estimating systems and believe the revised regulations are an important step toward negotiating fair and reasonable prices. However, our sample of 16 DCAA reports has indicated that DOD's efforts to identify and eliminate estimating system deficiencies have not been as successful as possible.

Our scope and methodology are discussed in appendix I. As requested, we did not obtain written agency comments on this report. However, we discussed its contents with DOD officials and have included their comments where appropriate.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the Secretary of Defense and the Directors of the Defense Logistics Agency and DCAA. We will also send copies to interested parties and make copies available to others upon request.

deficiencies,4 the report should recommend the disapproval of all or a portion of the estimating system.

The regulations clearly assign responsibility for determining the adequacy of contractor systems to the administrative contracting officer. The regulations also provide the following detailed sequence of actions that the administrative contracting officer should follow to ensure the timely correction of estimating system deficiencies:

- After receiving DCAA's report, the administrative contracting officer should submit a copy to the contractor and request written agreement or disagreement with the report's findings and recommendations.
- After considering the contractor's response and consulting with the DCAA auditor, the administrative contracting officer should determine whether (1) the estimating system contains deficiencies needing correction, (2) any deficiencies are significant and would result in the disapproval of all or a portion of the estimating system, or (3) any proposed corrective actions are adequate.
- The administrative contracting officer should then notify the contractor of the determination and, if appropriate, the government's intent to disapprove all or part of the system.

The auditor and administrative contracting officer are required to monitor the contractor's progress in correcting any deficiencies. If the contractor fails to make adequate progress, the administrative contracting officer must take whatever actions are necessary to ensure that the deficiencies are corrected. Such actions include reducing or suspending progress payments and recommending that potential contracts not be awarded to the contractor.

Many Estimating System Reviews Were Not Conducted as Team Efforts Contract administration personnel are expected to provide technical expertise needed to analyze such things as the accuracy and reliability of contractor estimates for manufacturing and engineering labor hours, material quantities, scrap and rework costs, and various overhead costs. The costs for such items represent a substantial portion of contractors' proposals and can total millions of dollars.

<sup>&</sup>lt;sup>4</sup>The regulations define a "significant" estimating deficiency as a shortcoming that is likely to consistently result in estimates that in total, or for a major cost element, do not constitute an acceptable basis for negotiating fair and reasonable prices.

rely largely on information produced by contractor cost estimating systems to establish contract prices. Therefore, sound estimating systems that produce reliable contract proposals are fundamental to negotiating fair and reasonable noncompetitive contract prices.

To ensure that such contract prices are fair and reasonable, DOD issued revised regulations on contractor cost estimating systems in March 1988. The regulations, issued in response to the House Committee on Government Operations' and our recommendations, require certain major contractors to establish and maintain adequate cost estimating systems and to disclose their systems to DOD.

DOD's revised regulations are contained in section 215.811 of the <u>Defense Supplement to the Federal Acquisition Regulation</u>. According to the regulations, an "estimating system" encompasses all of a contractor's policies, procedures, and practices for generating cost estimates based on available information. It includes the organizational structure; established lines of authority, duties, and responsibilities; internal controls and managerial reviews; flow of work, coordination, and communication; and estimating methods and analyses, accumulation of historical costs, and other data included in contract proposals.

### Our Past Reviews Found Problems With Estimating Systems and DOD Oversight

Estimating system deficiencies can cause inflated contract prices. In several reviews conducted between 1985 and 1988, we found a number of weaknesses in the way contractors had estimated material, labor, and other costs for noncompetitive contracts, such as the following:

- In October 1985, we reported on a review of 87 subcontracts negotiated under DOD prime contracts valued at \$785 million. We found that prime contractors had been able to negotiate subcontract prices that were \$42 million (about 5 percent) below those included in prime contract prices. The reductions resulted because contractors had not evaluated subcontracts before prime contracts were awarded, as required by DOD procurement regulations.
- In June 1987, we reported on an additional 28 subcontracts which had been negotiated into DOD prime contracts for about \$92 million.<sup>2</sup> Again, we found that prime contractors had negotiated subcontract prices that were about \$10 million (about 11 percent) below those included in prime

<sup>&</sup>lt;sup>1</sup>GAO Work at Defense Contractor Plants, statement of Frank C. Conahan before the Legislation and National Security Subcommittee, House Committee on Government Operation (Oct. 3, 1985).

<sup>&</sup>lt;sup>2</sup>Contract Pricing: Contractor Cost Estimating Systems (GAO/NSIAD-87-140, June 3, 1987).