Audit Report

OFFICE OF THE INSPECTOR GENERAL

USE OF WORK MEASUREMENT SYSTEM DATA IN NEGOTIATING WITH PRIME CONTRACTORS

Report Number 92-025 December 18, 1991

Department of Defense

The following acronyms are used in this report.

AFSC.....Air Force Systems Command
DFARS.....Defense Federal Acquisition Regulation Supplement
DPRO.....Defense Plant Representative Office
ELS.....Engineered Labor Standards
FAR.....Federal Acquisition Regulation
FMFIA.....Federal Managers Financial Integrity Act
GAO.....General Accounting Office
MIL-STD.....Military Standard
NAVAIR.....Naval Air Systems Command
PCO.....Procurement Contracting Officer
RFP.....Request for Proposal
WMS.....Work Measurement System

INSPECTOR GENERAL
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December 18, 1991

MEMORANDUM FOR DIRECTOR OF DEFENSE PROCUREMENT
ASSISTANT SECRETARY OF THE ARMY (FINANCIAL MANAGEMENT)
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT)
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)

SUBJECT: Report on the Audit of the Use of Work Measurement System Data in Negotiating with Prime Contractors (Report No. 92-025)

We are providing this final report for your information and use. Comments on a draft of this report were considered in preparing the final report.

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Therefore, we request that the Director of Defense Procurement provide final comments on Recommendations 1. and 2. by February 18, 1992.

DoD Directive 7650.3 also requires that the comments must indicate concurrence or nonconcurrence in the finding and each recommendation addressed to you. If you concur, describe the corrective actions taken or planned, the completion dates for actions already taken, and the estimated dates for completion of planned actions. If you nonconcur, you must state your specific reasons for each nonconcurrence. If appropriate, you may propose alternative methods for accomplishing desired improvements.

This report identifies no readily quantifiable monetary benefits; however, other benefits are shown in Appendix C. Recommendations are subject to resolution in accordance with DoD Directive 7650.3 in the event of nonconcurrence or failure to comment.

We appreciate the courtesies extended to the audit staff. If you have any questions on this audit, please contact Mr. James J. McHale, Program Director at (703) 614-6257 (DSN 224-6257) or Mr. Michael Perkins, Project Manager, at (703) 614-6259 (DSN 224-6259). The planned distribution of this report is listed in Appendix E.

Robert J. Lieberman
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for Auditing

cc:

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Secretary of the Air Force
Assistant Secretary of Defense (Production and Logistics)
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Office of the Inspector General, DoD

AUDIT REPORT NO. 92-025 **December 18, 1991**
(Project No. 0CD-0061)

USE OF WORK MEASUREMENT SYSTEM DATA IN NEGOTIATING WITH PRIME CONTRACTORS

EXECUTIVE SUMMARY

Introduction. A work measurement system is a compilation of techniques for setting time standards, collecting data on hours worked, and analyzing the variance between actual and standard hours. If work measurement systems are properly implemented, management uses the resulting data to evaluate productivity and to determine where improvements are needed to avoid inefficient or uneconomic production.

The use of work measurement data within DoD was incorporated through Military Standard 1567A, which was designed to improve productivity and efficiency in contractor industrial operations and to reduce weapon systems costs. Defense Federal Acquisition Regulation Supplement (DFARS) section 215.876, "Work Measurement Systems," was added in May 1989, requiring the use of the Work Measurement System (WMS) when appropriate, to provide data for use in planning, estimating cost, and monitoring contractor performance.

Objectives. The audit objectives were to determine the extent that Government procurement contracting officers (PCOs) requested, analyzed, and used contractor work measurement data in their contract cost analyses to negotiate production costs; to influence improved contractor performance and efficiency; to ensure compliance with DoD regulations; and to determine whether internal controls were in place and being followed.

Audit Results. PCOs did not request, analyze, or use WMS data to negotiate production costs, even though all contractors visited had some type of WMS in place.

Internal Controls. The audit identified a material internal control weakness. Adequate administrative procedures were not established to ensure that DFARS provisions were followed. PCOs did not use WMS data in contract cost analyses or contract price negotiations. Refer to the internal controls section in Part I, page 3 of this report.

Potential Benefits of Audit. Potential benefits would be based on future contract negotiations that use work measurement data to improve contractor performance and efficiency; therefore, we could not determine the amount of monetary benefits involved (Appendix C).

Summary of Recommendations. We recommended submittal of regulatory changes, policy emphasis, and training for acquisition managers.

Management Comments. The Director of Defense Procurement nonconcurred with Recommendations 1.a., 1.b., 1.c., 2.b., and 2.c. The Director stated that use of WMS data should not be a requirement but should be one of the tools a contracting officer has the flexibility to use in a responsible and constructive manner when negotiating a contract. The Director partially concurred with Recommendation 2.a. to instruct the Services to emphasize the benefit of WMS data in their procurement training program. However, the Director did not provide a completion date. Management comments to the draft report are summarized in Part II of this report, and the complete text of the responses is in Part IV.

Audit Response. We do not agree with the position of the Director of Defense Procurement on the recommendations with nonconcurrences and consider the management comments nonresponsive. As discussed in this report, the use of WMS data will result in DoD getting the best possible price on competitive and negotiated contracts and will help contractors become more competitive at a time when DoD acquisition funds are decreasing. The bottomline is that the use of WMS data will identify opportunities for contracting officers and contractors to save money. Currently, DoD contracting officers are not making use of this powerful tool. We request that the Director provide a completion date for Recommendation 2.a. and the final comments on the remaining recommendations by February 18, 1992.

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This report was prepared by the Contract Management Directorate, Office of the Assistant Inspector General for Auditing, DoD. Copies of the report can be obtained from the Information Officer, Audit Planning and Technical Support Directorate, (703) 693-0340.

PART I - INTRODUCTION

Background

Work measurement. Work measurement is a generic term used to refer to the setting of a time standard by a recognized industrial engineering technique, such as time study, standard data, work sampling, or predetermined motion time system.

Work measurement system. A work measurement system (WMS) is a compilation of techniques for setting time standards, collecting data on hours worked, and analyzing the variance between actual and standard hours. If work measurement systems are properly implemented, management uses the resulting data to evaluate productivity and to determine where improvements are needed to avoid inefficient or uneconomic production.

Interest in the use of WMS data has increased because of concerns that reliance on contractor historical labor costs does not provide insight into the direct labor use of contractor proposed production costs.

A WMS, integrated with the contractors' existing system for estimating production costs, would enable the contractor to generate more accurate proposed production costs by taking into account improvements in manufacturing efficiency. These improvements should result in DoD getting the best possible price on competitive and negotiated contracts and should help contractors become more competitive at a time when DoD acquisition funds are decreasing. Simply stated, a WMS should identify opportunities to save money.

The use of WMS data within DoD was incorporated through Military Standard (MIL-STD) 1567A, which was designed to improve productivity and efficiency in contractor industrial operations and to reduce weapon systems' costs. MIL-STD 1567A applies to weapon systems costing more than $100 million.

The Defense Federal Acquisition Regulation Supplement (DFARS) was changed in May 1989, to add section 215.876, "Work Measurement Systems." The change made it DoD policy to use WMS data, when appropriate, to provide data for use in planning, cost estimating, and monitoring contractor performance. DFARS section 215.876(b) states, "The contracting officer, in coordination with the Program Manager, shall include provisions in the contract to implement the program's work measurement system requirements."

DFARS section 215.876(b) also references MIL-STD 1567A as acceptable criteria for WMS provisions, but allows for the use of the contractors' existing WMS, if acceptable to the Government, and if appropriately tailored for the specific program or

contract. WMS is applicable in solicitations and resulting production contracts for major weapon systems or subsystems costing in excess of $20 million annually or with a total multiyear cost of $100 million or more.

Also, the addition of DFARS section 215.807, "Prenegotiation Objectives," requires the contracting officer to consider data resulting from the application of WMS in the development of pricing objectives for negotiations.

Objectives

The overall objectives of the audit were to determine the extent that DoD Procurement Contract Officers (PCOs) requested, analyzed, and used contractor work measurement data in their contract cost analyses to negotiate production costs and to influence improved contractor performance and efficiency; and to determine whether internal controls were in place and being followed.

Scope

Our scope was originally limited to airframe contractors. However, we expanded the scope to include any prime contractor to obtain a more representative view on the use of work measurement by Defense contractors.

Contract selections. We judgmentally selected and reviewed documentation from contract actions of $20 million or greater negotiated after May 1, 1989. Our selections were taken from the FY 1990, DD Form 350, "Individual Contracting Action Report," data base as of March 31, 1990. The data base contained 143 actions totaling $11.8 billion. We chose at least two contracts from each Service to obtain a representative view of how WMS data were used by acquisition managers in each Service. Appendix A lists the contract actions reviewed.

Documentation reviewed and locations visited. For each selected contract action, we reviewed WMS data generated by the contractor and the proposal for labor hours as well as supporting Government documents, including the request for proposal, technical evaluation, cost-price analysis, preaward audit, and pre- and post-negotiation memorandums. We reviewed the extent that engineered labor standards (ELS) and work measurement systems were used by contractors to estimate and propose contract costs. For each action, we visited the responsible DoD procurement office, the prime contractor, the Defense Plant Representatives' Office, and the cognizant Defense Contract Audit Agency field office to determine the extent that WMS data were requested, analyzed, and used to negotiate a contract price.

Use of technical staff. A WMS specialist from the Office of the Inspector General, DoD, assisted our auditors in evaluating WMS data and related reports generated at three contractor locations. A staff auditor with an industrial engineering background performed similar functions at the remaining three contractor locations.

Auditing period, locations, and standards. This economy and efficiency audit was conducted at the activities listed in Appendix D from April through September 1990. We made limited use of computerized data in performing this audit. First, we used the Individual Contracting Action Report to select contracts that met certain criteria, which were identified in the contract selection paragraph above, for inclusion in the audit. The criteria were verified during the audit. Second, the contractors provided examples of computerized data generated by each WMS, which were subject to their own annual internal review. However, we did not validate these data. Further, we did not rely on and have not made any projections based on these data. Except as noted, the audit was made in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD. Accordingly, we included such tests of internal controls as were considered necessary.

Internal Controls

We focused on the internal controls by determining whether PCOs complied with DFARS section 215.807, "Prenegotiation Objectives," as they relate to WMS. Our audit disclosed that PCOs did not use work measurement system data in contract cost analyses or contract price negotiations. This occurred because the language in DFARS sections 215.876 and 215.807 enabled subjective noncompliance by acquisition managers. Further, the DFARS, as currently written, does not require PCOs to justify the use or the lack of use of contractor WMS data in the negotiation of a contract price. The internal control weakness is addressed in the finding in Part II of the report.

The audit identified a material internal control weakness as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. DoD did not have sufficient controls to ensure that PCOs and program managers complied with existing regulations regarding the use of WMS data. All recommendations in this report, if implemented, will correct the weakness. We could not readily determine the monetary benefits to be realized by implementing the recommendations, because the benefits would be based on future contract negotiations for which WMS data are used to negotiate a contract price. Copies of the final report will be provided to the senior officials responsible for internal controls within OSD.

Prior Audit Coverage and Other Reviews

Audit coverage. The General Accounting Office (GAO) issued Report No. NSIAD-88-43BR, "Work Measurement Programs at Selected Contractor Locations" (OSD Case No. 7511), November 4, 1987. GAO found that none of the four contractors reviewed had fully complied with WMS requirements. GAO also found that three of the four contractors did not use their WMS in formulating proposal hours and that all of the contractors overreported savings resulting from their WMS.

Work measurement was also a topic in IG, DoD, audit Report No. 88-193, "Management of the Phoenix Missile Program," August 22, 1988. The audit disclosed that the procurement contracting officer (PCO) did not consider the contractor labor efficiency data in establishing a prenegotiation position. As a result, the Navy negotiated labor factors considerably higher than the industry average. The negotiated factors were estimated to have resulted in a potential excess cost of $18.1 million for 2 years of the program. The report recommended that the Navy require PCOs to analyze labor hours via the contractor work measurement system, assess the quality of the contractor work measurement system data, justify agreements to pay for the variance from the standard hours, and document the analysis in the prenegotiation memorandum. The Navy nonconcurred with the recommendations, stating that follow-on buys of the Phoenix missile would be contracted from dual sources and, thus, would not be subject to requirements for cost and pricing data.

Other reviews. In coordination with the Assistant Secretary of Defense (Production and Logistics), the IG, DoD, issued a study titled, "Work Measurement Systems and Engineered Labor Standards," October 22, 1986. The study reviewed 16 DoD contractors to determine the general effectiveness of WMS in defense contracting and production. The study disclosed that all 16 contractors had work measurement systems, and all examples of WMS usage were cost-effective. The study concluded that WMS and ELS should be used to effect cost reductions to the DoD and that the best way for contractors to identify and correct uneconomical practices in manufacturing was to use an adequate ELS-based WMS. The study concluded that to be cost-effective, contractors should use MIL-STD 1567A, but they would not use it widely unless mandated and that MIL-STD 1567A should be tailored to individual contractors. The study also concluded that PCOs had little or no training in work measurement systems, a condition that continues to exist.

The study recommended to the DoD that MIL-STD 1567A and the related program guidance be revised to provide greater compliance requirements. The OSD concurred with this recommendation. On March 1, 1989, DoD added section 215.876, "Work Measurement," to

the DFARS and revised section 215.807, "Prenegotiation Objectives." This audit determined that the DFARS revision have had little effect on increasing the use of WMS data in negotiating with contractors.

PART II - FINDING AND RECOMMENDATIONS

USE OF PRIME CONTRACTOR'S WORK MEASUREMENT SYSTEM DATA

PCOs did not request, analyze, or use WMS data to negotiate direct labor costs. PCOs and program managers were not familiar with the use of WMS data and were not comfortable with using the results of technical evaluations involving WMS data in developing negotiation positions and in negotiating a contract price. These conditions occurred because the DFARS did not mandate the use of WMS data, and acquisition managers had not received training in the use and benefits of WMS data. As a result, PCOs were unaware of contractor inefficiency and did not receive the potential benefits of reduced costs and efficiency through use of WMS data to propose and negotiate direct labor costs.

DISCUSSION OF DETAILS

Contractor work measurement systems. All six contractors visited during the audit had the fundamentals of an adequate WMS in place, but only five contractors used engineered labor standards. Although each contractor system differed in the details of its operation, the reports produced, and the degree of verification of accuracy in each system, WMS data were available and would have addressed contractor inefficiencies and uneconomical practices. Further, every contractor WMS had been in place before the May 1989 DFARS changes, which prescribed the use of WMS data by DoD acquisition personnel. Since DoD indirectly pays for WMS data, DoD should use the data generated from the systems, which can result in cost savings to DoD. The Naval Air Systems Command (NAVAIR) PCO, responsible for contract N00019-86-C-0214 with General Electric, stated that for the FY 1990 procurement of T64-416A engines, savings were about $4,000 per unit due to use of the General Electric WMS data during negotiations.

Our audit focused on five documents generated by contractor work measurement systems. All contractors routinely generated labor performance reports, variance analysis reports, and corrective action plans. These are important basic documents that make up a good fundamental WMS. Some contractors routinely produced trend analyses of work measurement data and used cost reduction plans to decrease the amount of direct labor hours. The five documents are described in Appendix B. Although these documents were produced by the contractors we visited, PCOs either were unaware of them or did not use them in negotiating a contract price.

Use of WMS data. Acquisition managers, who include both PCOs and program managers, did not request the use of WMS data in requests for proposals (RFPs) or in requests for field pricing support. Consequently, PCOs did not use WMS data in developing prenegotiation objectives or during negotiations.

Requests for proposals. We found no documentation to indicate that the acquisition managers considered using WMS data for six of the eight RFPs we reviewed. Since the PCOs did not have WMS data, they could not identify early inefficiencies in contractor personnel planning, scheduling, manufacturing, budgeting, performance evaluation, and cost estimating. Contractors usually proposed costs based on historical actual costs when not directed otherwise. However, PCOs are required to evaluate the effect of the contractor's current practices on future production costs. Federal Acquisition Regulation (FAR), section 15.805-3, "Cost Analysis," identifies various techniques and procedures to be used in conducting this evaluation. Section 15-805-3(b) states that the contracting officer shall ensure that the effects of inefficient or uneconomical past practices are not projected into the future. Projections of historical labor costs do not address contractor operating efficiency. The PCOs could not determine whether the effects of inefficient or uneconomical past practices would be projected into the future. Therefore, the PCOs were not in compliance with FAR section 15.805-3(b). The use of WMS data will give PCOs an indication of contractor inefficiencies and will allow PCOs to evaluate contractor actions more efficiently.

The attitudes of some acquisition managers toward the use of WMS data are clearly negative.

- The NAVAIR program manager responsible for the Sikorsky SH-60F aircraft contract stated that he designed the RFP and intentionally did not include WMS in it. Also, he emphasized that as long as Sikorsky Aircraft Division could execute the contract and did a quality job, he did not care how the contractor performed its work.

- The PCO and contract specialist responsible for contract DAAE07-90-C-A013 with Allison Transmission Division, General Motors Corporation, stated that the RFP did not have a WMS data requirement, because the PCO and the contract specialist were not familiar with the DFARS WMS requirements. In fact, the PCO and the contract specialist thought that the Data Management Directorate of the Army Tank-Automotive Command was responsible for requiring WMS data and compliance with the MIL-STD.

Requests for technical evaluations. DFARS section 215.876(b) states that WMS data will be used, when appropriate, in planning and cost estimating. However, PCOs did not require the use of WMS data in any of the seven requests for field support or technical evaluations that we reviewed.

When the use of WMS data is not required by the PCO in the RFP or in the request for technical evaluations, technical evaluators are generally obligated to evaluate the costs as proposed by the contractor. These costs are usually based on historical actual costs incurred on past procurements. Projection of past actual costs results in the projection of past inefficiencies and uneconomical practices into future cost estimates. Although the technical evaluators can ask for WMS data, there is no assurance that they will ask for WMS data or that the PCO will consider the data, if different from that proposed by the contractor.

The PCO responsible for a Raytheon Equipment Division contract with the Electronics Systems Division, Air Force Systems Command (AFSC), did not require the use of WMS data in the technical evaluation of a proposal that led to contract F19628-89-C-0131. This contract was negotiated in September 1989 for approximately $231.2 million. Even though the PCO technical analysis branch performed the technical evaluation, the PCO did not require the use of WMS data in the technical evaluation. The rationale for not requesting WMS data was that the PCO would always depend on the technical analyst to decide on the type of data that went into the technical evaluation. In this particular case, the technical analyst performed a limited review of WMS data. However, it is possible that the use of WMS data would not have received serious consideration, because the chief of the technical branch at the Electronics Systems Division, AFSC, did not subscribe to the theory of evaluating a contractor's WMS data. The branch chief stated that the Government should not tell contractors how to improve their manufacturing operation.

Prenegotiation objectives based on WMS data and post-negotiation memorandums. In five of the seven prenegotiation memorandums in our sample, PCOs did not cite the use of WMS data in establishing a negotiation position. Therefore, the PCOs did not comply with DFARS section 215.807, which requires the PCO to consider data resulting from the application of the WMS in the development of prenegotiation objectives, or if they did consider WMS data in the two prenegotiation memorandums, PCOs did not document how it was used. In addition, the PCOs did not comply with DFARS section 215.876, which clearly states that using WMS data for cost estimating is DoD policy. Further, the PCOs did not document whether data from contractor WMS were acceptable or appropriate.

PCOs did not discuss WMS data in six of the eight post-negotiation memorandums in our sample. This was not surprising since contracting officers had not requested or analyzed contractor WMS data and had not used WMS data to develop prenegotiation objectives.

We reviewed the Titan IV missile follow-on buy through modification P00346 to contract F04701-85-C-0019 with Martin Marietta Corporation. This contract, valued at $1.6 billion, was for the purchase of Titan IV missiles and included a MIL-STD 1567A requirement. The PCO used a team concept for the Titan IV negotiation. Primary responsibility was delegated to the chief negotiator, and the technical positions were the responsibility of the industrial engineer assigned to the "should cost" team.

Although the contract had a MIL-STD 1567A requirement and the contractor proposed direct labor hours using WMS data, neither the PCO nor the chief negotiator used WMS data to develop a prenegotiation objective. The working papers of the "should cost" team indicated that the team made a limited review of WMS data. The "should cost" team took exception to some WMS-based hours; however, the team did not reference the questioned hours in the should cost report or a subsequent cost/price analysis. Because questioned WMS hours were combined with other non-WMS questioned hours and were included in summary totals, they lost all identity. The prenegotiation memorandum did not refer to WMS data, the MIL-STD 1567A, or the "should cost" team's recommended hours. Also, the post-negotiation memorandum did not disclose any discussion of WMS-related topics during the negotiation even though the contractor proposed direct labor hours using WMS data. The rationale of the chief negotiator for not using WMS data was that findings of the "should cost" team, related to WMS data, were not clearly presented to the procurement staff during the prenegotiation/pricing objective phase.

Reasons for nonuse of WMS data. The PCOs did not use WMS data for various reasons. Acquisition managers were not familiar with the types of data available from specific contractor WMS. Also, acquisition managers were not familiar with the use of WMS data and were not comfortable with using the results of technical evaluations involving WMS data when developing negotiating positions and when negotiating a contract price.

Acquisition managers were reluctant to use WMS data. The PCO at the AFSC Space Systems Division, responsible for the Titan IV missile follow-on buy, mentioned that implementing a WMS or MIL-STD 1567A was a waste of time and money for large DoD systems such as the Titan IV. The PCO believed that WMS could be applicable only to companies that have large commercial operations. Further, the Director, AFSC Electronics Systems Division, responsible for the Raytheon Milstar production contract, stated that contracting officers should not tell a contractor what to do. Rather, the contracting officer should address only the cost involved in implementing WMS data. We believe that the nonuse of WMS data stems from the lack of WMS training.

DFARS guidance. The addition of DFARS section 215.876 in May 1989 and the revision to section 215.807 have had marginal effects on the use of WMS data by acquisition management personnel. Even though all contractors reviewed had fundamental WMS in place that tracked direct labor performance and performed some type of variance analysis, DoD acquisition managers did not require that WMS data be proposed or analyzed prior to price negotiations because the current wording of DFARS section 215.876(b) is permissive in that it allows for noncompliance without justification. As written, section 215,876 (b) requires the use of "WMS, when appropriate, ... if acceptable to the Government . . . . "[Emphasis added.] DFARS section 215.807 states that the PCO "shall consider" WMS data, but does not require PCOs to indicate use of the data or reasons for non-use. As a result, the DFARS does not mandate that PCOs use contractors' existing WMS data, or derive any benefits from improvements in contractor efficiencies. Therefore, direct labor continues to be proposed and evaluated based on historical actual costs when MIL-STD 1567A is not a contract requirement, providing little or no insight into the contractors' past inefficiencies.

Lack of WMS training. Acquisition management personnel lacked WMS training, which we believe directly contributed to PCO and program manager noncompliance with DFARS sections 215.876 and 215.807 and to their negative perceptions on the value and use of WMS data. At the Army Tank-Automotive Command, the PCO responsible for Allison Transmission Division X1100-3B transmissions and Cummins Engine Company diesel engines stated that he was more interested in taking cost and pricing courses and other contract-related courses rather than in taking a WMS course. He concluded that among the training courses designed for the PCOs, WMS was not a top priority. The PCO for contract F19628-89-C-0131 with Raytheon Equipment Division felt that WMS was a wasted effort that cost money and had no useful return. The PCO for contract F04701-85-C-0019 with Martin Marietta felt that MIL-STD 1567A was a waste of time for Government contracts. The Project Manager for an unnegotiated Navy contract with Sikorsky indicated that he did not have confidence in WMS.

The above are examples of the prevailing attitudes toward WMS that we found among acquisition managers during the audit. Specific WMS training should help change this attitude. At the time of the audit, DoD did not offer any WMS courses tailored to acquisition management personnel. Without exposure to and familiarity with proper techniques for the application of WMS data in analyzing costs and in setting negotiation objectives, acquisition personnel will continue to avoid requesting and using contractor WMS data.

During our audit, we interviewed nine PCOs, seven program managers and six lead contract negotiators. None of the 22 individuals received any substantive training in using WMS to evaluate proposed data or in applying WMS data during price negotiations. Only one PCO indicated detailed familiarity with WMS data, because he had an industrial engineering background. One program manager had received 2 hours of WMS training during an unrelated course.

Although DoD activities did not conduct WMS training for procurement personnel at the time of our audit, courses had been offered to Air Force personnel in the past. An example of such a WMS course was "Application of Work Measurement Techniques to Pricing." The course was taught to procurement personnel from 1987 through 1989 by the Air Force Contract Management Division. The course addressed the benefits of performing cost and price analyses through review of WMS data, such as realization factor elements, production management systems, and cost performance reports. The course was taught to approximately 150 Air Force procurement personnel. The course was suspended because of a lack of funding and the eventual termination of the Contract Management Division's operation. Although the AFSC was attempting to revive and expand the course at the time of our audit, a DoD-wide approach to WMS training of acquisition management personnel had not been addressed.

The lack of WMS training is not new. An IG, DoD, study in 1986 indicated that 10 of 13 contracting officers interviewed were unaware of WMS requirements and that 11 of the 13 needed some form of WMS training. We believe that the general lack of WMS knowledge needs to be addressed through mandatory training.

A recent congressional report by the Investigative Subcommittee of the Committee on Armed Services of the U.S. House of Representatives, dated May 8, 1990, noted the inadequate training of DoD procurement personnel. The report, entitled "The Quality and Professionalism of the Acquisition Workforce," states: "The Services have been unsuccessful in achieving required training of their Program Managers. The Services have also failed to adequately train their contracting personnel."

General guidance for mandatory training requirements of acquisition managers is addressed by DoD Directive 5000.52, "Defense Acquisition Education and Training Programs," August 22, 1988. The Directive made the Under Secretary of Defense for Acquisition responsible for developing fully qualified personnel in acquisition positions. No WMS training requirement exists in the DoD Directive, its September 1990 implementing manual (DoD 5000.52M), or the FY 1991 list of mandatory acquisition education courses directed by the Under Secretary of Defense for Acquisition. The implementation manual does not address mandatory training or WMS for PCOs and program managers.

If work measurement data are to be used in the proposal process, an adequate training plan must be developed for and required of PCOs, program managers, contract negotiators, and cost/price analysts.

WMS costs and benefits. PCOs frequently cite high implementation cost as a reason for not pursuing the use of WMS data while giving little or no consideration to the benefits of WMS. Their attitude is further influenced by the perception that WMS implementation will not result in benefits to current contracts, but rather future contracts. However, WMS implementation costs cited by contractors were overstated or unsupported, and benefits to the Government are available. Further, PCOs did not require contractors to submit proposals to support their implementation costs. As a result, cost/benefit analyses were not performed by DoD analysts, and PCOs did not require MIL-STD 1576A on contracts and, therefore, are not aware of the contractor current operating efficiency. Further, the Government continues to fund the operation of the contractor WMS with no intent of using the resulting data.

Only one of six contractors performed and documented a cost analysis of implementing MIL-STD 1567A. General Electric Company's MIL-STD 1567A estimate, dated December 11, 1987, overstated the implementation costs according to a DoD analysis. The General Electric study concluded that MIL-STD implementation would not be feasible because net implementation costs were large. Our review showed that General Electric estimated costs exceeded $2 million. However, a DoD technical analysis report concluded that implementation of the MIL-STD would result in a net savings to the Government of $31,421. The main reason for the cost difference was that the DoD technical analyst did not accept the proposed cost of developing labor standards. The analyst believed that General Electric should have been able to take advantage of extensive standard time data derived from previous MIL-STD 1567A efforts on other production engine lines.

Substantial benefits were available through the use of WMS data. The Defense Plant Representative Office (DPRO) at the Martin Marietta facility in Denver, Colorado, prepared a WMS cost/benefit analysis for Titan IV costs on contract F04701-85-C-0019, with revisions through October 5, 1990. The analysis concluded that WMS benefits outweighed WMS costs 4.2 to 1. The MIL-STD-1567A implementation costs of $5.4 million had been offset by estimated WMS savings of $22.8 million for four direct "touch" labor categories. The DPRO estimated savings by comparing actual proposed labor hours with projected labor hours that would have been expected from using an average aerospace

industry improvement curve for the negotiated number of missiles procured. The IG, DoD, 1986 study, "Work Measurement Systems and Engineered Labor Standards" indicated similar benefits. The study cites an average benefit-to-cost ratio of 6.5 to 1 as a clear indicator that the use of WMS data is cost-effective.

The need to understand and use contractor WMS data is evident. Since all contractors visited during the audit had a WMS in place, the WMS should be validated, and the resulting data should be used. It is not cost-effective for DoD to pay a contractor to maintain an inaccurate WMS or to not use the data generated from a validated system. The Government may be paying for high levels of contractor direct labor inefficiency, in addition to paying for the costly overhead of personnel, such as industrial engineers, cost analysts, and manufacturing personnel to operate the WMS.

In summary, revisions to the DFARS are needed to eliminate language that enables widespread failure to use WMS data by acquisition managers. Further, mandatory training will make acquisition managers more comfortable with the use of WMS data during the negotiation process.

RECOMMENDATIONS, MANAGEMENT COMMENTS AND AUDIT RESPONSE

1. We recommend that the Director of Defense Procurement direct the Defense Acquisition Regulations Council to revise the Defense Federal Acquisition Regulation Supplement (DFARS) as follows:

a. Add the following change to the second sentence in section 215.807(b): The Contracting officer shall utilize data resulting from the application of work measurement systems in developing pricing objectives and negotiations.

Director of Defense Procurement comments. The Director nonconcurred and stated that the current regulatory coverage adequately addresses utilization and submission of WMS data. The Director further stated that the DFARS 252.215-7003(b) requires a contractor to have an estimating system that is consistent with and integrated with the contractor's related management system; and DFARS 252.215-7002 requires the contractor to give the Government access to its WMS records. The Director also stated that since a WMS is a related management system, contractors are already required to utilize available WMS data in developing cost estimates, when appropriate.

Audit Response. We agree that the DFARS 252.215-7003(b) requires a contractor to have an estimating system that is consistent with and integrated with its related management system or WMS, and DFARS 252.215-7002 requires the contractor to give the Government access to its WMS records. There is no guarantee, however, that contracting officers will request

the use of WMS data in requests for proposals or in requests for field pricing support. We found no documentation to indicate that contracting officers considered using WMS in six of the eight requests for proposals we reviewed. Contractors usually proposed costs based on historical actual costs when not directed otherwise. Consequently, contracting officers did not use WMS data in developing prenegotiation objectives or during negotiations. Since the contracting officers did not have WMS data, they could not identify early inefficiencies in contractor personnel planning, scheduling, manufacturing, budgeting, performance evaluation, and cost estimating. We maintain our position concerning the needed revision to the DFARS. We request that the Director reconsider her position on this recommendation.

b. Add the following sentence to section 215.807(b): Contracting officers will document reasons for not using contractor WMS data in developing pricing objectives and negotiations.

Director of Defense Procurement comments. The Director nonconcurred and stated that additional documentation requirements beyond those currently in DFARS are not needed. The Director also stated that no meaningful benefits will be gained by requiring contract price analysts, contract auditors, and technical evaluators to document why WMS data was not used in a particular analysis.

Audit Response. In five of seven prenegotiation memorandums in our sample, contracting officers did not cite the use of WMS data in establishing a negotiation position. Therefore, the contracting officers presumably did not comply with DFARS section 215.807, which requires the contracting officers to consider data resulting from the application of the WMS in the development of prenegotiation objectives. If contracting officers did consider WMS data, they did not document how they were used. Further, the contracting officers did not document whether data from contractor WMS were acceptable or appropriate. We believe that requiring contracting officers to document reasons for not using contractor WMS data in developing pricing objectives and negotiations will compel the contracting officers to comply with DFARS section 215.807. We also feel that any mechanism or internal control that will ensure compliance with established regulations is a meaningful benefit. Therefore, we maintain our position concerning the need to revise the DFARS. We request that the Director reconsider her position on this recommendation.

c. Add the following sentence to section 215.876: Contracting officers and program managers will document their reasons for not including requirements for work measurement systems data in all applicable solicitations.

Director of Defense Procurement comments. The Director nonconcurred and stated that contracting officers and program managers should be allowed the latitude to apply WMS data requirements selectively. The Director also stated that when certified cost or pricing data are required, the solicitation does not (and should not) specifically identify all the various components of cost or pricing data to be submitted.

Audit Response. The attitudes of some contracting officers toward the use of WMS data are clearly negative. Therefore, we believe there is a need for an internal control to substantiate that the contracting officer seriously considered the application of WMS requirements in the request for proposal. Requiring the contracting officers to document their reasons for not including requirements for WMS data in all applicable solicitations is such an internal control.

Contracting officers are required by the FAR to evaluate the effect of the contractor's current practices on future production costs. FAR section 15.805-39(b) states that the contracting officer shall ensure that the effects of inefficient or uneconomic past practices are not projected into the future. Projections of historical labor costs do not address contractors' operating inefficiencies. Consequently, the contracting officers could not determine whether the effects of inefficient or uneconomic past practices were projected into the future. Therefore, the contracting officers were not in compliance with FAR section 15.805-3(b). The requirement for and use of WMS data will give contracting officers an indication of contractor inefficiencies and will allow contracting officers to evaluate contractor actions more effectively. We maintain our position on the needed revision to the DFARS and request the Director to reconsider her position on this recommendation.

2. We recommend that the Director of Defense Procurement:

a. Establish for all contracting officers and program managers a basic training requirement that emphasizes the benefit of WMS data and the evaluation and use of the data for the negotiation process.

Director of Defense Procurement comments. The Director partially concurred and stated that the reason WMS data are not used more frequently is that the procurement workforce is not as familiar with the use of WMS data as it should be. The Director stated that they will instruct the Services to emphasize in their procurement training programs the appropriate use of WMS data in planning, cost estimating, developing pricing objectives, and monitoring contract performance.

Audit Response. The management comments about the forthcoming instructions to the Military Departments concerning WMS training have satisfied the intent of the recommendation. We request that the Director advise us of when that action will be taken and how much lead time will be granted to the Military Departments to submit their plans and to implement training.

b. Issue guidance that requires procurement contracting officers in the Military Departments and Defense agencies to use contractor WMS data in developing pricing objectives, negotiating contract price, and monitoring contract performance in compliance with Defense Federal Acquisition Regulation Supplement sections 215.807 and 215.876.

Director of Defense Procurement comments. The Director nonconcurred and stated that the DFARS section 215.807(b) already requires contracting officers to consider data resulting from the application of WMS in developing pricing objectives and in negotiations.

Audit Response. The addition of DFARS section 215.876 in May 1989 and the revision to DFARS section 215.807 have had marginal effects on the use of WMS data by contracting officers. The contractors reviewed had a fundamental WMS in place that tracked direct labor performance and performed some type of variance analysis. However, DoD contracting officers did not require that WMS data be proposed or analyzed prior to price negotiations, because the current wording of DFARS section 215.876(b) and 215.807 are permissive in that they allow for noncompliance without justification. Specifically, DFARS section 215.807 states that contracting officers "shall consider" WMS data, but does not require them to indicate use of the data or reasons for nonuse. As a result, the DFARS does not mandate that PCOs use contractors' existing WMS data. Thus, DoD does not derive any benefits from improvements in contractor efficiencies. Therefore, direct labor continues to be proposed and evaluated based on historical actual costs, providing little or no insight into contractors' past inefficiencies. We maintain our position concerning the need for the action and request that the Director reconsider her position on this recommendation.

c. Report the noncompliance with the DFARS sections 215.807 and 215.876 as a material internal control weakness in the annual statement of assurance, and track the status of corrective actions using the procedures established in DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987.

Director of Defense Procurement comments. The Director nonconcurred and stated that contracting officers shall consider data resulting from the application of WMS in the development of pricing objectives and negotiations. The Director also stated that contracting officers are allowed the flexibility to determine when use of WMS data is appropriate in contract cost analyses or contract price negotiations.

Audit Response. The audit disclosed that contracting officers did not use WMS data in contract cost analyses or contract price negotiations. This occurred because the language in DFARS sections 215.876 and 215.807 permits noncompliance, and there were no other internal controls established to verify that WMS data are ever requested or used by contracting officers. As a result, DoD did not have sufficient controls to ensure that contracting officers complied with existing regulations intended to encourage the use of WMS data. This is a material internal control weakness as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38, and should be disclosed in the annual statement of assurance. Therefore, we maintain our position on the recommendation and request that the Director reconsider her position on this recommendation.

PART III - ADDITIONAL INFORMATION

APPENDIX A - Schedule of Contract Actions Reviewed

APPENDIX B - Basic Work Measurement System Documentation

APPENDIX C - Summary of Potential Benefits Resulting from Audit

APPENDIX D - Activities Visited or Contacted

APPENDIX E - Final Report Distribution

APPENDIX A: SCHEDULE OF CONTRACT ACTIONS REVIEWED

Contractor	Contract Number	Negotiation	Value of Contract Action
Martin Marietta Corp.	F04701-85-C-0019-P00346	Aug. 31, 1989	$1,626,000,000
General Electric Co.	N00019-86-C-0214-P00036	Apr. 26, 1990	82,450,000
McDonnell Aircraft Co.	N00019-88-C-0001-P00040	June 29, 1989	802,000,000
McDonnell Aircraft Co.	N00019-88-C-0069-P00051	Aug. 29, 1989	1,461,000,000
McDonnell Aircraft Co.	N00019-88-C-0289-P00036	May 22, 1990	1,320,000,000
Raytheon Company, Equipment Division	F19628-89-C-0131-P20001	Sept. 22, 1989	231,184,443
United Technologies Corp., Sikorsky Aircraft Division	DAAJ09-88-C-A003-P00225	June 8, 1990	47,672,144
General Motors Corp. - Allison Transmission Division	DAAE07-90-C-A013	Apr. 20, 1990	132,324,657

APPENDIX B: BASIC WORK MEASUREMENT SYSTEM DOCUMENTATION

Labor performance reports - One of the most significant values of an adequate WMS is its ability to compare actual direct labor utilization to preestablished contractor goals through labor performance reports. All contractors reported labor performance showing plant efficiency. These labor performance reports showed computed labor efficiency by comparing the actual hours to earned hours based on labor standards. Although contractor definitions of "earned hours" varied, the reports clearly indicated efficiency and short-term productivity in a timely manner.

Variance analyses - All contractors we audited performed variance analyses to identify controllable production inefficiencies so that they could be corrected. The analyses compared the differences between actual labor hours and the work accomplished, breaking down the differences into reasons for inefficiency. However, we noted that contractor efforts varied. For example, variance analyses of one contractor were used to correct production problems as they occurred, while another contractor did a thorough analysis, but covered only a small portion of the manufacturing universe.

As a result of this varying effort, the usefulness of a variance analysis to identify specific areas of contractor inefficiencies ranged in proportion to the amount of effort put into the analysis. A Government evaluation of current practices was lacking to determine their usefulness and suggest improvements. Since DoD was paying, either directly or indirectly, for the maintenance of these WMSs, a determination of cost-effectiveness was needed.

Trend analyses - The Martin Marietta Corporation Denver Operation was able to present trend analysis information on request. Trend analysis is important because it allows management to chart the productivity of a plant over a long period. We found that the other contractors maintained historical data from which trend analyses could have been developed.

Cost reduction plans - One contractor used formal cost reduction plans to improve its methods of manufacturing by reducing the number of direct labor hours needed to manufacture an item. While other contractors did not have plant-wide cost reduction objectives, they did compare plant performance to negotiated contract costs.

Audits of system accuracy - None of the WMSs examined had been subject to regular periodic audits of standards, although two contractors had plans to institute an audit following a review of the WMS by Government engineers. The contractors who did not plan to perform regular accuracy audits told us that accuracy was reviewed in the course of rewriting and updating the labor standards. When this was done, they stated that the new standards rarely differed from the old standards by more than 5 percent.

The accuracy of labor standards is critical if labor standards are to be used as the basis of cost estimates. In a good WMS, standards should be verified for accuracy through periodic reviews or audits.

To use work measurement-based costs in negotiating contracts, it is necessary to know the quality of the data derived from the labor standards. In turn, the quality of the data can only be known by knowing the accuracy of the labor standards. Standards of known accuracy form the basis of an acceptable WMS. In light of the importance of knowing the accuracy of the standards, we believe that either the contractor or DoD should perform periodic audits. Such audits need not be expensive if carried out in accordance with the statistical sampling principles well-known in industrial engineering.

Having useful reports, doing meaningful variance and trend analyses, developing cost reduction plans, and having accurate work measurement standards are part of an adequate WMS.

APPENDIX C: SUMMARY OF POTENTIAL BENEFITS RESULTING FROM AUDIT

Recommendation Reference	Description of Benefit	Type of Benefit
1.a., 1.b., and 1.c.	Internal Control. The requirement to use or to document non-use of work measurement data will result in increased use of data in negotiating lower direct labor costs on negotiated contracts.	Cost avoidance. Monetary benefits are undeterminable.*
2.a.	Compliance. Better knowledge of benefits from using WMS data during contract negotiations should result in compliance with the DFARS.	Cost avoidance Monetary benefits are undeterminable.*
2.b.	Compliance. Emphasis of current guidance should result in compliance	Cost avoidance. Monetary benefits are undeterminable.*
2.c.	Compliance. Emphasis of current guidance should result in compliance	Cost avoidance. Monetary benefits are undeterminable.*

* We were unable to project monetary benefits because any prospective cost avoidance would be based on reduced labor costs in future contract price negotiations for undeterminable items in unknown quantities.

APPENDIX D: ACTIVITIES VISITED OR CONTACTED

Office of the Secretary of Defense

Assistant Secretary of Defense (Production and Logistics), Washington, DC
Director of Defense Procurement, Washington, DC
Comptroller of the Department of Defense, Deputy Comptroller (Management Systems), Washington, DC
Defense Productivity Program Office, Falls Church, VA

Department of the Army

Army Materiel Command, Alexandria, VA
Army Aviation Systems Command, St. Louis, MO
Army Tank-Automotive Command, Warren, MI
Army Management Engineering College, Rock Island, IL

Department of the Navy

Naval Air Systems Command, Washington, DC
Space and Naval Warfare Systems Command, Washington, DC

Department of the Air Force

Assistant Secretary of the Air Force (Acquisition), Washington, DC
Air Force Systems Command, Andrews Air Force Base, MD
Air Force Contract Management Division, Kirtland Air Force Base, NM
Air Force Electronic Systems Division, Hanscom Air Force Base, MA
Air Force Space Systems Division, Los Angeles, CA

Defense Logistics Agency

Director, Defense Logistics Agency, Alexandria, VA
Defense Contract Administrative Services Management Area, Fort Benjamin Harrison, IN
Defense Plant Representatives Office - Allison Transmission Division, General Motors Corporation, Indianapolis, IN
Defense Plant Representatives Office - Boeing Military Airplanes, Wichita, KS
Defense Plant Representatives Office - General Electric Company, Lynn, MA
Defense Plant Representatives Office - Martin Marietta Corporation, Denver, CO
Defense Plant Representatives Office - McDonnell Aircraft Company, St. Louis, MO
Defense Plant Representatives Office - Raytheon Company Equipment Division, Marlborough, MA
Defense Plant Representatives Office - Sikorsky Aircraft Division, United Technologies Corporation, Stratford, CT

Defense Contract Audit Agency

Director, Defense Contract Audit Agency, Alexandria, VA
Defense Contract Audit Agency Field Locations:
  Eastern Region - Central Indiana Branch Office,
    Indianapolis, IN
      Resident Office - General Electric Company, Lynn, MA
      Resident Office - Martin Marietta Corporation, Denver, CO
      Resident Office - McDonnell Aircraft Company, St. Louis, MO
      Resident Office - Raytheon Company, Equipment Division,
        Marlborough, MA
      Resident Office - Sikorsky Aircraft Division, United
        Technologies Corporation, Stratford, CT

Contractors

Allison Transmission Division, General Motors Corporation,
  Indianapolis, IN
General Electric Company, Aircraft Engine Business Group,
  Lynn, MA
Martin Marietta Corporation, Denver, CO
McDonnell Aircraft Company, St. Louis, MO
Raytheon Company, Equipment Division, Marlborough, MA
Sikorsky Aircraft Division, United Technologies Corporation,
  Stratford, CT

APPENDIX E: REPORT DISTRIBUTION

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition
Assistant Secretary of Defense (Production and Logistics)
Director of Defense Procurement
Comptroller of the Department of Defense

Department of the Army

Secretary of the Army
Assistant Secretary of the Army (Financial Management)

Department of the Navy

Secretary of the Navy
Assistant Secretary of the Navy (Financial Management)

Department of the Air Force

Secretary of the Air Force
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Assistant Secretary of the Air Force (Acquisition)
Headquarters, Air Force Systems Command

Other Defense Activities

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, Defense Acquisition Regulations System

Non-DoD

Office of Management and Budget

U.S. General Accounting Office
NSIAD Technical Information Center

Congressional Committees:
- Senate Subcommittee on Defense, Committee on Appropriations
- Senate Committee on Armed Services
- Senate Committee on Governmental Affairs
- Senate Ranking Minority Member, Committee on Armed Services
- House Committee on Appropriations
- House Subcommittee on Defense, Committee on Appropriations
- House Ranking Minority Member, Committee on Appropriations
- House Committee on Government Operations
- House Subcommittee on Legislation and National Security, Committee on Government Operations

PART IV - MANAGEMENT COMMENTS

Director of Defense Procurement

Management Comments from Director of Defense Procurement

OFFICE OF THE UNDER SECRETARY OF DEFENSE

WASHINGTON, DC 20301-3000

AUG 15 1991

DP/CPF

MEMORANDUM FOR DIRECTOR, CONTRACT MANAGEMENT DIRECTORATE

THRU: CHIEF, CONGRESSIONAL ACTIONS AND INTERNAL REPORTS 16 Aug 91

SUBJECT: Draft Report on the Use of Work Measurement System Data in Negotiating with Prime Contractors (Project No. OCD-0061)

This is in response to your June 12 request for our comments on the subject draft report. Our response to the report recommendations is attached. We believe the current work measurement coverage contained in the Defense Federal Acquisition Regulation Supplement appropriately addresses the use of work measurement data. We must continue to provide contracting officers (as well as price analysts, auditors, and technical evaluators) the flexibility to use whatever evaluation tools and techniques are most appropriate for the particular situation.

The DoD manufacturing environment is frequently different from the production circumstances in which the achievement of an "industry standard" can be expected — namely very repetitive operations and high production volumes. DoD production quantities are frequently small, products are technically sophisticated, and engineering changes frequently occur. Work measurement is one productivity measurement index; like any productivity measurement index, it should be used constructively and responsibly.

We believe that contracting officers should make greater use of competition, quality history, the record on manufacturing efficiency, and contractor productivity-enhancing investment in awarding contracts. These factors, along with use of work measurement systems data, when appropriate, are all tools for reducing contract prices. We will continue to examine the best ways to promote the consideration and use of work measurement as an industrial engineering tool in defense contracting. Thank you for the opportunity to comment on the draft report.

Eleanor Spector

Eleanor R. Spector
Director, Defense Procurement

Attachment

RECOMMENDATIONS

1. We recommend that the Director of Defense Procurement direct the Defense Acquisition Regulations Council to revise the Defense Federal Acquisition Regulation Supplement (DFARS):

a. By adding the following change to the second sentence in section 215.807(b): "The Contracting officers shall utilize data resulting from the application of WMS in developing pricing objectives and negotiations."

Director, Defense Procurement Response

Nonconcur. The current regulatory coverage adequately addresses utilization and submission of work measurement systems (WMS) data. DFARS 252.215-7003(b) requires a contractor to have an estimating system that is consistent with and integrated with the contractor's related management systems. Since WMS is a related management system, contractors are already required to utilize available WMS data in developing cost estimates, when appropriate. DFARS 252.215-7002 requires the contractor to give the Government access to its WMS records. The last sentence in DFARS 215.807(b) and the first sentence in DFARS 215.876(b) sufficiently detail contracting officer responsibilities regarding the use of WMS data.

b. By adding the following sentence to section 215.807(b): "Contracting officers will document reasons for not using contractor WMS data in developing pricing objectives and negotiations."

Director, Defense Procurement Response

Nonconcur. Additional documentation requirements beyond those currently in DFARS are not needed. Contract price analysts, contract auditors, and technical evaluators use a variety of tools to analyze contractor cost estimates and to make recommendations for contracting officers to use in developing pricing objectives. Both the Armed Services Pricing Manual and the DCAA Contract Audit Manual address various methods of analyzing manufacturing labor hours, including the use of WMS data. No meaningful benefits will be gained by requiring these individuals to document why a particular tool was not used in a particular analysis.

c. By adding the following sentence to section 215.876: "Contracting officers and program managers will document their reasons for not including requirements for WMS data in all applicable solicitations."

ATTACHMENT

Director, Defense Procurement Response

Nonconcur. Contracting officers and program managers should be allowed the latitude to apply WMS data requirements selectively. It is not our policy to require contracting officers to document these types of judgments. WMS data are just one of many components of cost or pricing data. When certified cost or pricing data are required, the solicitation does not (and should not) specifically identify all the various components of cost or pricing data to be submitted.

2. We recommend that the Director of Defense Procurement:

a. Establish for all contracting officers and program mangers a basic training requirement that emphasizes the benefit of WMS data and the evaluation and use of the data for the negotiation process.

Director, Defense Procurement Response

Partially concur. We agree that the reason WMS data are not used more frequently is that the procurement workforce is not as familiar with the use of WMS data as it should be. We will instruct the services to emphasize in their procurement training programs the appropriate use of WMS data in planning, cost estimating, developing pricing objectives, and monitoring contract performance.

b. Require the Procurement Contracting Officers and program managers in the Military Departments and Defense agencies to use contractor WMS data in developing pricing objectives, negotiating contract price, and monitoring contract performance in compliance with Defense Federal Acquisition Regulation Supplement sections 215.807 and 215.876.

Director, Defense Procurement Response

Nonconcur. DFARS 215.807(b) already requires contracting officers to consider data resulting from the application of WMS in developing pricing objectives and in negotiations. We believe that greater familiarity with WMS data will result in its increased use.

c. Report the noncompliance with the Defense Federal Acquisition Regulation Supplement sections 215.807 and 215.876 as a material internal control weakness in the annual statement of assurance and track the status of corrective actions using the procedures established in DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987.

Director, Defense Procurement Response

Nonconcur. DFARS 215.807(b) states that contracting officers shall consider data resulting from the application of WMS in the development of pricing objectives and negotiations. Contracting officers are allowed the flexibility to determine when use of WMS data is appropriate in contract cost analyses or contract price negotiations.

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