UNITED STATES GENERAL ACCOUNTING OFFICE
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STATEMENT OF
ELMER B. STAATS, COMPTROLLER GENERAL OF THE UNITED STATES
BEFORE THE
SUBCOMMITTEE ON PRIORITIES AND ECONOMY IN GOVERNMENT
JOINT ECONOMIC COMMITTEE

Mr. Chairman and Members of the Committee:

I am pleased to appear before this Subcommittee today. My statement deals primarily with reports we have recently made concerning [acquisition of major weapons systems,] the feasibility of making "should cost" reviews in auditing and pricing of negotiated contracts, a congressionally-directed study of profits earned on defense contracts, and a related GAO initiated study of the return on capital of a selected group of individual contracts. This latter study was designed to determine the feasibility of allocating capital to individual contracts and to determine the range of return on capital employed in individual contracts.

We have also included attachments updating work which we have done relative to the Truth-in-Negotiations Act (P.L. 87-653) and the use of Government-furnished equipment by defense contractors. Both have been subjects of previous hearings by this Committee.

MAJOR ACQUISITION REVIEWS

We delivered our second annual report on major weapon systems studies on March 18, 1971. We concluded from our study that although there have been substantial improvements in the processes followed by the Department of Defense in buying major weapon systems, cost growth is still a formidable problem.

We found that on 61 weapon systems where complete cost data were available, estimates to develop and produce the weapon systems had increased some $33.4 billion from initial estimates. About one third of this increase, or $9.5 billion represented the difference between the estimates prepared when the systems were first approved for development (the planning estimate) and updated estimates prepared when the systems were about to be placed under a development contract. The remaining $23.9 billion increase was due to changes in quantities to be acquired and to a combination of such things as engineering changes, revisions to estimates, and provisions for increased cost due to economic inflation. The complete digest of our March 18, 1971, report is attached to this statement (See Attachment I).

Audit of Program Estimates

I would now like to discuss a question you have raised in the past on the DOD cost estimates contained in the Selected Acquisition Reports, that is, to what extent are the Selected Acquisition Reports audited, certified or verified by the GAO? Initially, I would like to emphasize that our audit is of the weapon system program, not the Selected Acquisition Report itself. Our detailed examination is focused on the data that supports the summary information shown on the Selected Acquisition Report.

The cost information shown on the Selected Acquisition Reports are estimates of projected costs, not costs which have actually occurred. I believe this point is often misunderstood. One cannot apply the same verification techniques to estimates as can be applied to actual costs. For example, the initial planning estimate for a new fighter plane often starts with a planned cost figure estimated from a cost to weight relationship derived from earlier fighters that are considered to be roughly equal. There are many assumptions implicit in that calculation. We are able to trace planning estimates back to supporting data and attempt to determine that all pertinent known factors that may affect the estimates are considered. But the estimates are not precise; cannot really be verified; and usually prove to be overly optimistic.

The next estimate shown on the Selected Acquisition Report is the Government's "development estimate." These estimates cannot be reconciled with the planning estimates. We can, however, compare them to estimates made by at least two contractors. As you know, the contractor's estimates are subject to a review by the Defense Contract Audit Agency as to the currency, completeness and accuracy of the contractor's cost data supporting his price proposals. In addition, the contractor's technical proposal is given an extensive review by various Government technical personnel.

In connection with our continuing review of contract pricing, we examine the work of these groups and make intensive independent examinations of these data. The factual parts we can, and do verify. Not all of the assumptions inherent in cost projections can be precisely verified. But we can determine whether the successful contractor's final price proposal is incorporated into the Government's development estimate.

Finally, each quarterly Selected Acquisition Report contains an estimate providing as accurate an indication as possible of current program potential costs. In practice, this estimate is the development estimate just described, adjusted for changes in quantities; for engineering changes required to upgrade a system performance or to correct system deficiencies; for current estimates of the anticipated effect of economic inflation; for estimating errors discovered after the development estimate has been established; and for several other considerations. We can, to some degree, review the bases for these various changes to the development estimate.

For the future, we are seeking to improve the validity of the data included in the Selected Acquisition Report with respect to potential costs of major weapon systems. We intend to do this through our study of the use of "should cost" concepts and through the work of the Congressionally directed activity of the Cost Accounting Standards Board, of which I have been designated Chairman, established to promulgate cost-accounting standards designed for use by prime contractors and subcontractors in the pricing, administration, and settlement of negotiated defense contracts in excess of $100,000. It is my hope and belief that we will be successful.

The identification of need for a weapon system and the relative priority to be assigned its development is a fundamental problem in acquisition of weapon systems. Initial decisions as to which weapon system will be developed and the priority of its development is made by any one of the military services, but DOD has no organized method by which such proposals can be measured against its total needs.

Seemingly, the entire structure of the military service and the Office of the Secretary of Defense are involved in this process, in one way or another, and the long and imprecise process of defining and justifying and of redefining and rejustifying a weapon system, through many layers of involvement, invariably has delayed decisions and has extended stated availability dates by years.

The cumulative effect of the involvement of many different organizational units in the decision to justify and then to proceed with development is the root cause of long delays in development decisions. Almost every weapon system we studied showed some substantial degree of uncertainty as to whether, when, or in what form the weapon should be developed.

It occurs to us that ideally there should be a direct relationship between the missions for which weapon systems requirements are determined; e.g., strategic deterrent, land warfare, ocean control, etc., and the organizational structure needed to acquire them. The Office of the Secretary of Defense has recently implemented a new approach along these lines. Although still in its infancy such an arrangement should facilitate grouping related weapon systems in packages of common mission and would permit putting together an acquisition organization of appropriate size and stature to handle these matters. Eventually, we believe program management and organization will evolve along mission lines.

Feasibility of a Military Price Index

I would like to touch on one other important point with respect to cost estimating, one in which you have expressed interest in the past. I refer to the problem of estimating the effect of economic inflation on the cost of weapon systems. In testimony before this Committee on

May 20, 1970, we told you we planned to do additional work on this problem. Our review is not yet completed, but we can make some observations which we think will be useful.

As the first step in our work we reviewed all of the studies we could find which had been done by or for the Department of Defense to develop specialized price indexes for particular weapon systems or components. We found that in no case had original research been performed on the actual cost of such items. Rather, average hourly earnings and components of the Wholesale Price Index available from the Bureau of Labor Statistics (BLS) were combined into an index for the particular military item. The selected component indexes were weighted in proportion to the portion of cost to which each such index was judged to pertain. Since we could not find that any tests had been performed to determine the validity of this method, and since in many cases the content of the selected BLS indexes appeared to be quite different than the content of the military item involved, we had no basis for establishing a level of confidence in these indexes.

In the next phase of our work we conducted pilot tests in contractors' plants and in some cases we were able to compute indexes reflecting the actual price movements in those contractors' plants. The indexes we developed relate to relatively standard items. We are comparing the movements in the indexes we developed with the general price movement in the economy as indicated by the BLS indexes. We are still analyzing the results of this work.

With regard to non-standard items it appears that it would require very difficult and costly analysis to separate the effects of specification change from price change for a large number of items. Our research suggests,

however, that where large amounts of unusual material and highly specialized labor such as titanium, and the labor associated in its fabrication, are present in a system, the records at contractors' and vendors' plants would allow a determination of the price movements in that particular portion of production.

We have recently discussed the results of our studies with a group of consultants who were given draft papers containing the results of the research to which I have referred. The initial consensus of this group is that it would be impossible to compute an accurate price index for military hardware. This group suggested that estimates of inflationary effect on costs of military items should start with the use of generally available indicators such as the Wholesale Price Index or major components of that index. The group suggested that tests such as we have conducted should continue to be performed to test whether or not in specific instances a really significant inequity might exist.

We are encourged by the fact that the BLS is expanding the coverage of indexes such as the Wholesale Price Index to include items more representative of the Aerospace industry. For example, we are advised that executive jet aircraft are being incorporated into the Wholesale Price Index. We are still evaluating the use of improved BLS indexes tested by work such as we have performed as a feasible alternative to the maintenance of a fully representative military price index containing a large number of different series of military items.

FEASIBILITY OF USING "SHOULD COST" CONCEPTS

In May 1969 this Subcommittee recommended that GAO study the feasibility of incorporating into its reviews of contractor performance the "should cost" method of estimating contractor costs. This approach attempts to determine the amount that weapons systems or products ought to cost, given attainable efficiency and economy of operations on the part of contractors. In addition to the traditional methods of price analysis, using historical data, these reviews incorporate examinations into possible improvements in methods of production and other areas of potential cost reductions.

In May 1970, we reported to the Congress that it appeared to be feasible for us to apply "should cost" concepts in our post-award reviews and that we would perform a number of trial applications. The results of our trial reviews at four contractors' plants were reported to the Congress on February 26, 1971. (See attachment II, a digest of this report.) We found a number of areas at each of the plants where we believe action could have been taken by the contractor to lower costs to the Government. At one location for example, a one-time investment of about $580,000 in an improved production control system could result in annual savings estimated at over $3 million.

Our review also identified areas where Government contracting or administration practices adversely affected contract costs. For instance, at one contractor's plant the Government was requiring that spare parts be packed for indeterminate storage or overseas shipment although the

parts were being used for overhaul purposes in the United States. In this case the potential savings could range between $200,000 and $600,000 a year, depending on quantities procured.

The total of the savings which could accrue to the Government as a result of our reviews at these four plants could not be readily determined. In those instances, however, where we could measure the effect of suggested improvements in contractor and Government management practices, the annual savings amounted to almost $6 million.

We brought our findings to the attention of the procuring agencies and are monitoring the actions being taken to effect savings. We were recently advised, in one instance, that our findings would be useful in the negotiation of the follow-on production contracts, and that many of the points raised during our review have already been included in the initial discussion with contractor representatives.

We are planning additional reviews. However, our statutory authority to examine contractors' records is not broad enough to cover all the matters which should be considered. In addition to access to plant, supervisory and management personnel we should have access to:

--budgetary information,

--production control records,

--internal studies,

--profit forecasts,

--management information systems,

--labor standards, their development and application.

Under our current access-to-records authority certain of this information would usually be available as it related to a specific contract, but not on a plant wide basis.

Without broader authority we will have to depend on the voluntary cooperation of contractors for access to their plants and records. In this regard, along with our February report to the Congress we submitted proposed draft legislation to your Subcommittee on Economy in Government. We also submitted this draft legislation to the House and Senate Committees on Armed Services and the House and Senate Committees on Government Operations. We have had no indication to date that any legislation has been or will be introduced on our proposal.

Should Cost Efforts by Department of Defense Components

We believe that the greatest benefits will accrue to the Government when should cost concepts are applied by the procurement authorities as part of their preaward analysis of contractor's proposals. At that time, the results of should cost reviews would be of maximum effectiveness in assisting Government negotiators in arriving at fair and reasonable prices. Even more importantly, potential Government contractors will be more likely to accept should cost findings and to implement any needed corrective procedures prior to the award of a major contract.

One of the primary objectives of GAO's effort will therefore be to encourage the military services to apply should cost techniques

in their preparation for negotiation of selected non-competitive type procurements. We plan to examine into the reviews performed by the military services to (1) determine their adequacy and (2) evaluate the responsiveness of the contractors and the Government to recommendations of the review teams. Further, it is our intention to periodically analyze all of the findings of the various reviews to determine commonality of deficiencies and to develop recommendations for corrective action to minimize such problems in future contracts.

At the present time, the Department of the Army is utilizing should cost review techniques to a greater extent than the other services.

The Army has completed four reviews, has three underway, and is planning ten more within the next year. The Navy has completed one review, has one underway and has no others planned. The Air Force has completed one, and has one additional planned at this time.

We recently completed an evaluation of the first major review effort by the Army and it appears that the study was adequately conducted by a very capable staff and that significant savings will be realized.

METHOD FOR DETERMINING PROFIT OBJECTIVES FOR NEGOTIATED PROCUREMENT

During the hearings in November 1968 and in January 1969 the Subcommittee on Economy in Government of this Committee developed in considerable detail the need for a comprehensive study of profits realized by defense contractors. Subsequently, the Armed Forces Appropriation Authorization Act for fiscal year 1970, Public Law 91-121, approved November 19, 1969, directed GAO to study profits earned on negotiated contracts and subcontracts entered into by the Department of Defense, National Aeronautics and Space Administration, and the Coast Guard. Contracts of the Atomic Energy Commission awarded to meet requirements of the Department of Defense were also included.

Witnesses in the hearings mentioned above expressed the view that profit objectives for negotiated contracts should give greater weight to capital investment. The GAO, from an earlier study for the House Appropriations Committee, and from other contract audit work had also developed some thoughts as to the need for consideration of invested capital in negotiating defense contract profits. We therefore decided to make a concurrent study to determine the feasibility of relating capital employed to individual contracts and to ascertain the range of return on capital among individual contracts.

The procedures we followed and our findings are included in our report dated March 17, 1971, and in attachments to this statement. I will discuss here our recommendation.

We believe that of the various ratios available for evaluating profits earned by contractors, the percentage of profit earned on total capital investment--the total investment in all assets used in the

business, exclusive of any Government-owned items or leased items--is the most meaningful for evaluating defense profits. The rate of return on total capital investment relates earnings to total capital employed, regardless of whether it was provided by the owners of a business, its creditors, or its suppliers. Further, interest is not an allowable cost under Government contracts and must be paid out of profits. The recurring controversy over this matter can be eliminated by considering total capital in determining profit objectives. By basing profits on total capital, those contractors that employ debt capital will have the funds to pay interest and those that employ equity capital will have the funds to pay dividends.

In conducting our study we found that there was a great range in rates of return on total contractor capital committed to defense production. This was true both for contractors' overall annual rates of return that we obtained through use of a questionnaire, and for rates of return for individual contracts that we reviewed. We believe that at least part of the range in rate of return on defense work is due to the fact that under current defense contract negotiation procedures, little consideration is given to the amount of capital investment required from the contractor for contract performance. Instead, profit objectives are developed as a percentage of the anticipated costs of material, labor, and overhead. As a result, inequities can and do arise among contractors providing differing proportions of the capital required for contract performance where the risk, complexity and management problems are similar. Also, by relating profits to costs,

contractors in noncompetitive situations have little incentive to make investments in equipment which would increase efficiency. Such investments tend to lower rather than increase profits in the long run. Of course, other factors, such as whether or not the program involved will be continued, could be an overriding consideration in bringing about contractor investments to reduce costs.

We believe that it is essential to change the present system in order to motivate contractors to reduce costs under Government noncompetitive negotiated contracts. Where the acquisition of more efficient facilities by contractors will result in savings to the Government in the form of lower contract costs, contractors should be encouraged to make such investments. Proper consideration of contractor provided capital can cause a greater reliance on private capital to support defense production. To accomplish this, it is essential that capital investment supersede or supplement, as conditions warrant, estimated costs as a basis for negotiating profit rates. We realize that other factors are also important, such as life expectancy of a Government program and that contractors will not and should not invest in facilities simply because the investment will be in the base upon which profits are figured. Such investments will have to be economically attractive over the lives of the assets involved. Most important, however, the present strong incentive for contractors to minimize their investment for Government work should be eliminated.

In our opinion, a system providing for consideration of capital requirements in negotiating profit rates would be fairer than the

present system to both contractors and the Government. It should help greatly in identifying situations involving a high rate of return on capital and will provide information to the contracting officer that we believe now is available in many cases to the contractor.

We believe also that the system adopted should be used where applicable by all Government agencies since many contractors do work for more than one agency.

In our March 17, 1971, report to the Congress we recommended that the Office of Management and Budget take the lead in interagency development of uniform Government-wide guidelines for determining profit objectives for negotiating Government contracts — guidelines that will emphasize consideration of the total amount of contractor capital required where effective price competition is lacking.

Procedures for Consideration of Invested Capital

We have not attempted to develop detailed changes in the Armed Services Procurement Regulation (ASPR) required for consideration of invested capital in establishing negotiated defense contract profit objectives. However, we have some thoughts on this and related matters that may be of interest to the Committee.

The rate of return on investment in a business may be said to be made up of two major elements.

(1) A portion relating to return on the actual funds invested in the business.

(2) A portion to compensate for the business risks and degree of management capability required due to the complexity of the products produced.

Where a business provides all of the capital required in contract performance, it would be fairly easy to establish a profit objective for a particular contract. An overall rate of return on investment required in contract performance could be established based upon consideration of the rate of return currently being realized (1) by the industry involved, and (2) by the specific company involved on other than defense sales.

Where a portion of the capital is provided by the Government through progress payments and/or facilities and equipment, a more complicated situation results. In such cases where the Government capital is relatively minor, it might be desirable to develop an overall profit objective based upon the total contractor and Government capital required and then reduce the profit objective to reflect the interest factor on Government-furnished capital. This would leave a net profit objective representing a return on the contractors' capital and a return for the management effort involved.

In cases where the Government capital contribution is fairly substantial, it would probably be desirable to compute separately (1) a rate of return on the contractors' financial investment, and (2) the profit or fee warranted based on the management effort required.

In contracts such as for operation of Government-owned plants and for services, the capital required is furnished by the Government to a very large extent. In these cases the profit or fee has been and will continue to be based primarily on the management effort required.

Section 3-808 of ASPR and Chapter 12 of ASPR Manual for Contract Pricing set out guidelines used by DOD procurement officials to develop profit objectives for negotiated contracts where analysis of a contractor's proposed costs is required. These sections will require revision to reflect consideration of invested capital. We also believe that it should be made clear in ASPR that where investment data is submitted by contractors and used in pricing, it comes under the certification requirement established for compliance with P.L. 87-653 (Truth-in-Negotiations Act).

Who Should Develop the System?

We believe that the development of a system for considering contractor invested capital in negotiating Government contracts is properly a responsibility of the executive branch of the Government. Since several agencies are involved, we recommended that the Office of Management and Budget take the lead in development of the system.

There are numerous articles on the use of return on investment data and the concept is frequently used by industry for such purposes as determining whether to make plant investments, for pricing contracts or product lines, and for evaluating performance. Further, as discussed in our report, a considerable amount of work has been done by (1) NASA in developing and testing a contract negotiation procedure that provides for consideration of contractor invested capital, and (2) by DOD in developing a somewhat different system, but with the same objective. We think, as a starting point, OMB should evaluate the work done to date

by NASA and DOD, proceed with any further development or testing work considered necessary, and prescribe a system for use by all Government agencies. We do not believe the problems involved are insurmountable.

The procedures we followed in performing our studies are described in attachments III and IV to this statement.

GOVERNMENT-OWNED EQUIPMENT AND REAL PROPERTY FURNISHED TO CONTRACTORS

Since hearings on this subject before the Subcommittee on Economy in Government in November and December 1967, the Department of Defense has taken a number of actions designed to improve management of its property in the possession of contractors. The Department has adopted a very restrictive policy with respect to providing additional facilities to contractors, but there has been little actual progress in reducing the amount of Government-owned equipment and real property in the custody of contractors.

The adequacy of reimbursement to the Government for use of the equipment for commercial production continues to be a problem. We are currently examining into this matter, and other aspects of the management of industrial plant equipment at 28 contractors' plants. Our preliminary observations are that there continue to be deficiencies in contractors' records of machine utilization and a lack of uniformity in computing rent due for commercial use of Government-owned equipment.

Further details on this subject are included in Attachment V to this statement.

PUBLIC LAW 87-653 - THE TRUTH-IN-NEGOTIATIONS ACT

We are continuing to devote considerable attention to the audit of contracts negotiated by the Department of Defense. Attachment VI to my statement contains information on the work recently completed and reviews underway, as well as our plans for work in this area in the immediate future.

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This completes my formal statement.

ATTACHMENT I

COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

ACQUISITION OF MAJOR WEAPON SYSTEMS
Department of Defense B-163058

D I G E S T

WHY THE REVIEW WAS MADE

The large investment required in recent years for acquisition of major weapons has impacted heavily on the resources available for other national goals and priorities.

Acquiring these major weapons involves substantial long-range commitment of future expenditures. Because of deep concern in the Congress on these matters and because of evidence that the weapon systems acquisition process has serious weaknesses, the General Accounting Office (GAO) has undertaken to provide the Congress and the Department of Defense (DOD) with a continuing series of appraisals of those factors most closely related to effective performance in procuring major weapons. This report represents GAO's first such appraisal.

FINDINGS AND CONCLUSIONS

1. Concurrent with GAO's studies, over the last several months the Office of the Secretary of Defense (OSD) and the military services have been engaged in a substantial effort to identify and solve problems that have adversely affected the acquisition of major weapon systems in terms of compromised performance, delayed availability, and increased costs. GAO has found that generally the newer weapon procurements are following a slower development pace and procurement practices are more conservative than those of earlier periods. Because many of the current programs are in early states of acquisition, evidence of the results of the changed concepts is not yet available to adequately assess them, but the outlook is brighter.

2. The identification of need for a weapon system and the relative priority to be assigned its development is a fundamental problem in acquisition of weapon systems.

   Initial decisions as to which weapon system will be developed and the priority of its development is made by any one of the military services, but DOD has no organized method by which such proposals can be measured against its total needs. Such a method is now under development but it is in its infancy.

3. In recent months, the Office of the Secretary of Defense and the military services have paid extensive attention to the persistent problems of defining performance characteristics of weapon systems and

of determining the technical feasibility of achieving that performance. There are many encouraging signs that these problems are being abated.

Extensive efforts are being applied--early in the weapon development process--to identifying areas with high design risks and to constructing and testing the hardware itself to demonstrate the feasibility of high-risk components before proceeding with further development.

4. In the preparation of and attention given to cost-effectiveness determinations, there was a wide range of quality. This variation has lessened the value of these studies to the entire acquisition process.

5. One of the most important unresolved problems in the management of major acquisitions is the problem of organization. The essence of the problem appears to be attempts to combine the specialized roles of major weapon systems acquisition management into more or less traditional military command structures. Because of this, there usually are a large number of organizations not directly involved which can only negatively influence the project.

   It occurs to GAO that ideally there should be a direct relationship between the missions for which weapon systems requirements are determined; e.g., strategic deterrent, land warfare, ocean control, etc., and the organizational structure needed to acquire them. Such an arrangement would facilitate grouping related weapon systems in packages of common mission and would permit putting together an acquisition organization of appropriate size and stature to handle these matters. Eventually, GAO believes, program management and organization will evolve along mission lines.

   There are other alternatives involved, but whichever is chosen must clearly provide for someone to be in charge, to have authority to make decisions and to have full responsibility for the results. The Deputy Secretary of Defense has recognized that the correction of this problem is fundamental to any real improvement and has stated that he plans to pursue it aggressively.

6. GAO found that, on 61 weapon systems where complete cost data were available, estimates to develop and produce the weapon system had increased some $33.4 billion. About one third of this increase, or $9.5 billion, represented the difference between the estimate prepared when the system was first approved for development (the planning estimate) and an updated estimate prepared when the system was about to be placed under a development contract. The remaining $23.9 billion increase was due to changes in quantities to be acquired and to a combination of such things as engineering changes, revisions to estimates, and provisions for increased cost due to economic inflation. (See p. 58.)

RECOMMENDATIONS OR SUGGESTIONS

The Secretary of Defense should:

1. Make every effort to develop and perfect a Department-wide method--now in its early stages of development--to be followed by all military services for determining two things: first, what weapon systems are needed in relation to the Department's missions; second, what the priority of each should be in relation to other systems and their missions.

2. Establish guidelines and standards for the preparation and utilization of cost-effectiveness studies. These guidelines should require that studies be updated and reviewed as part of the decision process when major changes in cost and/or performance require revised schedules for funding commitments.

3. Place greater decisionmaking authority for each major acquisition in a single organization within the service concerned, with more direct control over the operations of weapon systems programs and with sufficient status to overcome organizational conflict between weapon system managers and the traditional functional organization.

4. Ensure that each selected acquisition report (a) contain a summary statement regarding the overall acceptability of the weapon for its mission, (b) recognize the relationships of other weapon systems complementary to the subject systems, and (c) reflect the current status of program accomplishment.

AGENCY ACTIONS AND UNRESOLVED ISSUES

DOD has been actively pursuing a program to improve the management of the acquisition of major weapons. The Deputy Secretary of Defense has assumed a significant role in this improvement program. It is too early to say how effective many of these actions will be; but, if effectively pursued, they should result in better management. As GAO has noted previously, beneficial results of some of these actions have become apparent.

The comments by DOD on this report express only a general reaction due to the limited amount of time GAO was able to allow for DOD review. Because of the nature and importance of this subject, DOD wants to examine the final report further.

MATTERS FOR CONSIDERATION BY THE CONGRESS

This report provides the Congress with an independent appraisal of the complex problems associated with weapon systems development and procurement by DOD--a matter of serious concern in the Congress.

COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

APPLICATION OF "SHOULD COST" CONCEPTS IN REVIEWS OF CONTRACTORS' OPERATIONS
Department of Defense B-159896

D I G E S T

WHY THE REVIEW WAS MADE

In May 1969, the Subcommittee on Economy in Government, Joint Economic Committee, reporting on "The Economics of Military Procurement," expressed concern that the traditional method of pricing negotiated contracts--primarily on the basis of past or historical costs--did not protect the interests of the Government adequately.

The Subcommittee recommended that the General Accounting Office (GAO)

> *"study the feasibility of incorporating into its audit and review of contractor performance the should cost method of estimating contractor costs on the basis of industrial engineering and financial management principles."*

The should-cost approach attempts to determine the amount that weapons systems or products ought to cost, given attainable efficiency and economy of operations.

In May 1970, GAO reported to the Congress that it appeared to be feasible to apply should-cost concepts in its reviews. GAO also stated that it would perform trial reviews of this type to obtain additional information concerning benefits that could be realized and problems that might be encountered.

This report presents GAO's findings and conclusions based on its trial applications of should-cost concepts.

FINDINGS AND CONCLUSIONS

On the basis of four trial reviews applying should-cost techniques, GAO has concluded that such reviews can be extremely beneficial and that it should make should-cost-type reviews in the future.

GAO found a number of areas at each of four contractor plants where increased management attention could result in lower costs to the Goverment. For example,

--improvements were needed in production planning and control,

--there was a need for increased competition in the procurement of material from subcontractors, and

--higher quality engineering talent was utilized than was required by the nature of the work being performed.

GAO brought the specific findings to the attention of appropriate contractor and agency officials and made suggestions for improvements. (See pp. 8 to 10 and 14 to 15.)

Although should-cost review techniques primarily are intended to find out how contractors' operations can be improved, they also lead to disclosures of areas where Government contracting or administration practices affect contract costs adversely. GAO noted instances of excessive packaging requirements, failure to consolidate purchasing, and excessive testing requirements. (See p. 14 and 15.)

The total savings which could accrue to the Government as a result of the GAO reviews and the resulting improvements in contractor and Government management practices cannot be determined readily because the effects on costs of certain of the suggestions could not be measured readily. In those instances where they could be determined, the savings amounted to almost $6 million. (See p. 33.)

The military services have performed should-cost reviews in order to be in a better position to negotiate contract prices for major weapons systems. Recognizing that the negotiation of contract prices is the responsibility of the procuring agency, GAO believes that its reviews should not be conducted in a preaward environment.

Future GAO reviews therefore will attempt to evaluate how procuring agencies and contract administrators are discharging their responsibilities and to suggest ways in which contractors can reduce the costs to the Government. (See p. 21.)

Procuring agencies that perform should-cost reviews prior to the awards of major contracts are in a strategic position to obtain contractor cooperation and concurrence in changes needed. Application of should-cost concepts during preaward reviews enables Government contracting officers to negotiate from positions of strength because the comprehensive findings and observations of the review teams are available during negotiations. Since this type of information is available, the contracting officer can influence the contractor to adopt recommendations for improved operations. (See p. 21.)

Although GAO had some success in encouraging contractors to study and/or improve their operations, GAO could not be as effective as the procuring agencies in motivating the contractors. There was no obligation on the part of contractors to accept the suggestions of the GAO review teams, and in some instances no interest was shown in considering GAO proposals objectively. In other instances contractors took a positive attitude toward reducing the costs of future operations. (See p. 22.)

The success of future reviews of this type by GAO probably will depend almost entirely on the cooperation of contractors and on the extent to which the Department of Defense contracting officials apply GAO findings and recommendations during negotiations of contracts. (See p. 22.)

AGENCY AND CONTRACTOR COMMENTS

The Office of the Assistant Secretary of Defense (Installations and Logistics) advised GAO that the Department of Defense agencies concerned would look into the specific matters reported by GAO at the contractors' plants.

Pertinent contractor comments were:

--GAO should place greater emphasis on reviewing overall Government and contractor procurement systems rather than detailed costs.

--There should be some additional evaluation of cost benefits resulting from should-cost reviews versus the costs of accomplishment.

--Additional statutory authority for GAO may not be necessary.

GAO does place primary emphasis on evaluating procurement systems rather than detailed costs, and GAO reviews are so designed. GAO also applies criteria to ensure, insofar as possible, that the benefits resulting from should-cost reviews will be significant in relation to the costs of making the reviews.

MATTERS FOR CONSIDERATION BY THE CONGRESS

Should-cost reviews require examinations into many facets of contractors' operations and management. The present provisions of GAO's statutory authority to examine contractors' records are not broad enough to enable GAO to cover all of the matters which should be considered. The Congress therefore may wish to consider expanding GAO's statutory authority to enable GAO to make effective should-cost reviews on an independent basis.

ATTACHMENT III

PROCEDURES USED BY THE GENERAL ACCOUNTING OFFICE IN DEVELOPING PROFITS OF DEFENSE CONTRACTORS

Questionaire Data

We developed a questionnaire to obtain annual information from selected contractors for the years 1966 through 1969 on sales, profits, total capital investment, and contractor equity investment for defense business and comparable commercial sales. Provision was made for separate reporting of the operating results for Government-owned contractor-operated (GOCO) facilities and similar activities requiring little or no contractor investment, to prevent distortion of data on return on capital.

Questionnaires were sent to 154 contractors which, as a group, had received (1) about 60 percent of recent DOD prime contract awards of $10,000 or more, (2) about 80 percent of similar NASA contract awards, and (3) a significant part of AEC and Coast Guard contract awards. The 154 contractors included the 81 largest DOD contractors, excluding oil companies and nonprofit companies, taken from a list of the 100 contractors and their subsidiaries receiving the largest dollar volume of military prime contracts of $10,000 or more in fiscal year 1969. Oil companies were excluded because a major part of the procurement involved

had been advertised or awarded through price competition and would not have been affected by DOD's policies in negotiating profit.

In summarizing data for large DOD contractors, a large corporation was excluded because its great volume of commercial sales would have substantially altered our commercial data and the result would not have been representative of most of the companies included in the study. Also, the defense business of 6 of the large contractors was primarily in GOCO type work which we summarized separately. Thus, our annual profit data for large contractors pertains to 74 companies.

We selected 63 additional contractors by taking (1) every 72nd contractor from an alphabetical list of DOD contractors receiving awards of $10,000 or more and totaling $500,000 or more in fiscal year 1968, exclusive of the 81 top contractors and their subsidiary companies already selected, and (2) some AEC contractors. Two of these contractors had gone out of business at the time of our study, so that our results for the smaller contractors are based on replies for 61 contractors. The 61 included 47 smaller defense contractors and 14 AEC contractors.

We also obtained data from 10 contractors who received a major part of their defense business in the form of subcontract awards.

A random selection of 40 of the 154 questionnaires was made for verification at the contractors' plants. Each of the above groups was represented in the 40 questionnaires selected. In addition, each remaining questionnaire was carefully reviewed and verified through calls, letters, and follow-up visits to the contractors' offices. We also checked to see whether the data provided agreed with similar data in the contractors' audited financial statements and appeared reasonable.

In summarizing the questionnaires for the 74 large DOD contractors we found that profit on defense work measured as a percent of sales was significantly lower than on comparable commercial work. Due to the effect of Government-furnished capital, we found that when profit was considered as a percent of total invested capital, the difference narrowed and when profit was considered as a percent of equity capital there was little difference between the rate of return for defense work and that for commercial work.

ATTACHMENT IV

PROCEDURES USED IN REVIEW OF INDIVIDUAL CONTRACTS

In reviewing hearings of the Subcommittee on Economy in Government on the subject of the economics of military procurement, we noted considerable concern that return on capital had not been considered in negotiating defense contract prices. For example, on page 16 of published hearings for November 11 through 14, 1968, Admiral Rickover discussed (1) two cases where a low percentage of profit based on costs was very misleading without consideration of the rate of return on capital, and (2) that under the present system of determining profits as a percentage of estimated costs a contractor who increases his efficiency may in the long run lose profit, since the latter is determined as a percent of cost.

Later, after our review had started, in hearings before the same Subcommittee in May of 1970, Mr. Robert N. Anthony, a former DOD comptroller, commented on the need for the computation of defense profits, as least in part, as a percentage of capital employed.

We also had developed some thoughts as to the need for consideration of invested capital in negotiating defense contract profits from work we had done in examining into the use of the weighted guidelines for the House Appropriations Committee in 1967 and from other contract audit work that we had done in the Department of Defense.

As a result, in addition to the annual profit data developed through our questionnaire, we decided to review a number of individual contracts

in order to determine whether it was generally practicable to develop return on investment data by contract and to see whether there was a great range in rates of return for individual contracts, particularly rates of return on capital

We initially considered obtaining a representative sample of recently completed defense contracts, however, we soon abandoned this idea because of the lack of a readily available identification of the universe from which a random sample could be selected. We planned to base our study on completed contracts in order that there would be no question as to what the actual profits were.

The population of Department of Defense contracts completed during any period is unkown but might be constructed by querying every contractor that had received contract awards. About 180,000 contract actions of $10,000 or more are consummated each year by DOD. However, even if the population was limited to contracts over $1 million we estimate that the number of such contract awards amounts to about 5000 per year and involve over 800 contractors.

One possible approach to obtaining a viable population could have been to obtain a listing from each of the 74 larger DOD contractors, covered in the questionnaire phase of our study, of all contracts completed during the four year period of our study, regardless of when they were awarded. This in itself would have been a formidable job since many of the 74 contractors were made up of numerous subsidiary companies. For example, one contractor consisted of more than 100 subsidiary companies as well as numerous organizational contracting

points below that level that would have been involved in reporting on completed contracts.

Once these listings were obtained it would have been necessary to check a number at the site to determine whether they were accurate and complete prior to inclusion in a population from which selections might be made. We have no real way of estimating how many contracts would be included in this population.

If we could have developed a population it would then have been necessary to take a random sample to determine the final sample size necessary to produce statistics that would be of an acceptable level of reliability. We decided that this approach would not be feasible and decided to use a judgment sample instead. A judgment sample cannot be objectively evaluated by statistical methods. This precludes determination of representativeness and any basis for measuring and quantitatively expressing the sampling error (precision) and associated degree of confidence in the sample estimates. From pilot reviews we estimated that it would take an average of 75 man-days to develop profit and investment data for a contract. On the basis of spending about 10 to 11 thousand man-days on this phase of the study, we estimated that we could cover a maximum of about 150 contracts. Further, to have the work done on a timely basis we planned on reviewing about 4 contracts at each of the 40 locations. We actually did work at 37 contractors' plants and these were selected based upon consideration of the following factors:

(1) Those with the largest volume of DOD awards during 1968.

(2) Products involved--we wanted to cover the major areas where defense dollars are being spent, such as, aircraft, missiles, tank-automotive, weapons, ammunition, electronics, communications equipment.

(3) Availability of qualified personnel and workload of our regional offices.

We computed profit as a percentage of sales and of costs for each contract. We also computed profit as a percentage of the contrator's capital employed in contract performance. We excluded consideration of Government-furnished capital and leased assets as we were interested in the rate of return on resources provided by the contractor. Our computation of total capital employed included provision for the cost of work in process, finished goods, accounts receivable, fixed assets, and other assets such as cash, raw materials, and prepaid expenses.

The assets discussed above were financed on an overall basis by current liabilities, long-term debt, and equity capital. We refer to this overall investment in assets as total capital invested (TCI). In computing rate of return on TCI, we added interest expense to net profit, since interest represents the return to the providers of debt capital.

After determining average contract total capital investment, we computed the approximate contract equity capital investment. This was done on the basis of the overall corporate relationship of equity capital to the total liabilities and capital. The rate of return on equity capital was based on net contract income before Federal income

taxes but after deducting all contractor expenses allocable to the contract, indcluding interest expense.

The profit rates we computed in our contract reviews were substantially higher than the annual profit rates developed from our questionnaires. A comparison of the rates of return on total capital investment for the 37 companies involved showed 28 companies with higher rates of return for the individual contracts and 9 companies with higher rates of return shown in their questionnaires. A discrepancy was not unexpected since we had used a judgment sample in our contract reviews and it would have been pure coincidence if the rates had turned out the same. We obtained numerous explanations for the differences between the contract and annual profit data of the 37 contractors. A few examples are as follows.

1. The contracts we reviewed for one company were primarily related to production of missiles and rockets. These showed about 6 times (34.2% versus 5.8% respectively) the annual rates of return on TCI that the company reported in the questionnaire. The lower annual rates of return were due to significant losses in other divisions involving shipyard operations, torpedo production, start up costs of a new ordnance plant, and certain fixed-price development contracts.

2. The contracts we reviewed for another company were for missiles and showed about 10 times the rate of return on TCI of the company as a whole (48% and 4.7% respectively). While the rates of return on contracts were representative of the particular company segment where they were performed, they were not

representative of the company as a whole. Two of the four contracts involved low investments and high contract profits due to the earning of incentives. Other segments of this corporation were incurring losses on a variety of aircraft and ship construction projects for DOD, thus pulling down the overall average rate of return on capital for the entire company.

3. Contracts we reviewed in the aerospace division of another corporation showed about 3 times the rate of return on TCI of the company as a whole (28.2% and 10.2% respectively). Four of the five contracts (3FPI & 1FFP) earned about twice the average profit on sales that was earned company wide. The rate of return on TCI was enhanced because the division that performed these contracts held substantial Government-furnished equipment and was the only division that received progress payments under its Government contracts.

4. At another company, the contracts we reviewed were for an ammunition component, flares and aircraft starting cartridges. The overall rate of return on TCI for the contracts was about 5 times the rate of return on DOD sales for the company as a whole. (101.5% and 19.9% respectively). The contractor is a sole source producer for the particular ammunition component and earned a high rate of profit on this item as a result of cost underruns, and an above average going-in profit rate. The contractor's investment in fixed assets was low because contractor-owned facilities were about 60 percent depreciated. In addition, the contractor had substantial Government-owned facilities used in

performing some of the contracts we reviewed. The starting cartridge contract that we reviewed earned less than one-fourth the rate of return on TCI that was earned on the ammunition component and flare contracts. There were other producers competing for the award of this contract and the going-in profit rates were lower.

5. Contracts covered at another contractor were for ammunition components. The rate of return on TCI for the contracts we examined was over four times the rate of return on DOD business for the corporation as a whole (115.2% and 27.0% respectively). The manufacture of the ammunition components utilized a substantial portion of the Government-owned facilities available and had a high turnover rate. Other products furnished to DOD included development and fabrication of ground handling equipment for missiles and rockets and commercial type proprietary items. The latter products did not provide as great a rate of return and at least in some instances this was caused by competition from other suppliers.

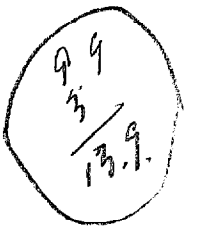
After considering the facts developed in checking our data with the contractors, our auditors did any additional review work considered necessary.

As a result of our contract review work we found that there was a great range in profits. For example, the rate of return on total capital investment ranged from a loss of 78 percent to a profit of 240 percent. The range in annual rate of return on total capital obtained through our questionnaire was also substantial. For example,

for 1969 the rate of return range for the 74 large DOD contractors was from -12 to +96, a range of 108. For all 4 years the range in rates of return on defense work of the 74 contractors was greater on defense work than on commercial work. For example, in 1969 the range on commercial work was from -33 percent to +39 percent, a range of 72 compared with 108 for the same year for defense work.

GOVERNMENT-OWNED PROPERTY FURNISHED TO CONTRACTORS

As of June 30, 1970, the cost of Department of Defense-owned facilities in contractors' custody was $9.9 billion. This amount is substantially the same as it was at June 30, 1967. The $9.9 billion is broken down as follwos: industrial plant equipment costing over $1,000 per item--$2.2 billion; other plant equipment-$2.4 billion, of which $63 million is ADP equipment; and industrial real property--$2.3 billion. There is no reported amount for special tooling and test equipment. It has been estimated by DOD officials to be around $3 billion.



Since the hearings on Government procurement and property management before the Subcommittee on Economy in Government in November and December 1967, the Department of Defense has taken a number of actions designed to improve its management of property in the possession of contractors. Most of these actions can be directly associated with specific recommendations of the Subcommittee. With respect to furnishing facilities to contractors, DOD has restated its policy of placing maximum reliance on the use of privately owned production equipment in connection with the performance of defense contracts. Under Defense Procurement Circular No. 63 dated September 30, 1968, the circumstances under which Government-owned facilities will be furnished to the contractor are very limited.

With respect to improving the management of equipment after it has been placed in the contractors' custody, DOD's principal actions have been:

1. Recommendations to the Office of Emergency Preparedness to revise rental rates. The rates were subsequently revised upward and are contained in Defense Mobilization Order 8555.1A dated June 1968;

2. Tightening up prior approval before Government-owned equipment can be used on non-defense work.

Although DOD has made some progress in its efforts to improve the management of equipment in the custody of contractors, there remain a number of problems concerning this equipment. Some of these relate to:

1. Determination of the adequacy of reimbursement to the Government for utilization of the property by contractors for commercial production.

2. Identifying equipment and facilities for which current or future needs are insufficient to warrant retention by the contractor.

3. Disposal of equipment and facilities no longer needed.

In our November 1967 report on need for improved controls over Government-owned property in contractors' plants (B-140389) we concluded that the determination of rent on a machine-by-machine basis would be more accurate and more equitable than the various methods in use. In November 1968 we advised the Subcommittee that DOD had been conducting a test of 20 contractors' plants to study the feasibility of maintaining records of equipment utilization on a machine-by-machine basis. The test, completed in the latter part of November 1968, produced such varied cost estimates for maintaining utilization records that the results were considered inconclusive as to whether the cost to maintain such records would be justified. We were advised by DOD officials at that time that the adoption of

a program to phase-out the use of Government-owned facilities in the possession of contractors was, in their opinion, a more practical solution to the problem of contractors using Government-owned equipment for purposes other than authorized in the contract.

In lieu of requiring utilization records on a machine-by-machine basis, DOD revised the Armed Services Procurement Regulation (ASPR) on June 30, 1969, to require contractors to submit in writing their basis for determining and allocating rental charges. Also, ASPR was revised to provide for establishing a minimum level of utilization for industrial equipment so that contracting officers can identify equipment with low usage for which retention cannot be justified.

DOD Program to Phase-Out Facilities in Possession of Contractors

To emphasize its basic policy to place maximum reliance on the use of privately-owned facilities in the performance of Government contracts, DOD issued a memorandum, dated March 4, 1970, calling for the phase-out of Government-owned facilities in the possession of contractors and subcontractors. Under the provisions of the memorandum each contractor, except non-profit contractors and contractors operating wholly Government-owned plants which do not compete with commercial firms, would be required to submit a plan which would advise the Department of Defense of its intention to replace in-place Government-owned facilities in its possession with privately owned facilities. Certain types of facilities were exempted and could be retained by contractors when removal to another location would be impractical or too costly in relation to their dollar value. All

other equipment was to be phased-out over a period not to exceed 5 years. Any decision to continue Government ownership of industrial facilities had to be justified to the Secretary of Defense as being in the best interest of the Government.

The military services and Defense Supply Agency first reported to the Assistant Secretary of Defense (Installations and Logistics) on the status of the phase-out program in December 1970. Out of 821 phase-out plans expected, 111 plans have been approved for phasing-out Government facilities now in the possession of contractors.

We were told that some contractors have not submitted plans because their production contracts with the Government will terminate before 1973 which is the latest date for implementation of the phase-out plan. Others delayed submitting phase-out plans because they favored procuring the Government-owned equipment in their possession but there is no legislation permitting the direct sale of such production equipment through negotiation with the holding contractor. The Department of Defense has since issued a memorandum on February 13, 1971, stating that the DOD was reassessing its mobilization production planning program. The memorandum authorizes the Secretaries of the Departments to approve exemptions or exceptions to the basic policy of the five year phase-out plan. We believe that this memorandum will suspend some of the activity which may have been anticipated in connection with the five-year phase-out plan.

GAO Reviews

Test equipment that should have been provided by private investment

Since our statement to the Subcommittee on Economy in Government in November 1968, concerning Government-owned property furnished to contractors, we have continued our surveillance of the DOD management of this property. Our most recent report on the subject pertained to an examination into the controls over test equipment acquired by contractors. On April 9, 1971, we reported (B-140389) to the Congress that significant quantities of plant equipment--specifically, general purpose test equipment--have been acquired as special test equipment and paid for by the Government. We found that five contractors had spent for the account of the Government an estimated $12 million for such equipment which should have been provided by private investment.

The acquisition of plant equipment as special test equipment has been permitted by the Armed Services Procurement Regulation definition of special test equipment which specifically includes all components of any assemblies of such equipment. This definition permits the acquisition of plant equipment as special test equipment when it is to be included in a group of test equipment items assembled for a specific use.

The Department of Defense concurred in our recommendation to revise the definition of special test equipment to exclude general-purpose equipment and said the revision would be made promptly.

Ineffective management of mobilization reserve equipment

In another report to the Congress (B-140389, dated April 7, 1970), we stated that there had been ineffective management, by two Army

Commands, of industrial plant equipment retained in mobilization reserve packages to meet production contingencies in time of war. These packages, valued at approximately $500 million, contain the equipment necessary to produce such items as artillery, rifles, ammunition casings, and tanks. Over a period of years the readiness status of that equipment had received insufficient attention. Some equipment packages did not contain enough equipment to meet planned production requirements; others had the capability for more production than DOD estimated would be needed; while others were being retained even though not identified with a specific producer or plant.

Our limited tests also showed that, during one 6-month period, the possibility existed that the Government had spent $6 million to buy new equipment--although similar unneeded equipment was being held by the two Army commands and was not reported as available for redistribution.

As a result of our report, DOD is making a study of its mobilization package program including policies and procedures for their establishment, justification, approval, retention, and management. The Army plans to review all such packages and report to the Defense Industrial Plant Equipment Center all excess production equipment.

Acquisition of facilities without disclosure to the Congress

In January 1970 we also reported (B-140389) that, in a number of cases, the acquisition of Government-owned contractor-operated facilities had been financed indirectly through the operating contractors, and thus had not been included in budget requests submitted

to the Congress. In these cases we found that the Departments of the Navy and Air Force had authorized contractors to provide financing for facilities costing $31 million and to recover costs involved through overhead charges against Government contracts. DOD has assured us that its internal regulations will be revised to (1) preclude indirect financing of industrial real property and (2) to ensure that acquisitions of such property are disclosed in budget submissions to the Congress.

GAO Follow-Up Review in Progress

As recommended in the April 1968 report of this Committee, we are currently reviewing the adequacy of DOD's controls over the acquisition and utilization of industrial plant equipment. In this conncetion, we are looking into acquisitions since the September 1968 instructions contained in Defense Procurement Circular No. 63 restricting the furnishing of equipment to the contractors. We are also examining into the need for retention of equipment and the use of equipment for commercial purposes, including the payment of rent for such use.

We are visiting a total of 28 contractors that have in their possession plant equipment costing about $347 million. The amounts of plant equipment at these locations range between $300,000 and $55.3 million.

Although we do not expect to complete our review until about September 1971, we have found that at the contractors we visited there has been very little acquisition of Government-owned equipment in

the past three years. However, there continues to be deficiencies in contractors' records of machine utilization, and we are still finding some cases where there is a lack of uniformity in computing rent due for commercial use of Government-owned equipment.

Also, in a number of instances we have found Government equipment being used on commercial work in excess of 25 percent of available time without obtaining prior approval from the Office of Emergency Preparedness as required by the Armed Services Procurement Regulation.

Legislation to Control Use of Government-Furnished Equipment

S. 1469, a bill to provide more effective control over the use of Government production equipment by private contractors, has been introduced in the 92nd Congress. This bill differs in certain important respects from similar bills introduced previously. With limited exceptions, it prohibits furnishing production equipment to all contractors, including those operating Government-owned plants. Current DOD policy as set forth in ASPR 13-301, concerning furnishing equipment to contractors, is consistent with this prohibition, except for furnishing equipment for use in a Government-owned contractor-operated facility.

It appears to us that, if the Government-owned contractor-operated concept for certain types of Defense items is to be retained, it will be necessary to continue the authority for the Government to provide facilities and equipment for such plants.

The previous bills provided for the negotiated sale of all production equipment at a fair and reasonable price to the holding

contractor. In commenting on this provision in a previous bill the Secretary of Defense gave his support to the proposed legislation adding that he felt such legislation would facilitate the phase-out of Government-owned facilities in the hands of contractors.

The legislative proposal defines production equipment and sets it apart from special-purpose production equipment, special-purpose production systems, and special tooling and special test equipment. It provides for the sale of production equipment by competitive sale and limits negotiated sale to items which meet the definition of special purpose production equipment, etc. We believe this provision will, to a considerable degree, diminish the Government's opportunity to divest itself of Government-owned equipment by delaying the sale of production equipment until the contracts are completed or until it is determined that the equipment is no longer needed for the purpose intended by the contractor. Under the provisions of the previous proposed legislation, negotiations could be conducted with contractors even though the equipment was currently being used in production under Government contracts. We believe the Department's plan to divest itself of Government-owned facilities could be accelerated by authorizing sale by negotiation of all equipment to holding contractors. Although the competitive sale requirement of the present legislation should result in greater assurance that amounts realized from disposal will be fair and reasonable, we believe that the requirement will extend the time period that the Department will be managing large inventories of Government-owned production equipment.

In addition, S. 1469 would also (1) require a periodic review of the circumstances under which any production equipment was furnished so that the equipment could be removed as soon as the initial reason for providing it ceased to exist; and (2) prohibit the use of Government equipment on commercial work.

We agree that there is need for periodic review of the utilization of equipment to determine whether its retention by the contractor is appropriate. On the other hand, some flexibility might be warranted with respect to the commercial use of equipment. In this connection, we note that the position of the Office of Emergency Preparedness is that such use may help keep the equipment in a high state of operational readiness through regular usage, may result in substantial savings to the Government, and may avoid an inequity to the contractor who is required to retain Government equipment in place intermingled with contractor-owned equipment required for commercial work.

We noted that the definition of production equipment excludes special-purpose production equipment, special-purpose production systems, special tooling equipment, and special test equipment for commercial purposes. Also, these types of equipment are excluded from periodic reviews to determine whether the circumstances that existed prior to furnishing it to the contractor still exist. If it is desired to have the same restrictions apply to special production equipment, special-purpose production systems, special tooling equipment, and special test equipment, as well as production equipment, appropriate changes should be made in the language of the bill.

ATTACHMENT VI

PUBLIC LAW 87-653 - THE TRUTH-IN-NEGOTIATIONS ACT

As you know, the Law requires a contractor to submit certified cost or pricing data for use in negotiations of noncompetitive contracts expected to exceed $100,000. It also provides the Government a legal right to a price adjustment if the price had been increased because of submission of noncurrent, incomplete or inaccurate cost data.

There are several basic exceptions in the law to the requirement for submission of cost or pricing data. One is when the contracting officer determines that there is adequate price competition; a second is when the price is based on a catalog price of a commercial item sold in substantial quantities to the general public; a third is when the head of the agency determines that the requirements for certified cost data may be waived.

In our contract audits we cover the basic provisions of the law from the standpoint of their effective implementation by DOD. We review selected individual contracts over $100,000 whose prices were established on the basis of certified data. We perform broad examinations into contracting officers' determinations that the exceptions exist and certified data are not required

In a statement before your subcommittee on December 29, 1969, we discussed our examination of prices negotiated for 34 procurements of general purpose bomb bodies valued at $343 million awarded to six

different contractors. We reported to the Congress on December 11, 1969, that

--prices for 33 procurements of about $309 million were higher by about $13.9 million than indicated by cost or pricing data available to the contractors prior to each negotiation, and

--prices for 12 procurements of about $172 million included cost estimates of about $46 million for which sound and realistic cost or pricing data were not available.

For each of the six contractors, the negotiated average profit ranged from about 6.7 percent to 11.4 percent of negotiated costs, while actual average profits ranged from 6.4 percent to 30.2 percent of actual costs.

Another report to the Congress on July 15, 1969, describes our review of prices negotiated under two contracts valued at about $23.3 million for 750-pound bomb fuzes. Negotiated prices included estimated costs that were about $3.5 million higher than indicated by cost information available to the contractor at the time of negotiation. The contractor had no factual support for other estimates of about $1.6 million consisting of anticipated price increases, production lot losses, scrap and rework. Since the contract was not completed at the time of our review, we did not compare the contractor's negotiated profit of about 10 percent with the actual profit realized. After our review, the contractor agreed to a price adjustment of $1.3 million.

I would now like to discuss our audits since January 1970, and our plans for the immediate future.

Contract Prices Based on Certified Cost or Pricing Data

We have issued 16 reports to the Congress and agency officials since January 1, 1970, covering 56 contracts having a value of about $278 million awarded to 34 contractors. Our findings on overpricing totaled about $6 million. Reviews of contracts awarded 13 other contractors are underway.

A summary report will be sent to the Congress on the work performed each fiscal year. These summary reports, the first of which will cover individual reports issued during fiscal year 1971, will provide us with a basis for identifying and planning broad examinations into selected areas where improvements appear to be needed.

On December 29, 1970, we reported to the Congress on the effectiveness of revised procedures implementing the Truth-In-Negotiations Act in achieving fair and reasonable prices. We also reported on the problems experienced by contractors and agency officials in applying the Act and the implementing regulations. We reviewed 35 contracts, valued at $135 million awarded to 21 contractors. The contracts were primarily awarded during 1968. For 18 procurements of $47 million, the data available to the contractors at the time of negotiation indicated that negotiated prices should have been $1.5 million lower. Little or no overpricing was found in the other 17 procurements amounting to about $88 million. The effectiveness of the Act seems to depend largely on how well it is administered by Defense procurement, audit, and technical personnel. It seems too that the cost or pricing data provisions of the Act and the regulations have posed no serious problems for Government or industry.

A Defense regulation effective January 1, 1970, established the requirement for prime contractors to obtain and submit cost or pricing data in support of major prospective subcontracts to be awarded on the basis of cost data. Previously there was no specific regulation requiring such a submission although many contractors did so. The prime contractor's certification covers the accuracy, completeness, and currency of the subcontractor data.

Since subcontract cost estimates are a major element in contract prices, we are currently planning a review to find out if (1) the new regulation is being effectively implemented by major Defense procurement offices, (2) subcontract estimates are reasonable in relation to available cost data, and (3) improvements in this area are needed.

Regarding the provisions in the law which give the Government a legal right to price adjustments, we reported to the Congress in 1966 on the need for the Defense Contract Audit Agency to establish a formal program for conducting postaward audits as a means of identifying defective pricing data. The Audit Agency formally established a program for regularly scheduled postaward reviews in March 1966. To aid the Audit Agency in this work, Congress enacted legislation which permits the auditors to examine cost records related to firm fixed-price contracts. The objectives of the postaward audits are to identify those instances where prices were increased because data submitted were noncurrent, incomplete, or inaccurate, and to provide the contracting officer with the facts needed to effect price reductions.

By June 30, 1970, the Audit Agency had performed postaward audits on about 4,000 contracts totaling $38 billion. Defective pricing of $185 million on 787 contracts was reported to contracting officials. These officials had completed actions on 185 contracts and had reduced contract prices by about $14 million.

We are currently beginning a review of the Defense Contract Audit Agency's defective pricing program. We plan to determine the efficiency and effectiveness of the Audit Agency's performance, its basis for selecting contracts for review, the audit techniques employed, and the benefits compared with the costs of the program.

Exceptions to Obtaining Certified Cost or Pricing Data

1. Contract prices based on adequate price competition

This year we started a review of a number of negotiated procurements subjected to the provisions of Public Law 87-653 where the price was determined to have been based on adequate price competition. Defense regulations establish criteria for identifying the presence of adequate price competition. We will consider whether these standards are being correctly and consistently applied and whether, in practice, they provide a sound basis for contract pricing without requiring submission of certified cost data. We will also evaluate the application and effectiveness of these standards to subcontract pricing.

A provision of the law requires discussions with all offerors in a competitive range, except where it can be clearly shown from the existence of adequate competition that acceptance of the initial proposal withough discussion would result in a fair and reasonable price and offerors are notified in advance that award may be

made without discussions. We will review the circumstances under which discussions are conducted with competing offerors in order to understand the objectives, the substance, and the effect of these discussions on contract pricing. We will also consider the circumstances and justification for awarding contracts without discussions.

2. Contract prices based on catalog prices

Public Law 87-653 provides that proposed prices may be accepted without requiring submission of certified cost data if they are based on catalog prices of commercial items sold in substantial quantities to the public. We examined 68 contracts negotiated on this basis and in December 1969 we reported to the Congress on needed improvements.

For 45 of the 68 contracts, there was no record of the information used to determine that substantial quantities had been sold to the public. Defense regulations do not provide guidance with respect to the amount of commercial sales that should be considered substantial.

We found instances where the largest individual commercial sale of an item at a catalog price was for substantially smaller quantities than those being purchased under individual Defense contracts. Under these circumstances there was no assurance that the price paid by the Defense Department would have been paid by commercial buyers for comparable quantities.

We recommended that, to improve determinations of whether the catalog price exception should apply, the Defense Department

1. provide more definite criteria for determining what constitutes substantial sales to the public;
2. require appropriate consideration of relative quantities involved in individual commercial sales and sales to the Government;
3. consider requiring the contracting officer to (a) obtain a certification from the contractor that the sales data submitted are complete and accurate, (b) include a provision in each proposal and any resulting contract which would permit Government representatives to examine the contractor's pertinent records in order to verify the information submitted in support of the proposal, and (c) verify sales data obtained from contractors.

The Defense Department, in September 1970, circulated to industry associations and Government agencies for comment a proposed revision to its regulations which covered most of our recommendations. The proposed changes are still under consideration by the Defense Department.

3. Waivers of requirements for certified cost data

Public Law 87-653 authorizes the head of an agency to waive the requirement for certified cost data in exceptional cases, provided he states in writing the reasons for such determination. Since enactment of the law, about 85 Secretarial waivers have been issued by Defense officials. Most of the waivers were considered necessary because the item was urgently needed and the contractor was sole source.

Some contractors would not provide cost or pricing data or a certificate, or accept a price adjustment clause on the grounds that the item was competitive or that its price was based on an established catalog or market price. Waivers have also been granted for purchase from foreign firms. One waiver has been made for procurements from Canadian contractors under special arrangements by which the Canadian Government audits the contracts and obtains a refund for the United States of any profits over 10 percent of estimated costs.