



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON 25

B-133396

SEP 18 1961

Honorable Sam Rayburn
Speaker of the House of Representatives

Dear Mr. Speaker:

Enclosed is our report on review of noncompetitive procurement of aeronautical replacement spare parts within the Department of Defense. The matters discussed in the report were the subject of hearings during May, June, and July 1961 before the Subcommittee for Special Investigations, Committee on Armed Services, House of Representatives.

Our review disclosed that, notwithstanding the provisions of the Armed Services Procurement Act, the stated policy of the Department of Defense, and numerous statements by Department of Defense officials regarding their efforts to get the maximum amount of competition, in actual practice the military services have continued to buy the majority of aeronautical replacement spare parts from the original manufacturers of military equipment without real attempts to obtain competition for the parts. The Department of Defense has estimated that its annual expenditure for the procurement of these parts is \$1.2 billion.

Contracting officers generally procure the parts on open contract with the prime contractor and have made little effort to find or develop competitive sources of supply. As a result, there has been a substantial amount of unnecessary noncompetitive procurement of aeronautical replacement spare parts. We believe that the failure of the military services to use competitive buying to the maximum practicable extent increases the price of the applicable spare parts by about 50 percent.

We believe that the primary reason for the military services' practice of buying the majority of their aeronautical replacement spare parts noncompetitively on open contract is to be found in the simplicity and expediency of this method of procurement. We believe, however, that this form of procurement generally results in higher prices, fosters and subsidizes inefficient and uneconomical practices in industry, and ignores or circumvents a basic policy of the Congress that all qualified suppliers shall have an equal opportunity to compete for the Government's business. We believe also that the maximum practicable

use of competition in Government procurement programs is fundamentally sound and will promote efficiency and economy in both Government and industry. Further, it is our opinion that the unsatisfactory conditions of long duration which continued to prevail in the military services' receipt and control of contractor-furnished technical data at the time of our review were clearly indicative of a lack of any real interest in the use of this data to obtain the maximum practicable amount of competition in the procurement of aeronautical replacement spare parts.

We also found unsatisfactory conditions in the military services' receipt, control, and use of contractor-furnished data. The Department of Defense believes that these conditions constitute one of the most intricate and difficult problems confronting management in the logistics area and that, until they are corrected, progress by the military services in increasing competitive procurement of aeronautical replacement spare parts will be seriously impeded.

Our review of the military services' use of noncompetitive contracts in their procurement of replacement spare parts included an examination of the circumstances which existed in the expenditure of more than \$106 million for 2,770 specific parts. Of this number, 1,675 parts, with a total price of more than \$66 million, were completely manufactured by subcontractors to the prime contractors who were awarded the Government contracts. The prime contractors had more than one subcontractor source of supply for 834 of the 1,675 replacement spare parts, and we believe it is reasonable to conclude that in these instances competitive sources of supply were also available to the procuring military service. The other 1,095 parts, with a total price of more than \$39 million, were manufactured partially or completely by the prime contractor. Many of these parts are items for which the services had or should have had complete technical data; the Government had or should have had the unrestricted right to use this data for any Government purpose, including competitive procurement; and the types of items involved were suitable for competitive procurement.

In commenting on our findings, the Assistant Secretary of Defense (Installations and Logistics) advised us that the Department of

Defense is in complete agreement with the underlying premise stated in our report "that the maximum practicable use of competition in Government procurement programs is fundamentally sound and will promote efficiency and economy in both Government and industry." He said that the military services recognize that they are not at present obtaining competition to the maximum practicable extent in the procurement of aeronautical replacement spare parts and that they believe there are substantial competitive opportunities in other areas of military procurement that have not yet been adequately exploited. He considers this to be one of the major problems in defense spending today and a primary goal of the Department of Defense is to minimize unnecessary noncompetitive procurement wherever it occurs.

Department of Defense programs designed to hasten the progress of competitive procurement are already in effect or planned and are consistent with the corrective actions we proposed in our report. The Assistant Secretary stated that, despite the most intensive efforts, many of the problems will persist for some time to come. He does not believe it is possible at this time to estimate with any degree of accuracy what the ultimate potential is for competition in the procurement of aeronautical replacement spare parts. Taking into consideration the problems to be dealt with, the Department of Defense believes a realistic target for the near future would be the achievement of competition in the range of 30 percent of total dollars.

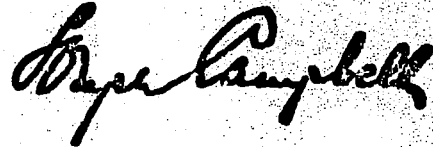
Some of the programs under way have already attained some degree of success in increasing competitive procurement; however, the success of other actions taken or planned is largely prospective in nature and their effectiveness will depend upon the manner in which they are carried out. The Department of Defense is to be complimented for its aggressiveness in taking prompt corrective action and for its willingness and desire to meet the many challenges that are presented in the resolution of this problem.

As a part of our continuous review of Department of Defense activities, we plan in our future examinations to make further inquiries into the progress of the military services in promoting greater competitive procurement.

B-133396

This report is also being sent today to the President of the Senate. Copies are being sent to the President of the United States and to the Secretaries of Defense, the Air Force, the Army, and the Navy.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "W. W. Campbell".

**Comptroller General
of the United States**

Enclosure

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the Departments of Defense and the Air
Force, Army, and Navy during the period
of this review**

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REPORT ON REVIEW
OF
NONCOMPETITIVE PROCUREMENT OF
AERONAUTICAL REPLACEMENT SPARE PARTS
WITHIN THE
DEPARTMENT OF DEFENSE

The General Accounting Office has made a selective review of noncompetitive procurement of aeronautical replacement spare parts within the Department of Defense. The purpose of our review was to examine into the extent that the military departments were awarding noncompetitive contracts for aeronautical replacement spare parts when they had, or should have had, all the data necessary for competitive buying. We also attempted to learn the approximate price advantage that occurs when items previously purchased noncompetitively are subsequently purchased by obtaining competition. We did not attempt to establish whether or not, in a particular case, the Government was charged excessive prices on parts purchased noncompetitively, because to do so would have required greatly expanding the scope of our work and it was not essential to the basic objectives of our review. Hence, we did not undertake to evaluate the cost of receiving, inspecting, preserving, and packaging parts furnished by the prime contractors to the military departments, nor did we attempt to determine and evaluate the reasonableness of profit earned on the sale of these parts. Since our examination was not directed to these aspects, we have not asked the various contractors to furnish comments on the

results of our review. Consequently, we have omitted the names of the firms from whom the parts were purchased.

This review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), the Accounting and Auditing Act of 1950 (31 U.S.C. 67), and the authority of the Comptroller General to examine contractors' records, as set forth in 10 U.S.C. 2313(b). The scope of our review is described on page 47 of this report.

INTRODUCTION

The Armed Services Procurement Act, as codified at 10 U.S.C. 2304(a), states that purchases of or contracts for property or services shall be made by formal advertising; however, the head of a military agency may negotiate for such a purchase or contract if the circumstances of the procurement meet one or more of the 17 exceptions cited in subsection 2304(a). The legislative history of these provisions indicates clearly that the Congress intended the military departments to continue to make the greater volume of their purchases and contracts by formal advertising and that this method should be used in all procurements in which it could be reasonably expected to give satisfactory results, even though circumstances might exist which would be sufficient to authorize negotiations under one or more of the exceptions.

The general policy of the Department of Defense, as set forth in the Armed Services Procurement Regulation 1-300.1, states that all procurements, whether by formal advertising or by negotiation, shall be made on a competitive basis to the maximum practicable extent. This method of procurement is believed to be the most advantageous to the Government--price, quality, and other factors considered. A basic prerequisite of competitive procurement is the ability of the procuring organization to fully describe the article or service needed, so that prospective suppliers will know exactly what is required. An effective means of providing an adequate description is through the use of engineering data, such as detailed specifications and drawings of the article to be procured.

Defense contracts for research, development, limited production for test and evaluation, and production of specialized military items usually require contractors to prepare and submit at Government expense engineering data for subsequent use in maintenance, inspection, and procurement of the article or its component parts. If the benefits of competition are to be realized in the subsequent procurement of these military items, it is essential that the military services obtain and use the engineering data provided under Government contracts.

We selected the procurement of aeronautical spare parts for stock replenishment for this review of the military services' buying practices because the parts have been previously procured and the related engineering data is or should be available for use in describing the needed articles to potential suppliers. The noncompetitive spare parts procurements covered in our review were awarded to sole-source suppliers under open contracts. These are agreements negotiated on an annual basis, which provide that the military departments will buy unknown quantities of unspecified parts during the year and that prices will be negotiated as provided in the contract terms. Almost all the noncompetitive procurements examined during our review were negotiated under the authority contained in 10 U.S.C. 2304(a)(10) which provides that contracts may be negotiated if they are for property or services for which it is impracticable to obtain competition.

During fiscal years 1959 and 1960, procurement of aeronautical replacement spare parts at the procurement centers included in our review amounted to over \$2.2 billion. Of this amount over

\$1.5 billion was expended by the Air Force, \$53 million by the Army, and \$742 million by the Navy. We were unable to determine the extent of competition in the Air Force procurements; however, Army and Navy records contained the following breakdowns:

Army Transportation Materiel Command:		
Advertised procurement		\$ 1,089,000
Negotiated procurement:		
Competitive	\$ 944,000	
Sole source	<u>51,910,000</u>	<u>52,854,000</u>
Total		<u>\$53,943,000</u>
Navy Aviation Supply Office:		
Advertised procurement		\$ 36,600,000
Negotiated procurement:		
Competitive	\$171,100,000	
Sole source	<u>534,400,000</u>	<u>705,500,000</u>
Total		<u>\$742,100,000</u>

Our review of the military services' use of noncompetitive contracts in their procurement of replacement spare parts included an examination of the circumstances which existed in the expenditure of more than \$106 million for 2,770 specific parts. These specific procurements were selected from noncompetitive contracts totaling more than \$500 million. Of the 2,770 parts reviewed, 1,675, with a total price of more than \$66 million, were completely manufactured by subcontractors to the prime contractors who were awarded the Government contracts. The other 1,095 parts, with a total price of more than \$39 million, were manufactured partially or completely by the prime contractors.

The principal Department of Defense officials responsible for administration of the activities discussed in this report are listed in appendix V.

SUMMARY FINDINGS, CONCLUSIONS, AND AGENCY COMMENTS

Notwithstanding the provisions of the Armed Services Procurement Act, the stated policy of the Department of Defense and numerous statements by Department of Defense officials regarding their efforts to get the maximum amount of competition, in actual practice the military services have continued to buy the majority of aeronautical replacement spare parts from the original manufacturers of military equipment and, as a result, there has been a substantial amount of unnecessary noncompetitive procurement of aeronautical replacement spare parts. We believe that this failure of the military services to use competitive buying to the maximum practicable extent increases the price of the applicable spare parts by about 50 percent. With regard to subcontracted parts, these price increases include prime contractor profits and allocations of indirect costs.

Generally, contracting officers have made little effort to find or develop competitive sources of supply. Further, the problem of finding and developing competitive sources of supply has been greatly aggravated by the fact that none of the services have any really effective control over technical data bought from contractors under previous contracts, which could be used for competitive procurement. Although defense contracts usually provide that contractors are to furnish complete technical data and unrestricted rights to the Government, we found that 2,047 of the 2,770 parts we examined were purchased noncompetitively on the basis of determinations that adequate data was not available to use in soliciting bids or that the data available was not adequate to

assure that the parts would perform the same function as the parts being replaced. Another 147 of the parts were purchased from manufacturers who had been determined to be sole sources of supply and 537 parts were purchased noncompetitively because of determinations that competition was precluded by the existence of patent rights, secret processes, or other similar circumstances.

Our review of the circumstances surrounding the procurement of 2,770 different kinds of replacement spare parts disclosed that 1,675 of the parts were completely fabricated by subcontractors to the contractors from whom the Government was buying the parts. In each case the military services had determined that competitive procurement of the needed parts was impracticable. In practice, however, we found 834 instances where the so-called sole-source supplier had several subcontractors who could manufacture the parts and that the suppliers frequently solicited competitive bids in awarding subcontracts. We believe that it is reasonable to assume, in these instances, that competitive sources of supply would also have been available to the military services.

Many of the other 1,095 kinds of parts which are still produced only by the original manufacturer of the equipment are items for which the services had or should have had complete technical data; the Government had or should have had the unrestricted right to use this data for any Government purpose, including competitive procurement; and the types of items involved were suitable for competitive procurement.

We believe that the primary reason for the military services' practice of buying the majority of their aeronautical replacement

spare parts noncompetitively on open contract is to be found in the simplicity and expediency of this method of procurement. We believe, however, that this form of procurement generally results in higher prices, fosters and subsidizes inefficient and uneconomical practices in industry, and ignores or circumvents a basic policy of the Congress that all qualified suppliers shall have an equal opportunity to compete for the Government's business. We believe also that the maximum practicable use of competition in Government procurement programs is fundamentally sound and will promote efficiency and economy in both Government and industry. Further, it is our opinion that the unsatisfactory conditions of long duration which continued to prevail in the military services' receipt and control of contractor-furnished technical data at the time of our review were clearly indicative of a lack of any real interest in the use of this data to maximize competition in the procurement of aeronautical replacement spare parts. In the absence of a concerted and major effort by the military services to use the contractor-furnished technical data in their procurement programs, it is unlikely that the data and related Government rights can ever be effectively managed, although the Government will continue to accumulate millions of costly drawings which are not considered to be adequate or usable for procurement purposes.

In view of the above, we proposed to the Secretary of Defense that:

1. Immediate steps be taken to reverse the current practice of routinely using negotiated noncompetitive contracting without real justification, rather than relying upon full and free competition to assure the Government's obtaining the best available products at the lowest prices;

2. Immediate steps be taken to correct at the earliest possible date the unsatisfactory conditions which exist in the control over and use of technical data in the Air Force, Army, and Navy;
3. Contract terms providing that the Government receive complete technical data and unrestricted rights to use the data for all Government purposes be vigorously enforced;
4. Regulations of the Department of Defense be revised to provide specific penalties against contractors who fail to furnish on a timely basis the technical data required by contracts; and
5. Regulations of the Department of Defense be amended to prohibit the use of open contracts for other than emergency procurement of urgently needed supplies.

The Assistant Secretary of Defense (Installations and Logistics) in commenting on our findings advised us that the Department of Defense is in complete agreement with the underlying premise stated in the report "that the maximum practicable use of competition in Government procurement programs is fundamentally sound and will promote efficiency and economy in both Government and industry." He said the military services recognize that they are not at present obtaining competition to the maximum practicable extent in the procurement of aeronautical replacement spare parts and that they believe there are substantial competitive opportunities in other areas of military procurement that have not yet been adequately exploited. He considers that this is one of the major problems in defense spending today and that a primary goal of the Department of Defense is to minimize unnecessary noncompetitive procurement wherever it occurs.

The Department of Defense agrees with our first four proposals for corrective action, and programs designed to hasten the progress of competitive procurement are already in effect or planned.

In connection with our last proposal, the Department of Defense agrees that measures are necessary to insure against the misuse of open contracts. Accordingly, instructions have been issued which require that, before any part may be bought under open contract, it must be separately evaluated to determine whether competitive procurement or procurement from other than the original source is practicable. The Department also believes that, in addition to its use for emergency procurements, the open contract is a highly efficient instrument for handling large numbers of orders which necessarily must be placed with the same contractor over a period of time.

We agree that the open contract is an efficient procurement instrument and we believe that, if properly controlled, it can be an economical means of procuring military equipment.

The Assistant Secretary stated that despite the most intensive efforts, many of the problems will persist for some time to come. He does not believe that it is possible at this time to estimate with any degree of accuracy what the ultimate potential is for competition in the procurement of aeronautical replacement spare parts. Taking into consideration the problems to be dealt with, the Department of Defense believes that a realistic target for the near future would be the achievement of competition in the range of 30 percent of total dollar value of such procurement.

Some of the programs underway have already been successful to some degree in increasing competitive procurement; however, the success of other actions taken or planned is largely prospective in nature and their effectiveness will depend upon the manner in

which they are carried out. The Department of Defense is to be complimented for its aggressiveness in taking prompt corrective action and for its willingness and desire to meet the many challenges that are presented in the resolution of this problem.

With regard to the invitation of the Department of Defense for the assignment of full-time General Accounting Office people to assist the Department in its efforts to reduce unnecessary non-competitive procurement, we have advised the Secretary of Defense that it is our belief that the nature of our responsibility and organization is such that we can expect to make a more effective over-all contribution to the identification and resolution of significant problems in the management of the Government's affairs by maintaining an independent approach in the utilization of our staff. We stated, however, that we would be pleased to explore with the Secretary, other opportunities for cooperative effort as may seem feasible.

DETAILED FINDINGS, CONCLUSIONS, AND AGENCY COMMENTS

NONCOMPETITIVE PROCUREMENT OF 1,675 PARTS
COMPLETELY MANUFACTURED BY SUBCONTRACTORS

Our review included an examination of the circumstances involved in the noncompetitive procurement of 1,675 replacement spare parts which were completely manufactured by subcontractors to the prime contractors. We have determined that the prime contractors had more than one subcontractor source of supply for 834 of these 1,675 replacement spare parts, and we believe that it is reasonable to conclude that competitive sources of supply were also available to the procuring military service. The total price to the military services for these 1,675 parts was about \$66 million which is \$22 million higher than the total of the subcontractors' prices of about \$44 million.

We are unable to estimate the net savings to the Government which could be expected to have resulted from competitive or direct procurement of the 1,675 subcontracted parts, since the prime contractors' prices included allocations of indirect expenses which, in the absence of these sales, would have been allocated in part to other Government sales. We believe, however, that the \$22 million differential in the prices provides an indication of the savings which can be expected from competition or, alternatively, from procurement of proprietary parts directly from a manufacturer entitled to use of the proprietary data.

Following are examples of our findings with regard to the circumstances involved in the noncompetitive procurement of a number of the 1,675 replacement spare parts which were completely

manufactured by subcontractors, and additional examples are contained in appendix I.

1. Arrow assembly--airplane mooring anchor
(appendix I, line 74)

During the 12-month period ending August 1959, the Army Transportation Materiel Command (TCMAC) purchased 19,635 arrow assemblies from a contractor who purchased the assemblies in completed form from a subcontractor. The prime contractor purchased the assemblies for \$1 each, or a total price of \$19,635, and sold them to the Army for \$1.25 each, or a total price of \$24,582.31. During this same period the Air Force procured 24,000 of these arrow assemblies under formal advertising procedures for 24 cents each, or a total price of \$5,856. An Air Force drawing is needed for fabrication of this part, and it is identified as an Air Force-Navy Aeronautical Standard item first developed in 1936. Had the Army purchased the assemblies at a price comparable to that paid by the Air Force, its total price would have been \$4,712.40, or a reduction of about \$19,830.

The Army has advised us that this part is now considered a competitive-type item and that procurements are being made competitively at a considerable price reduction. Approximately 16,000 arrow assemblies were purchased in April 1961 at a unit price of 16.5 cents.

2. Retaining nuts (appendix I, line 176)

On March 11, 1960, the Navy Aviation Supply Office (ASO) purchased 9,889 retaining nuts from a prime contractor. After soliciting competitive bids from three manufacturers, the prime contractor purchased the nuts from the low bidder for \$1.09 each, or a total price of \$10,779.01. The other two manufacturers submitted bids of \$1.74 each and \$3 each. The prime contractor's initial price to the Navy was \$15.24 each, or a total of \$150,708. This was subsequently revised to \$4.01 each, or a total price of \$39,654.89. This latter price is subject to further revision, upward or downward, in accordance with the prime contractor's annual over-all pricing procedures. Had the Navy purchased the nuts on the same basis as the prime contractor, there would have been a reduction in price of about \$29,000.

The Navy has advised that, although it was previously procured on a sole-source basis, this part could be and now would be procured competitively.

3. Bolts (appendix I, line 24)

On January 2, 1959, the Air Force San Antonio Air Materiel Area (SAAMA) purchased 45,000 bolts from a prime contractor who purchased the bolts in completed form from a subcontractor. The prime contractor purchased the bolts for 46 cents each, or a total price of \$20,700, and sold them to the Air Force for 55 cents each, or a total price of \$24,750.

The Air Force had complete technical data for this bolt and the Government had the right to use the data for procurement purposes; however, SAAMA technicians informed us that this bolt is not considered to be suitable for competitive buying because it is part of and therefore considered to be critical to the operation of the J-69 engine.

We were informed by engineers at the prime contractor's plant that the data furnished to the Air Force for this bolt was incomplete because the material specification, Silchrome No. I, is not detailed on the drawing. We found that the material is identified in Engineering Alloys, Woldman & Metzler, American Society for Metals, 1954 edition, and is a standard metal which can be purchased from any competent manufacturer. Had the Air Force purchased the bolts on the same basis as the prime contractor, there would have been a reduction in price of about \$4,000.

The Air Force advised us that the emergency nature of the requirement, the critical nature of the item, and the lack of information on interchangeability at the time of procurement were considered adequate justification for use of the open contract.

Although competitive procurement may not have been feasible in this instance, we believe that greater ingenuity by Air Force representatives could have resulted in direct procurement from the subcontractor at a reduced price and that a quality product would have been delivered within the time requirements.

4. Bearings (appendix I, lines 98 and 99)

During the 2-year period ended May 26, 1960, TCMAC purchased 865 bearings from a prime contractor who purchased the bearings in completed form from a subcontractor. The bearings are identified by this subcontractor's part number and the subcontractor individually packaged and preserved the bearings before shipment to the prime contractor. The prime contractor purchased the bearings for an average price of \$9.78 each, or a total price of \$8,460.90, and sold them to the Army for an average price of \$23.72 each, or a total price of \$20,519.59.

We were advised by officials of the prime contractor that they knew of no reason why these bearings could not be purchased directly from the manufacturer, since they are catalog items. Had the Army purchased the bearings directly on the same basis as the prime contractor, there would have been a reduction in price of about \$12,000.

In commenting on this part, the Army advised us that several attempts had been made to effect direct procurement from the subcontractor. However, the subcontractor refused to sell directly to the Government because the bearings are produced solely for the prime contractor who has design and reproduction rights to the part. The Army has also advised that every effort is being made to locate a qualified alternate source.

In view of the information we obtained from officials of the prime contractor regarding procurement directly from the subcontractor, we believe that the Army should make further inquiry into the matter to clarify the rights of the prime contractor, the subcontractor, and the Government.

5. Piston rings (appendix I, line 134)

On February 8, 1960, ASO purchased 163,815 piston rings from a prime contractor who purchased the piston rings from three different manufacturers. The prime contractor purchased the piston rings at unit prices of 69 cents, 70 cents, and 70.7 cents, for an aggregate total price of \$114,670, and sold them to the Navy for 92 cents each, or a total price of \$150,709.80. In accordance with contract provisions this latter price is subject to subsequent revision, upward or downward. Had the Navy purchased the piston rings on the same basis as the prime contractor, there would have been a reduction in price of about \$36,000.

In commenting on this part, the Navy said that consideration would be given in the future to procuring this item competitively and that the three subcontractor sources to the prime contractor would be contacted.

NONCOMPETITIVE PROCUREMENT OF 1,095 PARTS
MANUFACTURED BY SOLE-SOURCE SUPPLIERS

Our review included an examination of the noncompetitive procurement of 1,095 parts, with a total price of more than \$39 million, which were partially or completely manufactured by the prime contractors. We found that, at the time the Air Force and Army procured 303 of these parts, the files of the Air Force contained complete technical data which was adequate for competitive procurement and in most instances the Air Force had established unrestricted rights to use this data for all Government purposes. For the other 792 prime contractor-manufactured parts, we could not find complete technical data in the files of the military services. Our findings with regard to the inadequacies of the military services' control of contractor-furnished technical data are described in a later section of this report. (See p. 28.)

We are unable to evaluate the effect that competition would have had on the prices paid for each individual part manufactured by the prime contractors, because they have always been bought from the sole-source suppliers and we have no basis for comparison.

In an effort to approximate the influence of competition on the prices of replacement spare parts, we reviewed a number of instances where the military services changed from a sole-source to a competitive basis of procurement. The price reductions in these instances amounted to as much as 95 percent with an average decrease for all instances of more than 30 percent. On the basis of this average of more than a 30 percent price reduction, we estimate that competitive buying would have reduced the \$39 million

total price for these 1,095 parts by more than \$11 million. A more detailed discussion of this part of our review is contained in a later section of this report (see p. 19).

The following examples of noncompetitive procurement of parts manufactured by prime contractors are provided as being descriptive of the conditions we found in this phase of our examination and other examples are contained in appendix II.

1. Pane (appendix II, line 51)

On April 10, 1959, the Air Force Middletown Air Materiel Area (MAAMA) purchased 90 panes (left hand) from a prime contractor for \$40.74 each, or a total price of \$3,666.83. The Air Force had complete data and unrestricted rights for this part.

We found that the Army and Navy also bought this item non-competitively from the same prime contractor during the period from August through October 1959. The Army purchase of 289 panes and the Navy purchase of 86 panes were at the same unit price of \$40.74 paid by the Air Force.

We have been advised by all military services that consideration will be given to procuring this item competitively when additional requirements exist.

2. Plug (appendix II, line 1)

On October 31, 1958, the Air Force Warner Robins Air Materiel Area (WRAMA) purchased 3,000 plugs from a prime contractor for a price of \$4.74 each, or a total price of \$14,220. The Air Force had complete technical data for this plug and unrestricted rights to use this data for procurement purposes. WRAMA technicians informed us that they considered this part to be suitable for competitive procurement.

If this item is procured again, the Air Force has advised us that it will be systematically reviewed in accordance with controlling regulations and considered for competitive procurement.

3. Rear windshield assembly (appendix II, line 74)

On June 5, 1959, the Army Transportation Materiel Command purchased 592 windshield assemblies from a prime contractor for a price of \$21.14 each, or a total price of

\$12,511.98. The Air Force had complete data and unrestricted rights for this part.

Army representatives have advised us that this item has been researched by their engineering technicians and adequate descriptive data is now available for future procurements on a competitive basis.

4. Tube (appendix II, line 22)

On August 11, 1958, the Air Force San Antonio Air Materiel Area (SAAMA) purchased 1,007 tubes from a prime contractor for a price of \$13.25 each, or a total price of \$13,342.75. The Air Force had complete data and unrestricted rights to this part. SAAMA technicians informed us that they considered the part to be suitable for competitive procurement.

In commenting on this item, the Air Force advised us that consideration would be given to procuring this item on a competitive basis in subsequent procurements.

5. Leaf spring (appendix II, line 72)

Between January 21 and September 29, 1959, TCMAC purchased 895 leaf springs from a prime contractor for a price of \$5.70 each, or a total price of \$5,104.77. The Air Force had complete data and unrestricted rights for this part.

Army officials have pointed out in their comments that adequate descriptive data is now available and that this part will be procured competitively in the future.

PRICE REDUCTIONS RESULTING FROM
COMPETITIVE PROCUREMENT OF SPARE PARTS

Our review included an examination of a number of instances where the Air Force and Navy obtained competition in procuring replacement spare parts which had previously been purchased from sole-source contractors. We found that new sources of supply received the competitive awards in more than 70 percent of the instances and that the total prices in these instances were more than 30 percent lower than the total of the prices offered by the previous sole-source suppliers. We also found, in the instances where previous sole-source suppliers received the competitive awards, that they often made substantial reductions in their prices.

Our review in the Army did not include instances where it had competitively procured parts which had previously been purchased from sole-source contractors, but, in commenting on our findings, the Army described "Project BREAKOUT" and estimated that it could increase competitive purchases of aeronautical replacement spare parts by one third to a total of 50 percent of the dollar volume of the procurement of these parts.

Detailed discussions of our findings in the Air Force and Navy follow, and additional examples of the results of competitively procuring specific replacement spare parts are contained in appendix III.

Department of the Air Force

Our review of 178 Air Force competitive procurements disclosed that, when new sources of supply competed against previous

sole-source suppliers, the new sources received 130 (73 percent) of the awards. In these cases, the Air Force obtained spare parts at prices that averaged 33 percent less than those bid or proposed by previous sole sources. In the other 48 cases, we found instances in which the prior sole sources substantially reduced their prices under the pressure of competition in order to get the awards. There were also instances of substantial increases over the last previous sole-source prices.

In the 130 cases where new suppliers received competitive awards, the former sole-source suppliers proposed total prices of \$4,880,000, or \$1,621,000 more than the total prices of \$3,259,000 paid to the new suppliers. The price reductions on individual parts ranged from 1 to 95 percent.

In the 43 cases where former sole-source suppliers received competitive awards, and we were able to establish their previous prices, the total prices of \$1,143,232 were \$242,131 (17 percent) lower than their last previous prices as sole-source suppliers. In the other 5 cases we did not find any record of the previous prices.

Following are examples of reductions in price obtained by the Air Force as a result of competition.

1. Competitive procurement of thermocouples saves the Government \$705,000

The Middletown Air Materiel Area saved the Government at least \$705,000 through competitive procurement of 50,000 thermocouple and harness assemblies for J-47 jet engines used on B-47 aircraft.

This thermocouple and harness assembly is identified by Federal stock number 6685-610-1254 and it is used to indicate to the pilot the temperature of the engine exhaust

gases. Its proper functioning is considered by the Air Force to be essential to safety of flight.

Until January 1, 1958, the thermocouple and harness assembly was procured sole source. In order to develop other qualified sources, two subsequent procurements were advertised and contracts were awarded to a second manufacturer in January 1958 for a quantity of 13,237 and to a third manufacturer in May 1958 for a quantity of 11,922.

In June 1958 the Air Force developed another requirement for 33,645 of these thermocouple and harness assemblies. At this time a decision was made by the Air Force to buy them sole source from the original manufacturer because (1) unsatisfactory reports were being received concerning the second manufacturer's thermocouple and harness assembly produced under the January 1958 contract, (2) the third manufacturer was not yet in production on the May 1958 contract, and (3) the original manufacturer had made some engineering changes that improved its product.

The Air Force negotiated a unit price of \$35.05 with the original manufacturer for the entire quantity of 33,645. Subsequent to this sole-source procurement, both the second and the third manufacturers submitted qualified products.

In June 1959 a purchase request was initiated for 50,000 of the same thermocouple and harness assembly. A quantity of 25,000 was set aside for small business. Through competitive negotiation, a contract was issued to the third manufacturer in November 1959 for the other 25,000 at a unit price of \$18.25, or a total price of \$456,250. Subsequently, the small business set-aside was canceled and the quantity of 25,000 on the set-aside was added to the third manufacturer's contract, at the unit price of \$18.25 already negotiated with that company, to bring the total amount of that contract to \$912,500. On March 30, 1960, a minor price adjustment of about 3 cents per unit reduced the total contract price to \$911,360.

On this competitively negotiated procurement, the original manufacturer proposed a unit price of \$32.34, or \$808,500 for a quantity of 25,000. A quantity of 50,000 at the same price would amount to \$1,617,000. The difference in this amount and the total contract price is \$705,640, or a reduction of 44 percent.

This example illustrates that substantial savings through competitive procurement are not restricted to simple non-critical items but can also apply to parts whose proper functioning is considered essential to safety of flight.

2. Accidental competitive procurement results in \$25,000 price reduction

Although the method of obtaining competition in this case is unusual, we believe it illustrates the price reductions that can be obtained through competitive procurement.

The Directorate of Materiel Management at Warner Robins Air Materiel Area issued a purchase request on January 22, 1960, to the Procurement Division specifying that 618 Lock-foam Part Kits be procured from a recommended sole source. Each kit consists of one 3-gallon drum of C614R resin and two 1-gallon jugs of C614T foam and is used in the repair of propeller assemblies for C-133 and B-50 aircraft. The justification for sole-source procurement stated that the drawings and specifications necessary to allow advertised procurement were not available and that a single manufacturer would be the only firm solicited because it was the only known source with the product knowledge and capability to furnish items which were acceptable to the Air Force.

Although it was the intent of the procuring activity to solicit a proposal from the previous supplier only, copies of the Request for Proposal were inadvertently forwarded to several Air Procurement Districts (APDs). The APDs, unaware that the procuring activity had decided to negotiate with only one source, induced 11 potential manufacturers to ask for bid sets. Two proposals were received, including one from the recommended sole source. The other proposal was submitted by another manufacturer which held a license to manufacture Lockfoam products. It was subsequently determined by Air Force officials that these two companies were the only licensees.

The previous sole source quoted a price of \$72.15 per unit, or a total price of \$44,589. The new source proposed a unit price of \$31.79, or \$19,646 for the 618 kits, and received the award. As a direct result of this unintentional competition, the Government obtained a price which was \$24,943 or 56 percent less than that which would have been paid if the procurement had been awarded to the recommended sole source.

3. Prior sole-source manufacturer lowers price \$231,000 under pressure of competition

At the Dayton Air Force Depot (DAAFD), we found that the introduction of competition resulted in a prior sole-source manufacturer reducing its price from \$736,250 to \$505,000 for a total saving to the Government of \$231,250, or 31 percent.

The procurement involved 250 units of an electron tube of a type used to convert direct current into ultra high frequency current. It is used in a radar beacon which is a ground navigational aid device. Prior to this procurement, only one company had manufactured this item for the Air Force.

On November 4, 1958, DAAFD issued Invitation For Bid (IFB) 33-604-59-192 to 56 potential manufacturers. Of the 19 responses received, the original manufacturer was the only company to bid on this particular tube and it submitted a bid of \$2,945 per unit. Efforts of the Air Force buyer to negotiate a reduction in this price were unsuccessful and the manufacturer refused to supply DAAFD with cost data. According to the Air Force buyer, the company evidently felt it was in a solid sole-source position.

With a 17 months' supply of this item on hand at DAAFD, the buyer believed that there was still time to look for other sources. The buyer contacted several manufacturers of ultra high frequency electron tubes in an effort to get more than one manufacturer interested in supplying this tube. Finally the buyer contacted a newly established company which expressed a desire to bid on this item, and IFB 33-604-60-10 was prepared and submitted to the two interested companies.

The new source bid \$2,350 per unit and the original manufacturer bid \$2,020, or \$925 per unit less than its previous bid of \$2,945. We attribute this reduction of \$231,250 in the original manufacturer's bid to the competitive situation created by a resourceful Air Force buyer.

Department of the Navy

Our review in the Navy disclosed that, when new sources of supply competed against previous sole-source suppliers, new sources received the award in over 90 percent of the cases. As a result the Government obtained prices that averaged 33 percent less than those bid or proposed by the previous sole sources.

We found that the Navy has a special program which is designed to increase the use of competitive procurement. In January 1958, as part of this program, the Bureau of Supplies and Accounts issued instructions requiring the submission of quarterly reports showing savings achieved through competition resulting from conversion from sole-source procurement. During the period March 31, 1958, to June 30, 1960, the Aviation Supply Office reported the conversion of 72 line items to competitive procurement with the following results:

<u>Prices based on former sole source</u>	<u>Competitive prices</u>	<u>Price reduction</u>	<u>Percent of reduction</u>
\$9,690,000	\$6,500,000	\$3,190,000	33

We selected several examples of former sole-source procurement to illustrate that critical items of high value have been purchased competitively at substantial savings and without impairment of performance capability or delivery leadtime. It is significant to note that, although the following examples are typical of the items converted from sole-source procurement, the preponderance of spare parts are still considered by the Navy to be unsuitable for procurement from any source other than the original contractor.

1. Competitive procurement results in price reduction of over \$200,000

During fiscal year 1959, invitations for bid were advertised for six airship envelope kits conforming to technical specifications developed by the Navy.

The former sole source bid \$367,167 per kit, and two other bids were received of \$332,500 and \$336,737 per kit, respectively.

The lowest bidder was awarded a contract for one kit, negotiated downward from the original bid of \$332,500 to \$329,875. Negotiation included a quantity reduction to one kit because the bidder's production capacity was not adequate to fabricate six kits within delivery time limits.

The next lowest bidder was awarded an order for two kits at \$336,737 each. The basis for this award was productive capability to fabricate two additional kits urgently needed within a limited delivery time period.

The remaining requirement for three kits was placed on a second procurement action after the original manufacturer's high bid of \$367,167 per unit was rejected as unacceptable. The Navy subsequently awarded the second procurement for three kits to the original manufacturer at a competitively negotiated price of \$329,882 per kit. The over-all transaction summarizes as follows:

Original manufacturer, first bid	6 kits at \$367,167	<u>\$2,203,002</u>
Awards--initial advertisement:		
Second source	1 kit "	329,875 329,875
Third source	2 kits "	336,737 673,474
Award--second procurement:		
Original manufacturer	3 " "	329,882 <u>989,646</u>
Actual competitive price		<u>1,992,995</u>
Reduction over first bid of sole source		<u>\$ 210,007</u>

Under pressure of competition, the original manufacturer reduced its quoted price from \$367,167 each for six kits to \$329,882 per kit for a quantity of three. On the basis of six kits, the revised bid represents an aggregate reduction of \$223,710 from the original quotation. In addition, the production was spread to three firms, thereby accelerating delivery, and the competitive award served notice on the former sole-source producer that future quotations would need to be competitive.

2. Fuel injection nozzle assembly procured by competition at savings of \$2.5 million

During the test stages of the J-34 engine development, the prime contractor developed a fuel injection nozzle assembly which consisted of 60 nozzles for each engine. The original nozzle assembly was procured from the prime contractor on a sole-source basis at a cost of \$432.72 per set.

During 1951 the nozzle was reengineered and an initial procurement of 800 sets of the new nozzles cost the Government \$548.50 each.

Requests for competitive bids were first solicited by the Navy in July 1953 when another manufacturer, as low bidder, was awarded a contract for 1,600 sets at \$180.60 each. Thus, on this order, the unit price of \$548.50 was reduced by competition to \$180.60 per set, with resultant savings of about \$589,000 to the Government.

Subsequent purchases during the next 5 years were also competitively awarded by the Navy to the second source at prices ranging between \$122 and \$184 per set. During this period about 6,600 sets of nozzles were procured at a total cost of \$1,067,000. Had these nozzles been purchased noncompetitively at any figure approximating the initial prime contractor's price of \$548 per set, the Government would have incurred at least \$2.5 million additional cost.

3. Prices reduced \$19,000 by securing competition between the prime contractor and the subcontractor

In December 1959 the Navy Aviation Supply Office requested quotations for certain components (previously designated sole source for technical reasons) from the previous sole source and from one of its subcontractors. The following tabulation shows that the subcontractor was awarded orders for every item because of lower quotations.

<u>Item</u>	<u>Prime contractor</u>	<u>Subcontractor</u>	<u>Savings</u>
Extensometer	\$ 3,786	\$ 2,739	\$ 1,047
Bushing	951	687	264
Oil pump	7,970	5,766	2,204
Bushing	13,428	10,044	3,384
Fixture	19,448	12,964	6,484
Post	4,173	3,325	848
Post	3,654	3,515	139
Fixture	720	539	181
Template	405	293	112
Gage	450	325	125
Pin	282	186	96
Wrench	288	208	80
Insertor	221	160	61
Puller	2,143	1,550	593
Indicator	3,188	2,157	1,031
Bushing	6,715	4,854	1,861
Fixture	288	208	80
Wrench	208	150	58
Wrench	<u>1,102</u>	<u>798</u>	<u>304</u>
Total	<u>\$69,420</u>	<u>\$50,468</u>	<u>\$18,952</u>

The Government saved \$18,952 on the \$50,000 transaction, and an item-by-item comparison with earlier sole-source orders showed improvements in the delivery schedules.

The above examples clearly demonstrate that not only substantial price reductions can result from competition but also additional sources of production can be established thereby broadening the industrial base. It is also noteworthy that in specific cases the delivery schedules were improved and the spare parts that were procured were critical to the safety of flight and operation of aircraft. This indicates that the opportunities for successful competitive procurement are not necessarily restricted to simple noncritical replacement spare parts.

WEAKNESSES IN THE RECEIPT, CONTROL,
AND USE OF CONTRACTOR-FURNISHED
TECHNICAL DATA

During this review we examined into the conditions existing in the Air Force, Army, and Navy with regard to the receipt, control, and availability for use of technical data furnished to the Government under defense contracts. Previous reports on this subject were issued to the Congress for the Air Force in May 1959 (B-133168) and for the Navy in January 1960 (B-133263).

The following sections contain an initial report of our findings in the Army and follow-up reports of our findings in the Air Force and Navy.

Department of the Air Force

Our May 1959 report on the Air Force included findings that the maximum benefits of competition had not been realized in the procurement of military equipment, components, and spare parts because of (1) inadequate provision in contracts for use by the Government of contractor-furnished drawings acquired at Government expense, (2) unnecessarily restricted interpretation by Air Materiel Command (AMC) of prior contracts where use of data was not expressly restricted, and (3) inadequate controls and procedures regarding the receipt and use of such drawings. Our report also stated that the Air Force had expressed general agreement with our findings and recommendations, and enumerated the corrective actions which the Air Force had initiated.

Our follow-up review disclosed no instances where the Air Force had failed to include unequivocal provisions regarding the Government's rights to technical data in contracts awarded since

our previous review. We therefore conclude that the Air Force has eliminated the first of the above deficiencies.

With regard to the second deficiency, we examined the records maintained by AMC of the Government's rights to use data obtained under 254 contracts. We found that unrestricted rights had been established for 229 contracts, a determination had been made that the Government had no rights to use data furnished under 4 contracts, and no determinations had been made for 21 contracts. We therefore conclude that, although substantial progress has been made by AMC since our first review in 1957-58, there is a continuing need to establish the rights of the Government to use data furnished under a sizable number of older Air Force contracts. We believe, however, that this need would be readily accomplished if the Air Force were to adopt an active program of maximizing competitive procurement of replacement spare parts. Such a program would require determinations of Government rights to use the data pertaining to any equipment still in use which was delivered under these older contracts.

With regard to the third finding in our previous report, we find that little has been accomplished in the establishment of adequate procedures and controls over the receipt and storage of contractor-furnished technical data. For this data to be useful in the procurement programs of the Air Force, it must be readily available to procuring officials and there must be assurance that it is complete and current with relationship to all changes which have been made in the equipment to which it pertains. Detailed statements of our findings in these matters are contained in the following sections of the report.

Inadequate control over receipt of technical data required to be furnished under the terms of contracts

In our earlier report, which was based on an examination during 1957 and 1958, we stated that there was then no assurance that the Air Force received all technical data required under the terms of contracts. In commenting upon this finding, AMC agreed that improvements were necessary to enable effective utilization of technical drawings in the logistics system. AMC also informed us of several measures which had been initiated to improve its control over the receipt of technical drawings.

We found that, as of December 1960, the AMC officials who were responsible for the Air Force Central Drawings Repository had no positive means of assuring that they receive copies of all contracts which require contractors to furnish technical data to the Air Force, nor did they have any positive means of assuring that they receive all technical data which was known to be due under contracts of record in the Repository. For the 1,480 different spare parts which were included in the Air Force portion of this review, we found that the Repository had complete and current data for 582 parts, some data which was either incomplete or noncurrent for 606 parts, and no data for 292 parts.

Inadequate procedures for indexing and filing technical data stored in Air Force Central Drawings Repository

We found that, as of December 1960, the procedures being followed by the Repository in processing technical data received from contractors did not accomplish timely indexing, filing, and orderly storage so that the data would be readily available for use.

We found numerous unprocessed shipments of data in the drawing vault which were stored in bins, on tables and cabinet tops, and on the floor. We examined the records attached to 57 such shipments comprising over 4,500 pieces of data and found that they had been on hand for periods of 6 to 26 months.

We also found that the filing facilities were inadequate for orderly storage of a large quantity of data which had been processed. Thousands of these drawings in the vault were also stored on table and cabinet tops and on the floor.

Under these conditions it is almost impossible to determine what data has been received by the Repository, and, even with extensive and time-consuming research, there can be no assurance that any particular data is complete, current, and adequate for procurement purposes. Of equal importance is the fact that these conditions would necessarily result in delaying the availability of data which might be requested for use in procurement.

We conclude that the Air Force has not corrected the conditions which we found to exist in 1957-58, and we found little evidence at the time of our review of any concerted effort which would be required to make adequate technical data readily available for use in the competitive procurement of replacement spare parts.

Nonavailability of and failure to use
contractor-furnished technical data
at Air Force procurement centers

The nine AMC Air Materiel Areas and one AMC depot are responsible for all Air Force procurement of aeronautical replacement spare parts. During the period October 1959 to March 1960, we

made examinations at six of these procurement centers to determine the extent to which contractor-furnished technical data was available and used in procuring aeronautical replacement spare parts. We found that the procurement centers generally considered the contractor-furnished technical data in Air Force files to be inadequate for procurement purposes and that there was no significant effort to use the data to obtain competition in buying replacement spare parts. Detailed descriptions of our findings at four of the procurement centers follow.

San Antonio Air Materiel Area (SAAMA) is responsible for managing more than 130,000 different items of materiel with the great majority of these being components and parts of end items. At June 30, 1960, SAAMA had over \$189 million obligated under contracts for replacement spare parts. Although SAAMA estimated in January 1960 that it had over 1 million contractor-furnished drawings in its files, only 113 of these were considered to be adequate for procurement purposes. Purchase requests for all parts covered by contractor-furnished drawings, other than those to which the 113 adequate drawings were applicable, were justified for negotiated procurement on the basis that there were no known drawings, specifications, or purchase descriptions available for procurement purposes.

Warner Robins Air Materiel Area (WRAMA) is responsible for managing more than 170,000 different items of materiel with the great majority of these being components and parts of end items. At June 30, 1960, WRAMA had over \$167 million obligated under contracts for replacement spare parts. Until January 1, 1960, WRAMA

had practically no contractor-furnished drawings in its files and, as far as we could determine, was making little effort to use contractor-furnished technical data to obtain competition in its procurement of replacement spare parts.

Dayton Air Force Depot (DAAFD) is responsible for managing more than 380,000 different items of materiel with the great majority of these being components and parts of end items. At June 30, 1960, DAAFD had over \$70 million obligated under contracts for replacement spare parts. We found in January 1960 that DAAFD had a reference library containing several thousand drawings but that these were not considered to be adequate for procurement purposes and, as far as we could determine, very little effort was made to use contractor-furnished technical data to obtain competition in the procurement of replacement spare parts.

Middletown Air Materiel Area (MAAMA) is responsible for managing more than 110,000 different items of materiel with the great majority of these being components and parts of end items. At June 30, 1960, MAAMA had over \$58 million obligated under contracts for replacement spare parts. MAAMA has established a Procurement Data Section which has the responsibility of determining the availability and adequacy of specifications, drawings, and other technical data for use in procurement. In October 1960 we were informed by officials of this unit that they made no review of replacement spare parts being procured under open contracts with prime contractors. These orders, which are called production lists, and the open contracts under which they are issued cite 10 U.S.C. 2304(a)(10) and ASPR 3-210.2 (xiii) or (xv) as the

authority for negotiated noncompetitive procurement, with the justification being primarily related to the nonavailability of adequate technical data. By reviewing records and through discussions with MAAMA personnel, we determined that it is the general practice at MAAMA to buy replacement spare parts from the original manufacturer of the end item of equipment and that little effort is made to find or develop competitive sources of supply.

Department of the Navy

Our January 1960 report described what we believed to be serious deficiencies in the Navy's receipt, control, and use of contractor-furnished technical data. These included (1) lack of any assurance that all drawings required to be submitted by contractors are received, (2) failure to use drawings for advertised procurement, (3) lack of centralized control of Bureau of Ordnance drawings, and (4) indications of misuse by Aviation Supply Office of the authority to negotiate. The Navy generally accepted our findings and informed us of several corrective actions which had been implemented.

With regard to the first of the above findings, we did not make a detailed examination during this review of the controls over receipt and storage of Navy drawings. We did, however, search the technical data files of the Navy Aviation Supply Office (ASO) for the drawings applicable to 126 of the spare parts included in our examination. We found complete and current drawings for 104 parts and incomplete or noncurrent drawings for 22 parts. While working at contractors' plants we also determined, for a sample of 194 parts, that complete and current technical data had

been delivered to the Navy for 137 parts. Complete data applicable to the remaining 57 parts had not been delivered to the Navy for a variety of reasons. We conclude therefore that, although the Navy files contained complete and current technical data in a large percentage of the cases examined, there is still a need for improvement in the Navy procedures for controlling receipt of technical data.

With regard to the third finding in our previous report, our recent review did not include the Bureau of Ordnance and we have no basis for current comments.

With regard to the other two findings in our previous report, we found that little progress had been made in using the technical data as a basis for competitive procurement and that there continued to be many indications that Navy procurement officials were misusing the authority to negotiate contracts. Detailed statements of our findings in these matters are contained in the following sections of the report.

Failure to determine rights of
Government to use technical data

We found that a large quantity of the technical data furnished by contractors was inscribed with legends which stated restrictions on the rights of the Government to use the data. Although in most instances these restrictions were inconsistent with the provisions of the contracts under which the data was furnished, the Navy did not question their validity and they became the basis for justifying noncompetitive procurement of "proprietary" items. We also found that the Navy officials who were responsible for

receiving, storing, and issuing the technical data did not have sufficient information available to relate the drawings to the applicable contracts which establish the rights of the Government in the data.

Indications of misuse of authority
to negotiate contracts

At the Navy Aviation Supply Office we found that procurement of aeronautical replacement spare parts amounted to about \$742 million during the period January 1, 1959, to June 30, 1960. Of this total, more than \$705 million worth, or 95 percent, was procured under negotiated contracts, and more than \$534 million worth, or 75 percent of the negotiated amount, was bought on a sole-source basis without any effort to obtain competition. Our examination of a large number of these noncompetitive procurements indicates that the provisions of 10 U.S.C. 2304(a)(10) are the justification used by the Navy for buying over 95 percent of its replacement spare parts under negotiated contracts and over 75 percent of these parts without competition.

Since our tests have shown that the Government has unrestricted rights to use the data related to a large number of Navy aeronautical spare parts and that the Navy in fact has, or should have, complete and current data for most of these parts, we conclude that there continue to be many indications that the Navy is misusing its authority to negotiate or to buy sole source, as the case may be, in a large number of cases.

Department of the Army

This initial report on conditions existing in the Army with regard to the receipt, control, and use of contractor-furnished

technical data is based on our examination at the United States Army Transportation Materiel Command (TCMAC), St. Louis, Missouri. Our examination at TCMAC was confined to the procurement of replacement spare parts for aircraft which, under Department of Defense policy, had been procured for the Army by either the Air Force or the Navy. TCMAC is currently stocking about 45,000 different aeronautical spare parts and its purchases of spare parts totaled more than \$27 million during fiscal year 1960.

We found that, in general, TCMAC does not consider the contractor-furnished technical data in its files to be adequate for procurement purposes and, further, that TCMAC does not have any effective means of determining the rights of the Government to use the data for competitive buying. Our findings are described in the following sections of the report.

Nonavailability of and failure to use
contractor-furnished technical data

During our work at TCMAC, one of our objectives was to determine the extent to which adequate contractor-furnished technical data was available and used in the procurement of aeronautical replacement spare parts. Consistent with the procedures we followed at Air Force and Navy procurement centers, we selected for examination procurements of 216 replacement spare parts which TCMAC had purchased without competition from the manufacturers who supplied the original equipment.

A list of 48 of the above 216 parts was submitted to TCMAC personnel with a request that they determine (1) whether complete data was available, (2) whether the Government had unrestricted

rights to use the data, and (3) whether the parts were suitable for competitive procurement, assuming availability of complete technical data with unrestricted rights. TCMAC personnel informed us that it had complete data for 26 parts and incomplete or no data for 22 parts; that its records showed that the Government had unrestricted rights to use the data applicable to 16 of the 48 parts; and that its engineers believed that 43 of the 48 parts were suitable for competitive procurement, assuming availability of complete data and unrestricted rights.

Following the completion of this part of our examination, the Commanding General of TCMAC advised us that, while the information referred to above was undoubtedly correct, it was susceptible of misunderstanding, particularly if taken out of context and used as a basis for general conclusions regarding the availability of an adequate competitive package. He also gave us a general statement of TCMAC methods of operation and policies and called our attention to several factors which he believed to be important in any consideration of the need and opportunity for competitive procurement.

He informed us in essence that (1) the Department of Defense has progressively decreased the amount of engineering data which the Government may request from a contractor, (2) that drawings and other data available in his Command are confined, for the most part, to those required in the operation, maintenance, and supply support of aircraft, (3) that his Command has not in all cases maintained a current file of shop drawings, in-process drawings, work specifications, or other detailed data of like nature as to

methods of manufacture, (4) that what the Government bought from the prime contractor in regard to drawings and specifications was the responsibility of either the Air Force or the Navy and the Army has little information on any limitations or restrictions on their use, (5) that his Command is not in a position to furnish to a potential new source the complete engineering data package as the prime contractor can do with a subcontractor, (6) that his general practice has been to procure from the prime contractor peculiar parts of specific aircraft and engines since only prime contractors can reasonably commit themselves to production of a particular part on the basis of a general statement of what is wanted, and (7) that notwithstanding these conditions his Command has made continuing efforts to find alternate sources for items with particular emphasis upon those parts which seem inordinately expensive.

We believe the changes in DOD policy were intended to eliminate requirements for engineering data which was not needed for Government purposes. We are not aware of any change which restricts the requirement for technical data adequate for use in reprocurement and, in fact, it is our opinion that changes during recent years have been intended to more clearly define the need for complete and current data and to unequivocally state the Government's rights to unrestricted use of technical data applicable to military equipment.

We have not attempted during this review to develop information on any aspect of the military services' need for and use of contractor technical data in the operation, maintenance, and supply support of military equipment. We must assume that "supply

support" as used above excludes procurement of replacement spare parts. Since TCMAC has assumed the responsibility for procuring its replacement spare parts, we believe that it is essential that the drawings and other data available be augmented to the extent necessary for procurement purposes.

We have been informed that in research and development contracts and in production contracts requiring development it is the current policy of DOD to require contractors to furnish all data, including manufacturing drawings and specifications. We understand that the unlimited-rights-in-data clause currently prescribed for use in defense contracts is intended to require full compliance with this policy.

We agree that the technical data which contractors are required to furnish and the rights of the Government to use this data are largely determined by the provisions of applicable contracts. It is our opinion, however, that, since TCMAC has assumed the responsibility for procuring its own replacement spare parts for equipment supplied under Air Force and Navy contracts, it is essential that all data and rights information be readily available for use in TCMAC's procurement programs.

During our examination at TCMAC we learned that during the last 4 months of 1960 some 1,100 sole-source items of materiel were analyzed to determine their suitability for competitive procurement; however, only 40 of these were determined to be appropriate for future competitive buying.

In commenting on our findings, the Army furnished us with a report dated June 1, 1961, on the accomplishments of "Project

BREAKOUT" which shows a conversion to competitive procurement of 190 of 3,700 parts which were reviewed during a recent period of 9 months.

During our examination we also determined that 34 of the 48 spare parts discussed earlier were applicable to equipment furnished to the Army under Air Force contracts. We found that the Air Force Central Drawings Repository at Wright-Patterson Air Force Base had complete and current technical data for each of the 34 parts and that there were no restrictions on the Government's rights to use the data.

On the basis of our examination and of the information furnished by the Commanding General, we conclude that TCMAC does not have an adequate file of technical data and that it will be necessary for the Air Force and the Navy to assist the Army in correcting this deficiency before the Army can accomplish any substantial increase in the competitive procurement of aeronautical replacement spare parts.

CONCLUSIONS

We believe that the primary reason for the military services' practice of buying the majority of their aeronautical replacement spare parts noncompetitively on open contract is to be found in the simplicity and expediency of this method of procurement. We believe, however, that this form of procurement generally results in higher prices, fosters and subsidizes inefficient and uneconomical practices in industry, and ignores or circumvents a basic policy of the Congress that all qualified suppliers shall have an equal opportunity to compete for the Government's business. We believe also that the maximum practicable use of competition in Government procurement programs is fundamentally sound and will promote efficiency and economy in both Government and industry. Further, it is our opinion that the unsatisfactory conditions of long duration which continued to prevail in the military services' receipt and control of contractor-furnished technical data at the time of our review were clearly indicative of a lack of any real interest in the use of this data to maximize competition in the procurement of aeronautical replacement spare parts. In the absence of a concerted and major effort by the military services to use the contractor-furnished technical data in their procurement programs, it is unlikely that the data and related Government rights can ever be effectively managed, although the Government will continue to accumulate millions of costly drawings which are not considered to be adequate or usable for procurement purposes.

In view of the above, we proposed to the Secretary of Defense that:

1. Immediate steps be taken to reverse the current practice of routinely using negotiated noncompetitive contracting without real justification, rather than relying upon full and free competition to assure the Government's obtaining the best available products at the lowest prices;
2. Immediate steps be taken to correct at the earliest possible date the unsatisfactory conditions which exist in the control over and use of technical data in the Air Force, Army, and Navy;
3. Contract terms providing that the Government receive complete technical data and unrestricted rights to use the data for all Government purposes be vigorously enforced;
4. Regulations of the DOD be revised to provide specific penalties against contractors who fail to furnish on a timely basis the technical data required by contracts; and
5. Regulations of the Department of Defense be amended to prohibit the use of open contracts for other than emergency procurement of urgently needed supplies.

AGENCY COMMENTS

The Assistant Secretary of Defense (Installations and Logistics) in commenting on our findings advised us in a letter dated August 9, 1961 (appendix IV), that the Department of Defense is in complete agreement with the underlying premise stated in the report "that the maximum practicable use of competition in Government procurement programs is fundamentally sound and will promote efficiency and economy in both Government and industry." He said the military services recognize that they are not at present obtaining competition to the maximum practicable extent in the procurement of aeronautical replacement spare parts and that they believe there are substantial competitive opportunities in other areas of military procurement that have not yet been adequately exploited. This is considered one of the major problems in defense spending today, and a primary goal of the Department of Defense is

to minimize unnecessary noncompetitive procurement wherever it occurs.

The Assistant Secretary's comments regarding our proposals are indicative of a complete understanding of the problems involved and an appreciation of the difficulties that arise in their solution. With regard to our first proposal, we were advised that, whatever the situation may have been in the past, the wide range of programs now in effect and the additional measures under consideration by the military services to accelerate progress make it evident that the routine use of noncompetitive procurement is clearly not the present practice.

The Department of Defense recognizes the unsatisfactory conditions which exist in the control over and use of technical data as a basic problem and, without doubt, as one of the most intricate and difficult problems confronting management in the logistics area today. Since competition is dependent upon the ability of the procuring activity to describe adequately the items being procured, success in obtaining, controlling, and effectively utilizing technical data is a critical factor in DOD efforts to achieve a major advance in competitive procurement. Until data inventories can be converted into a system that promptly and effectively responds to procurement needs, progress will be seriously impeded. Since the time of earlier GAO reports on the subject in 1959 and 1960, programs to alleviate this situation have been initiated and the results have been encouraging. However, major problems remain that do not lend themselves to a quick solution. DOD has

instituted a number of projects to develop the additional measures needed to increase control of this area.

With regard to our third and fourth proposals, the Assistant Secretary advised us that DOD fully agrees that there should be vigorous enforcement of contract terms regarding the Government's receipt of and unrestricted rights to use complete technical data and that there should be specific penalties against contractors who fail to deliver technical data on a timely basis. Appropriate contractual provisions and other measures are being devised to supplement the procedures which are already in effect. The underlying problem is the need for a clearer understanding with industry as to the rights and interests in data and for a more efficient means for speedily determining these respective rights and interests as between the Government and prime contractors and subcontractors. The Assistant Secretary considers that DOD joint efforts with industry to develop a solution to this problem are well advanced.

In dealing with our last proposal, the Department of Defense recognizes that measures are necessary to insure against the misuse of open contracts. Therefore, instructions have been issued by the military services requiring that, before any part may be bought under an open contract, it must be separately evaluated to determine whether competitive procurement or procurement from other than the original source is practicable. To insure uniformity, requirements to this effect will be incorporated in the Armed Services Procurement Regulation. The Department also believes that, in addition to its use for emergency procurements, the open

contract is a highly efficient instrument for handling large numbers of orders which necessarily must be placed with the same contractor over a period of time.

The Assistant Secretary stated that it is not possible at this time to estimate with any degree of accuracy what the ultimate potential is for competition in the procurement of aeronautical replacement spare parts. There are undoubtedly large numbers of items of a noncritical nature that may be opened to competition without the scrupulous, time-consuming, and costly evaluations that are necessary for the more critical items. Taking into consideration the problems to be dealt with, the Department of Defense believes that a realistic target for the near future would be the achievement of competition in the range of 30 percent of total dollars.

SCOPE OF REVIEW

The purpose of our review of noncompetitive procurement of aeronautical replacement spare parts within the Department of Defense was to determine whether the military services solicited competition to the maximum extent practicable, and to the extent feasible, to determine the effect of competition, or the lack of competition, on prices paid by the Government. The review included an examination of selected procurement transactions at various procurement centers in the Air Force, Army, and Navy, and reviews were also conducted at selected contractors' plants. Our field work was completed in December 1960 and covered procurements made during 1958, 1959, and 1960. Military organizations visited during our review are listed below.

Air Force

Headquarters, Air Materiel Command, Wright-Patterson Air Force Base, Ohio
Middletown Air Materiel Area, Middletown, Pennsylvania
Mobile Air Materiel Area, Mobile, Alabama
Oklahoma City Air Materiel Area, Oklahoma City, Oklahoma
San Antonio Air Materiel Area, San Antonio, Texas
Warner-Robins Air Materiel Area, Macon, Georgia
Dayton Air Force Depot, Dayton, Ohio
Boston Air Procurement District, Boston, Massachusetts
Cleveland Air Procurement District, Cleveland, Ohio
Dayton Air Procurement District, Wright-Patterson Air Force Base, Ohio
Selected Air Force Plant Representative Offices

Army

Transportation Materiel Command, St. Louis, Missouri

Navy

Bureau of Naval Weapons, Washington, D.C.
Aviation Supply Office, Philadelphia, Pennsylvania

APPENDIXES

NONCOMPETITIVE PROCUREMENT OF SPARE PARTS
COMPLETELY MANUFACTURED BY SUBCONTRACTORS

DEPARTMENT OF THE AIR FORCE

Part name	Federal stock number	Quantity procured	Price to U.S. Government		Subcontractor price		Difference in price		Contractor sources of supply
			Unit	Total	Unit	Total	Unit	Total	
1. Clip	1610-570-2145	25,000	0.44	11,000.00	0.37	9,177.50	0.07	1,822.50	2
2. Rubbing seal	1610-507-2979	5,000	25.21	126,050.00	21.61	105,050.00	4.20	21,000.00	1
3. Gasket	1610-507-2971	27,370	.49	13,411.30	.39	10,674.30	1.10	2,737.00	1
4. Blade, heating element	1610-513-4188	1,699	43.19	73,379.81	35.40	60,144.60	7.79	13,235.21	1
5. Relay, solenoid	5945-500-5695	190	71.05	13,499.50	52.64	10,001.60	18.41	3,497.90	1
6. Relay, armature	5945-578-2481	190	60.70	11,533.00	44.98	8,538.60	15.76	2,994.40	1
7. Electrical frequency meter	6625-578-5853	30	452.30	13,569.00	330.00	10,050.00	117.30	3,519.00	1
8. Relay, solenoid	5945-501-5396	190	60.70	11,533.00	44.98	8,538.60	15.76	2,994.40	1
9. Aircraft fuel tank	1560-524-2546	14	275.47	3,856.62	285.00	3,150.00	90.47	706.62	1
10. do.	1560-524-2547	14	275.47	3,856.62	285.00	3,150.00	90.47	706.62	1
11. do.	1560-512-1144	12	232.62	2,791.40	190.00	2,280.00	42.62	511.40	1
12. do.	1560-512-1145	12	232.62	2,791.40	190.00	2,280.00	42.62	511.40	1
13. do.	1560-512-1146	12	306.08	3,672.90	250.00	3,000.00	56.08	672.90	1
14. do.	1560-512-1147	12	306.08	3,672.90	250.00	3,000.00	56.08	672.90	1
15. do.	1560-520-0949	12	287.72	3,452.59	235.00	2,820.00	52.72	632.59	1
16. do.	1560-520-0950	12	287.72	3,452.59	235.00	2,820.00	52.72	632.59	1
17. do.	1560-520-0951	12	238.74	2,864.93	195.00	2,340.00	43.74	524.93	1
18. do.	1560-520-0952	12	238.74	2,864.93	195.00	2,340.00	43.74	524.93	1
19. do.	1560-524-2544	14	312.20	4,370.83	250.00	3,570.00	57.20	500.83	1
20. do.	1560-524-2545	11	312.20	3,434.22	250.00	2,805.00	57.20	229.22	1
21. Cylinder assembly	1550-327-3775	71	69.25	4,916.75	58.55	4,015.75	12.69	200.58	1
22. do.	1650-327-3776	64	69.25	4,431.99	56.56	3,619.84	12.69	212.15	1
23. Actuator arm	1560-653-0989	400	11.56	4,625.84	9.45	3,780.00	2.11	845.84	1
24. Bolt	5306-677-6336	45,000	.55	24,750.00	.44	20,700.00	.09	4,050.00	1
25. Gasket	2840-641-7394	5,000	2.12	10,600.00	1.79	8,950.00	.33	1,650.00	1
26. Lock	2840-326-6821	30,000	.23	6,900.00	.18	5,400.00	.05	1,500.00	1
27. Washer	2840-555-6314	25,000	.23	5,500.00	.22	5,500.00	.00	1,000.00	1
28. Thermocouple and lead assembly	6685-675-0644	3,934	156.45	615,490.56	132.02	519,368.48	24.43	96,122.08	1
29. Shell assembly	2840-602-1754	2,629	173.49	456,105.21	146.54	389,243.14	26.95	70,862.07	2
30. Washer-key	5310-604-6571	175,000	.07	12,250.00	.04	7,000.00	.03	5,250.00	1
31. Tank assembly	1560-587-7368	50	231.66	11,583.00	202.50	10,125.00	29.16	1,458.00	4
32. do.	1560-587-7368	50	236.24	11,812.00	206.50	10,325.00	29.74	1,487.00	4
33. Catch assembly	1560-028-9373	742	13.10	9,720.20	11.45	8,495.90	1.65	1,224.30	2
34. Hinge, sub assembly	5340-536-7228	724	11.29	8,173.96	9.87	7,145.88	1.42	1,028.08	2
35. Can assembly	1560-601-2487	85	27.41	2,329.85	23.96	2,036.60	3.45	293.25	2
36. do.	1560-601-2487	200	26.76	5,352.00	23.39	4,678.00	3.37	674.00	2
37. Harness assembly	1560-546-4373	339	88.83	30,113.37	77.65	26,323.35	11.18	3,790.02	1
38. Clamp assembly	1560-345-2938	700	11.24	7,869.00	9.82	6,877.04	1.42	991.96	1
39. Tip assembly	1560-306-4402	125	31.75	3,968.75	27.75	3,468.75	4.00	500.00	2
40. Can assembly	1560-601-2485	88	57.46	5,056.48	50.23	4,420.24	7.23	636.24	2
41. Guard assembly	1560-313-0514	163	292.86	47,736.18	256.00	41,728.00	30.86	6,008.18	4
42. Glass assembly	1560-032-4621	62	93.82	5,816.84	82.01	5,084.62	11.81	732.22	2
43. do.	1560-032-4622	50	93.82	4,691.00	82.01	4,100.50	11.81	590.50	2
44. Trunion extension	1560-313-0471	35	100.56	3,519.60	79.91	2,796.85	20.65	722.75	2
45. Bracket, bolt	5306-474-4020	73,550	.22	16,181.00	.16	12,135.75	.06	4,045.25	4
46. do.	5306-474-4024	25,750	1.17	30,127.50	.88	22,660.00	.29	7,467.50	4
47. do.	5306-474-4030	25,620	.40	10,248.00	.30	7,609.14	.10	2,638.86	1
48. Castle nut	2950-613-5232	69,623	.41	28,545.43	.31	21,441.88	.10	7,103.55	1
49. Welding rod	3439-528-8682	14,400 lbs.	2.49	35,856.00	1.86	26,769.60	.63	9,086.40	4
50. Bearing	2915-397-8811	5,292	.70	3,679.64	.56	2,963.50	.14	716.14	1
51. Nose wheel piston rod	1630-397-1474	115	119.38	13,728.55	81.65	9,389.75	37.73	4,338.80	2
52. Cylinder assembly	1620-397-1476	200	84.44	16,888.00	57.75	11,550.00	26.69	5,338.00	2
53. Spacer	1560-614-2053	294	39.45	11,599.04	26.50	7,791.00	12.95	3,808.04	1
54. Armature	6105-328-0083	16,700	35.28	589,176.00	16.69	278,723.00	18.59	310,453.00	2
55. do.	6105-328-0083	27,832	35.28	981,912.96	16.69	464,516.08	18.59	517,396.88	1
56. Turbine and pinion shaft	1650-622-0253	325	119.74	38,915.50	78.87	25,632.20	40.87	13,283.30	2
57. Shaft and gear	1650-622-0253	114	274.43	31,285.02	183.04	20,866.44	91.39	10,418.58	2
58. Helical gear	1650-622-0260	462	70.30	32,478.60	46.84	21,638.41	23.46	10,840.19	2
59. Gear case assembly	1650-622-0282	28	3,493.23	97,810.44	2,341.82	65,571.03	1,151.41	32,239.41	2
60. Cooling air shroud assembly	1650-622-0291	136	377.55	51,346.80	243.28	33,086.12	134.27	18,260.68	2

APPENDIX I

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NONCOMPETITIVE PROCUREMENT OF SPARE PARTS
COMPLETELY MANUFACTURED BY SUBCONTRACTORS (continued)

DEPARTMENT OF THE ARMY (continued)

Part name	Federal stock number	Quantity procured	Price to U.S. Government		Subcontractor price		Difference in price		Contractor sources of supply
			Unit	Total	Unit	Total	Unit	Total	
120. Strut assembly	1620-326-6118	72	\$ 411.73	\$ 29,644.20	\$ 276.75	\$ 19,926.00	\$ 134.98	\$ 9,718.20	2
121. Spacer	1560-508-2876	221	29.46	6,509.56	19.80	4,375.80	9.66	2,133.76	4
122. Boot assembly	1560-522-8905	419	6.74	2,822.41	5.50	2,304.50	1.24	517.91	3
123. Flange	1560-528-7981	70	126.47	8,853.16	85.00	5,950.00	41.47	2,903.16	3
124. Bolt	5306-579-0398	48	52.51	2,520.66	35.30	1,694.40	17.21	826.26	3
Total, Army				<u>840,421.95</u>		<u>520,377.07</u>		<u>320,044.88</u>	

DEPARTMENT OF THE NAVY

125. Seal	5330-347-6942	500	28.05	14,025.00	11.31	5,655.00	16.74	8,370.00	2
126. Bearings	3110-618-2282	2,000	9.93	19,860.00	6.43	12,860.00	3.50	7,000.00	1
127. Bushings	2810-370-3135	1,422	31.50	44,793.00	16.95	24,102.90	14.55	20,690.10	3
128. Fuel strainer	2810-613-9608	1,246	41.11	51,223.06	22.81	28,421.26	18.30	22,801.80	1
129. Clamp	2810-620-1249	7,875	7.29	57,408.75	2.79	21,971.25	4.50	35,437.50	3
130. Fuel strainer	2945-605-8293	1,166	44.93	52,388.38	29.31	34,175.46	15.62	18,212.92	1
131. Bearing	3110-540-8486	904	80.09	72,401.36	58.61	52,983.44	21.48	19,417.92	2
132. Adapter	2810-600-6966	843	67.32	56,750.76	35.00	29,505.00	32.32	27,245.76	3
133. Flange	2810-508-7029	4,804	9.86	47,367.44	5.41	25,989.64	4.45	21,377.80	3
134. Piston rings	2810-118-6979	163,815	.92	150,709.80	.70	114,670.00	.22	36,039.80	3
135. Bushings	2810-343-3858	631	27.84	17,567.04	16.15	10,190.65	11.69	7,376.39	2
136. Ring	2810-333-4353	2,180	5.01	10,921.80	2.135	4,654.00	2.875	6,267.80	3
137. End bar	2810-704-9791	34,400	.65	22,360.00	.395	13,588.00	.255	8,772.00	3
138. Bushing	2810-651-7492	20,343	6.31	128,364.33	8.60	93,577.80	1.71	34,786.53	2
139. Flange	2810-623-6288	11,070	7.22	79,925.40	5.38	59,556.60	1.84	20,368.80	2
140. Bearings	2810-662-2503	4,323	13.63	58,930.74	10.01	43,273.23	3.62	15,657.51	4
141. Bushing	2810-440-7615	652	19.03	12,407.56	11.15	7,269.80	7.88	5,137.76	3
142. Guide exchange valve	2810-628-4-2-1	5,640	5.10	28,776.00	3.68	20,755.20	1.42	8,020.80	2
143. Gasket	2840-634-8288	55,741	.19	10,590.79	.059	3,288.72	.131	7,302.07	5
144. Bolt	5306-638-2812	134,250	.39	52,951.83	.153	20,540.25	.237	32,411.58	6
145. Clip	2810-479-2104	76,550	.05	3,962.27	.044	3,368.20	.006	593.07	2
146. Bushing, mag. drive shaft	2810-448-6683	9,436	2.25	21,257.98	.69	6,510.84	1.56	14,747.14	4
147. Snap ring	5340-531-8030	3,500	4.17	14,596.70	2.009	7,031.50	2.161	7,565.20	3
148. Bolt, accessory drive pad nut	5306-522-1480	32,250	1.29	41,500.00	.282	9,094.50	1.008	32,405.50	3
149. Tubular rivet	5320-680-2382	26,700	.12	3,204.00	.082	2,189.40	.038	1,014.60	3
150. Bolt, hex-head, drilled	5306-551-3505	38,485	.34	13,084.90	.29	11,160.65	.05	1,924.25	4
151. Washer	5310-330-2841	2,000,000	.01	23,256.79	.00484	9,680.00	.00516	13,576.79	4
152. Gasket, rocker box cover	2810-118-7690	2,714,670	.19	509,800.80	.11	298,613.70	.08	211,187.10	4
153. Cylinder assembly	2840-322-1488	971	103.00	95,481.00	73.46	68,097.42	29.54	27,383.58	2
154. Vane, turbine	2840-350-5394	13,895	20.47	284,430.65	13.25	184,108.75	7.22	100,321.90	2
155. Blade assembly	2840-539-6731	852	59.61	50,787.72	39.00	33,228.00	20.61	17,559.72	2
156. Guide	2840-540-2901	891	103.28	92,022.48	77.93	69,435.63	22.35	22,586.85	4
157. Washer	2840-652-3777	1,010	35.33	35,683.30	22.13	22,351.30	13.22	13,322.00	4
158.	2840-652-3778	1,059	38.81	41,099.79	26.34	27,894.06	12.47	13,205.73	2
159. Bearing, flanged	2840-622-2646	29,500	.60	17,700.00	0.48	14,160.00	.12	3,540.00	2
160. Blade, compressor	2840-659-7892	1,607	27.85	44,754.95	18.95	30,452.65	8.90	14,302.30	2
161. Probe weld	2840-604-4427	6,000	21.06	126,360.69	14.91	89,460.00	6.15	36,900.69	2
162. Bearing, flanged	2810-439-9704	1,595	20.34	32,437.25	11.25	17,943.75	9.09	14,493.50	2
163. Housing	2810-215-9912	1,840	62.31	114,650.80	44.95	82,708.00	17.36	31,942.80	2
164. Seal	2840-390-4575	4,009	51.11	207,951.71	22.30	134,483.98	28.81	73,467.73	2
165.	2840-031-6350	6,973	10.87	75,795.51	8.20	57,178.60	2.67	18,617.91	2
166. Bearing	3110-629-4108	940	207.64	195,181.60	139.56	131,166.40	68.08	63,995.20	2
167.	3110-627-7825	1,684	158.45	266,829.80	106.49	179,329.16	51.96	87,500.64	2
168.	3110-626-9419	1,318	60.74	80,055.32	40.81	53,787.58	19.93	26,267.74	2
169. Upper plate assembly	1500-624-3174	622	553.46	344,252.12	372.00	231,384.00	181.46	112,868.12	2
170. Lower plate assembly	1500-624-3175	621	663.54	412,058.34	446.00	276,666.00	217.54	135,092.34	2
171. Lock, combustion chamber fuel nozzle	2840-441-0159	131,861	.30	39,558.30	.0144	1,898.80	2856	37,659.50	2
172. Bolt	5306-688-1963	7,075	5.50	38,912.50	.901	6,374.58	4.599	32,537.92	2
173. Cotter pins	5315-576-9784	216,663	.13	28,166.19	.006	2,299.98	1.24	26,866.21	2
174. Bushing	2840-703-6101	5,468	3.80	20,778.40	1.37	7,491.16	2.43	13,287.24	2
175. Bearing housing	3110-586-8301	643	177.89	114,383.27	81.45	52,369.13	96.45	62,014.14	2

*The prime contractor provided the subcontractor with \$43,745.28 worth of material. Cost to prime contractor was \$134,483.98, "Prime's" markup was \$73,467.73.

The prices for items 127 through 165 and 171 through 175 are subject to adjustment, upward or downward, in accordance with the final settlement provisions of the fixed-price incentive contracts.

NONCOMPETITIVE PROCUREMENT OF SPARE PARTS
COMPLETELY MANUFACTURED BY SUBCONTRACTORS (continued)

DEPARTMENT OF THE NAVY (continued)

Part name	Federal stock number	Quantity procured	Price to U.S. Government		Subcontractor price		Difference in price		Contractor sources of supply
			Unit	Total	Unit	Total	Unit	Total	
176. Retaining nut	2840-691-6049	9,889	\$ 4.01	\$ 39,654.89	\$ 1.09	\$ 10,779.01	\$ 2.92	\$ 28,875.88	2
177. Bolts	2840-659-4185	10,677	5.35	57,121.95	1.95	20,820.15	3.40	36,301.80	4
178. Locking ring	2915-632-6288	10,635	1.87	19,887.45	.80	8,513.00	1.07	11,374.45	1
179. Sealed weldments	2840-659-4190	91	468.39	42,623.49	207.50	18,882.50	260.89	23,740.99	3
180. Spring	2840-612-1732	232,500	.11	25,575.00	.011	2,607.00	.099	22,968.00	3
181. Screw	5305-206-9498	27,763	.82	22,765.66	.116	3,220.51	.704	19,545.15	5
182. Seal, bearing	2840-321-2961	359	53.74	19,292.66	23.89	8,577.73	29.85	10,714.93	3
183. Bolt	5306-776-2245	46,210	.45	20,794.50	.1735	8,017.44	.2765	12,777.06	6
184. Bearing, seal	2840-703-4549	384	42.77	16,423.60	17.36	6,666.48	25.41	9,757.12	3
185. do.	2840-703-4548	250	44.91	11,227.50	18.85	4,712.41	26.06	6,515.09	3
186. Lead assembly	2840-553-1782	1,226	18.74	22,975.24	8.25	10,114.50	10.49	12,860.74	2
187. Bearing, ball	3110-678-6413	33	130.60	4,309.80	58.79	1,940.07	71.81	2,369.73	2
188. Bolt	5306-650-3461	10,387	1.37	14,230.19	.49	5,055.73	.88	9,174.46	2
189. "	5306-616-2814	69,121	.43	29,722.03	.09	6,450.01	.34	23,272.02	6
190. Nozzle assembly	2915-632-6443	146	150.99	22,044.54	66.50	9,709.00	84.49	12,335.54	1
191. Fuel nozzle assembly	2915-632-6144	153	227.74	34,844.22	94.00	14,382.00	133.74	20,462.22	1
192. Keys	5315-700-5651	1,866	5.58	10,412.28	1.95	3,638.70	3.63	6,773.58	1
193. Clamp assembly	2840-535-2087	299	100.07	29,920.93	44.68	13,359.32	55.39	16,561.61	1
Total, Navy				4,823,531.70		2,905,711.48		1,917,820.22	
TOTAL ALL SERVICES				\$9,516,457.19		\$5,975,867.93		\$3,540,589.26	

The prices for items 176 through 193 are subject to adjustment, upward or downward, in accordance with the final settlement provisions of the fixed-price incentive contracts.

APPENDIX II

NONCOMPETITIVE PROCUREMENT OF SPARE PARTS
PARTIALLY OR COMPLETELY MANUFACTURED BY SOLE-SOURCE CONTRACTORS

DEPARTMENT OF THE AIR FORCE

	Part name	Federal stock number	Quantity procured	Price	
				Unit	Total
1.	Plug	4730-203-0729	3,000	\$ 4.74	\$ 14,220.00
2.	Nut	5310-033-2678	345	38.24	13,192.80
3.	Ring	1610-674-8082	4,040	5.05	20,402.00
4.	Flat washer	5310-286-3103	143,300	.08	11,464.00
5.	Lock	1610-506-7689	700	14.17	9,919.00
6.	Stop assembly solenoid	1610-586-8852	740	97.89	72,541.80
7.	Bolt	1610-507-2862	800	21.07	16,856.00
8.	Screw	5305-349-7666	3,010	6.41	19,294.10
9.	Electrical connector assembly	1610-566-2486	4,160	8.90	37,024.00
10.	do.	1610-566-2487	6,220	9.09	56,339.80
11.	Pump assembly	1610-536-8266	200	131.48	26,296.00
12.	Tube	1610-304-5148	10,400	7.72	80,288.00
13.	Segment ring assembly	1560-123-2423	267	45.88	12,260.30
14.	do.	1560-123-2423	260	46.85	12,181.00
15.	do.	1560-123-2431	275	51.70	14,217.50
16.	do.	1560-123-2432	112	75.15	8,416.80
17.	Cushion assembly	1680-397-0609	417	24.90	10,383.30
18.	Segment ring assembly	1560-123-2424	328	59.40	19,484.45
19.	do.	1560-123-2424	202	61.35	12,393.35
20.	Cartridge assembly	1560-041-4290	1,455	10.50	15,271.35
21.	do.	1560-041-4290	1,112	11.40	12,676.80
22.	Tube	4710-032-5619	1,007	13.25	13,342.75
23.	Cushion assembly	1560-122-9762	428	18.95	8,110.60
24.	do.	1680-388-8419	372	24.30	9,039.60
25.	Adapter	1560-180-9437	971	9.20	8,933.20
26.	Support assembly	1560-196-3885	162	26.03	4,215.63
27.	Linkage "	1560-600-2405	200	16.90	3,379.28
28.	" "	1560-600-2406	450	16.74	7,531.83
29.	Cowl "	1560-320-6774	121	148.05	17,913.47
30.	Fitting	2915-215-0859	640	14.03	8,979.20
31.	" "	1560-560-5167	368	13.86	5,100.48
32.	Curtain assembly	1560-673-8612	200	43.48	8,696.00
33.	Valve "	1650-570-7114	90	374.19	33,676.70
34.	Lever	1620-628-2983	10	582.72	5,827.20
35.	Boot assembly	1560-560-5246	637	13.93	8,874.34
36.	Stub "	1560-092-5447	55	339.00	18,645.00
37.	" "	1560-092-5448	20	368.51	7,370.20
38.	Mast "	5826-557-4394	97	40.21	3,900.37
39.	Cable "	1560-307-3402	250	45.30	11,325.00
40.	Thermostatic switch	5930-296-5770	4,000	12.77	51,080.00
41.	do.	5930-296-5769	4,000	10.81	43,240.00
42.	Air duct hose	4720-606-9548	450	77.42	34,839.00
43.	do.	4720-708-0407	9,400	40.26	377,880.00
44.	Frequency meter	6625-481-0893	3,401	178.29	606,364.29
45.	Generator and cup assembly	6680-671-4866	310	210.34	65,205.40
46.	Indicator	6610-515-6180	300	85.75	25,725.00
47.	Magnet assembly	6020-708-2688	2,856	10.79	30,827.64
48.	Sector "	2950-303-2981	1,440	4.63	6,667.20
49.	Solenoid fuel valve assembly	4820-032-8120	3,200	10.27	32,864.00
50.	Mixing section	1560-040-9666	100	332.87	33,287.38
51.	Pane	1560-198-7097	90	40.74	3,666.83
52.	Window assembly	1560-097-4557	30	185.06	5,551.84
53.	Throat	2915-211-5024	11,424	2.93	33,472.32
54.	Ring diffuser	2915-037-9986	14,724	2.65	39,018.60
55.	Flange	2915-627-4773	5,887	15.01	88,363.87
56.	" "	2915-627-4773	33,589	14.39	483,345.71
57.	Coupling half	4730-541-1332	3,900	29.75	116,025.00
58.	do.	4730-541-1334	5,900	30.85	182,015.00
Total, Air Force					2,939,512.28

DEPARTMENT OF THE ARMY

59.	Mount assembly	1560-566-5880	32	181.25	5,800.00
60.	Elevator assembly	1560-673-2087	21	309.80	6,505.80
61.	Decal set	7690-591-0678	143	46.35	6,628.05

**NONCOMPETITIVE PROCUREMENT OF SPARE PARTS
PARTIALLY OR COMPLETELY MANUFACTURED BY SOLE SOURCE CONTRACTORS (continued)**

DEPARTMENT OF THE ARMY (continued)

Part name	Federal stock number	Quantity procured	Price	
			Unit	Total
62. Decal set	7690-591-0678	62	\$ 43.13	\$ 2,674.20
63. Motor assembly	6105-533-0100	100	62.95	6,295.00
64. Stack "	1560-608-7748	413	18.58	7,634.00
65. Drive "	1560-025-5079	266	44.60	11,863.60
66. Duct "	2995-628-3982	22	165.53	3,641.65
67. Harness assembly	1680-024-4163	40	36.80	1,472.00
68. Augmenter assembly	1560-524-2122	90	31.75	2,857.50
69. Baffle "	1560-574-5610	287	12.90	3,700.95
70. Spring	1560-257-0748	116	41.72	4,839.57
71. Panel assembly	1560-189-1181	515	15.39	7,926.33
72. Leaflet/w spring	1560-536-2397	895	5.70	5,104.77
73. Spring	1560-323-2911	64	44.99	2,879.58
74. Rear windshield assembly	1560-186-8957	592	21.14	12,511.98
75. Left-hand cowl assembly	1560-532-6633	142	48.56	6,895.04
76. Seat assembly	1680-396-0395	133	69.79	9,281.66
77. Hose "	1660-040-9653	896	7.75	6,943.91
78. Air box assembly	2915-196-3906	238	28.84	6,864.69
79. Jumper	1560-654-3181	836	4.51	3,774.54
80. Pane	1560-198-7097	289	40.74	11,774.58
81. Section assembly	1560-510-4094	57	150.90	8,601.45
82. Pedal	1560-397-1668	35	89.92	3,147.33
83. Cover assembly	1560-373-7071	16	449.78	7,196.48
84. Shroud assembly	1560-098-1580	20	662.74	13,254.75
85. Link "	1560-221-3055	345	7.63	2,633.21
86. Shaft "	1560-629-4623	60	463.16	27,789.83
87. Door "	1560-673-5472	20	1,016.25	20,325.03
88. Fitting	1560-336-0762	100	119.59	11,959.38
89. Cover assembly	8340-633-1001	541	16.72	9,043.49
90. Hose "	4720-633-0951	156	15.59	2,431.65
Total, Army				244,252.00
TOTAL, AIR FORCE AND ARMY				\$3,183,764.28

COMPETITIVE PROCUREMENT OF SPARE PARTS

DEPARTMENT OF THE AIR FORCE

Part name	Federal stock number	Number of bids received	Quantity	Price proposed or bid				Previous sole source's bid exceeded award by	
				Previous sole source		Source receiving award		Unit	Total
				Unit	Total	Unit	Total		
1. Lock form parts kit "C"	1610-771-0221	2	618	\$ 72.15	\$ 44,588.70	\$ 31.79	\$ 19,646.22	\$ 40.36	\$ 24,942.48
2. Canopy assembly	1560-600-7459	2	20	3,405.00	68,100.00	2,850.00	57,000.00	555.00	11,100.00
3. Ammunition box assembly	1005-623-6434	2	102	594.12	60,600.24	539.71	55,050.42	54.41	5,549.82
4. do.	1005-623-6435	2	195	594.00	115,830.00	539.71	105,243.45	54.29	10,586.55
5. Pin	5315-298-2126	8	19,781	3.00	59,343.00	1.43	28,286.83	1.57	31,056.17
6. Nut	5310-208-9864	10	1,800	1.83	3,294.00	.35	626.40	1.48	2,667.60
7. Bolt	5306-207-7696	10	7,650	.28	2,142.00	.11	872.10	.17	1,269.90
8. Clamp	5340-048-6152	9	8,925	2.25	20,081.25	1.87	16,689.75	.38	3,391.50
9. Tube assembly	2840-840-9028	6	251	26.20	6,576.73	13.60	3,413.60	12.60	3,163.13
10. Bolt	5306-693-6126	7	2,620	.54	1,418.52	.18	458.50	.36	960.02
11. Bearing sleeve	1560-662-6631	27	1,000	6.90	6,900.00	3.68	3,680.00	3.22	3,220.00
12. Bomb door pin	5315-547-9077	18	10,000	1.45	14,500.00	.36	3,600.00	1.09	10,900.00
13. Washer	5310-025-7178	13	15,000	.48	7,230.00	.06	900.00	.42	6,330.00
14. Bomb door pin	5315-522-4792	18	6,600	2.20	14,513.40	.40	2,640.00	1.80	11,873.40
15. Fuel cell can	1560-328-6697	28	653,040	.03	20,845.04	.01	9,038.07	.02	11,806.97
16. Fitting	1560-335-5153	25	118,125	.35	40,873.61	.12	13,938.75	.23	26,934.86
17. Vortex generator	1560-334-5826	14	2,520	7.42	18,698.40	.92	2,318.40	6.50	16,380.00
18. Stud (pack of 5)	5307-308-3108	10	4,230	1.49	6,302.70	.16	676.80	1.33	5,625.90
19. Bracket assembly	1650-210-8845	10	1,400	4.74	6,636.00	1.88	2,625.00	2.86	4,011.00
20. Packing (seal)	2840-641-6711	4	11,000	.28	3,080.00	.12	1,320.00	.16	1,760.00
21. Bracket assembly	1560-210-8612	25	2,458	11.11	27,315.75	.88	2,163.04	10.23	25,152.71
22. Disconnect assembly	1560-035-1012	21	300	60.25	18,075.00	17.85	5,355.00	42.40	12,720.00
23. Latch	1560-342-8140	7	4,985	15.03	74,924.55	7.76	38,683.60	7.27	36,240.95
24. Packing	5330-599-0339	20	5,779	2.02	11,673.58	1.18	6,794.69	.84	4,878.89
25. Bolt	5306-286-3990	10	3,170	2.59	8,216.64	.12	389.91	2.47	7,826.73
26. "	5306-038-2487	9	95	6.89	654.74	.94	89.30	5.95	565.44
27. "	5306-291-1139	9	545	9.63	5,246.72	.94	512.30	8.69	4,734.42
28. "	5306-693-6392	9	1,265	9.36	11,836.61	.89	1,125.85	8.47	10,710.76
29. Valve	2915-031-5585	4	3,845	7.40	28,453.00	3.11	11,957.95	4.29	16,495.05
30. Generator assembly	1560-312-9536	3	33,000	.61	20,130.00	.45	14,817.00	.16	5,313.00
31. Plate	1650-633-6090	3	128	5.68	727.04	1.38	176.64	4.30	550.40
32. Shaft	1560-386-6513	3	200	39.46	7,892.00	8.77	1,774.00	30.69	6,118.00
33. Flap assembly	1560-345-2075	3	1,586	59.86	94,937.96	43.41	68,848.26	16.45	26,089.70
34. Weld "	1560-327-0293	3	57	423.40	24,133.80	283.50	16,159.50	139.90	7,974.30
35. Tube "	1560-096-4139	3	1,451	65.49	95,025.99	43.68	63,379.68	21.81	31,646.31
36. Tube	2840-210-6048	4	990	16.40	16,236.00	11.63	11,513.70	4.77	4,722.30
37. Shaft assembly	1650-625-2413	2	248	339.52	84,200.96	195.00	48,360.00	144.52	35,840.96
38. Filter element	1650-540-3397	2	211,410	1.36	287,517.60	.87	183,081.06	.49	104,436.54
39. Valve	1660-768-2133	2	426	29.91	12,742.80	22.43	9,555.18	7.48	3,187.62
Total, Air Force					1,351,494.33		812,740.95		538,753.38

DEPARTMENT OF THE NAVY

40. Safety lock	1730-614-0721	10	785	5.23	4,105.55	2.10	1,648.50	3.13	2,457.05
41. Ground safety lock	1730-532-3403	10	857	11.37	9,744.09	4.50	3,856.50	6.87	5,887.59
42. Tow bar assembly	1730-626-3858	8	53	170.72	9,048.16	110.95	5,880.35	59.77	3,167.81
43. Ground safety lock	1730-600-3400	10	1,147	15.22	17,457.34	9.61	11,022.67	5.61	6,434.67
44. Hydraulic fitting	1650-474-2000	9	36	63.52	2,286.72	22.15	797.40	41.37	1,489.32
45. Adapter	5120-659-6806	12	65	23.25	1,511.25	6.47	420.55	16.78	1,090.70
46. Sleeve	2915-037-7900	7	95	47.85	4,545.75	29.87	2,837.65	17.98	1,708.10
47. Valve assembly	1660-603-8700	3	54	73.60	3,974.40	24.50	1,323.00	49.10	2,651.40
48. Extensometer	1610-214-5994	3	19	199.25	3,785.75	144.15	2,738.85	55.10	1,046.90
49. Bushing	1610-214-6011	2	3	317.00	951.00	229.15	687.45	87.85	263.55
50. Oil sump	1610-214-6049	2	10	797.00	7,970.00	576.60	5,766.00	220.40	2,204.00
51. Bushing	1610-214-6051	2	16	373.00	13,428.00	279.00	10,044.00	94.00	3,384.00
52. Fixture	1610-214-6078	2	34	572.00	19,448.00	381.30	12,964.20	190.70	6,483.80
53. Post	1610-442-7755	2	13	321.00	4,173.00	255.75	3,324.75	65.25	848.25
54. Post	changed to 4920-347-3649	2	28	130.50	3,654.00	125.55	3,515.40	4.95	138.60
55. Fixture	1610-442-7833	2	16	45.00	720.00	33.71	539.36	11.29	180.64

COMPETITIVE PROCUREMENT OF SPARE PARTS (continued)

DEPARTMENT OF THE NAVY (continued)

Part name	Federal stock number	Number of bids received	Quantity	Price proposed or bid				Previous sole source's bid exceeded award by	
				Previous sole source		Source receiving award		Unit	Total
				Unit	Total	Unit	Total		
56. Template	4920-546-2580	2	3	\$ 135.00	\$ 405.00	\$ 97.65	\$ 292.95	\$ 37.35	\$ 112.05
57. Gage	4920-650-3484	2	2	225.00	450.00	162.73	325.50	62.25	124.50
58. Pin	5120-214-5991	2	11	25.70	282.70	16.97	186.67	8.73	96.03
59. Wrench	5120-302-5180	2	8	36.00	288.00	26.06	208.32	9.94	79.68
60. Insertor	5120-341-4867	2	8	27.65	221.20	20.07	160.00	7.58	61.20
61. Puller	5120-394-5089	2	23	93.20	2,143.60	67.43	1,550.89	25.77	592.71
62. Indicator	5210-212-2976	2	16	199.25	3,188.00	134.83	2,157.60	64.40	1,030.40
63. Bushing	1610-214-6052	2	17	395.00	6,715.00	285.51	4,853.67	109.49	1,861.33
64. Fixture	1610-442-7757	2	4	72.00	288.00	52.08	208.32	19.92	79.68
65. Wrench	1610-442-7794	2	9	23.15	208.35	16.78	150.86	6.41	57.49
66. "	5120-566-3474	2	12	91.85	1,102.20	66.90	798.00	25.35	304.20
67. Enclosure for gas turbine compressor	2995-523-0225	10	100	3,200.00	320,000.00	2,119.98	211,998.00	1,080.02	108,002.00
68. Enclosure for gas turbine compressor	2995-523-0225	10	90	3,200.00	288,000.00	2,077.18	186,946.20	1,122.82	101,053.80
69. Fuel injection nozzle assembly	2840-049-1931	Unknown	1,600	548.50	877,600.00	180.60	288,960.00	367.90	588,640.00
70. Airship envelope kit	1560-658-7424	3	1	367,167.00	367,167.00	329,875.00	329,875.00	37,292.00	37,292.00
71. do.	1560-658-7424	3	2	367,167.00	734,334.00	336,737.00	673,474.00	30,430.00	60,860.00
72. do.	1560-658-7424	3	3	367,167.00	1,101,501.00	329,882.00	985,616.00	37,285.00	111,885.00
Total, Navy					<u>3,810,697.06</u>		<u>2,759,118.41</u>		<u>1,051,578.65</u>
TOTAL, AIR FORCE AND NAVY					<u>\$5,162,191.39</u>		<u>\$3,571,859.36</u>		<u>\$1,590,332.03</u>

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON 25, D. C.

INSTALLATIONS AND LOGISTICS

CF

AUG 9 1961

Dear Mr. Comptroller General:

Reference is made to your draft report dated April 21, 1961 on the Review of Noncompetitive Procurement of Aeronautical Replacement Spare Parts within the Department of Defense.

Beginning on May 24, 1961, in testimony before the Subcommittee for Special Investigations of the House Committee on Armed Services, the General Accounting Office presented its findings and conclusions and reviewed a number of the specific items listed in the report. The hearings continued in the latter part of June and early July with testimony by representatives of the Department of Defense.

Since our position and views on the detailed findings and conclusions in the report were spelled out in the hearings, they need not be repeated at this time. In response, however, to your request for comments on the draft report, we think it would be helpful to state briefly where we stand on the issues raised and what actions we propose to take.

First, we should like to give you our comments on each of the five recommendations contained in the report.

Recommendation No. 1 is that "immediate steps be taken to reverse the practice of routinely using negotiated noncompetitive contracting without real justification, rather than relying upon full and free competition to assure the Government's obtaining the best available products at the lowest prices."

The Department of Defense is in complete agreement with the underlying premise stated in the report and reiterated in the hearings that "the maximum practicable use of competition in Government procurement programs is fundamentally sound and will promote efficiency and economy in both Government and industry." This we regard as axiomatic. We recognize that we are not at present obtaining competition to the maximum practicable extent in the procurement of aeronautical replacement spare parts. Furthermore we believe that there are substantial competitive opportunities in other areas of military procurement that have not yet been adequately exploited. We consider this one of the major problems in defense spending today and one of our primary goals is to minimize unnecessary noncompetitive procurement wherever it occurs.

We can say, however, that whatever may have been the situation in the past, the routine use of noncompetitive procurement is clearly not the practice today. This is evidenced by the wide range of active and effective programs that have been put into effect by the military departments. These programs and the additional measures that are being considered to accelerate our progress are discussed in the enclosures to this letter.

Recommendation No. 2 is that "immediate steps be taken to correct at the earliest possible date the unsatisfactory conditions which exist in the control over and use of technical data in the Air Force, Army, and Navy."

This is a basic problem and, without doubt, one of the most intricate and difficult problems confronting management in the logistics area today. Since competition is dependent on the ability of the procuring activity to describe adequately the items being procured, our success in obtaining, controlling, and effectively utilizing technical data is a critical factor in our efforts to achieve a major advance in competitive procurement. Until we can convert our data inventories into a system that promptly and effectively responds to procurement needs, our progress will be seriously impeded.

We can report, however, that here also significant programs are in active operation. We believe you will find on reviewing the enclosures that encouraging progress has been made since the time of your earlier reports on this subject in 1959 and 1960. However, major difficulties remain that do not lend themselves to quick solution. We have instituted a number of projects to develop the additional measures needed, but it will require the application of the most advanced and ingenious devices and the most skillful management and engineering techniques to enable us to achieve and maintain control over these rapidly growing mountains of paper.

Recommendations No. 3 and 4 are that "contract terms providing that the Government receive complete technical data and unrestricted rights to use the data for all Government purposes be vigorously enforced," and "that regulations of the DOD be reviewed to provide specific penalties against contractors who fail to furnish on a timely basis the technical data required by contracts."

We fully concur in these recommendations and appropriate contractual provisions and other measures are now being worked out to supplement the procedures which are already in effect. This is a problem with many ramifications which are discussed at some length in the enclosures. The underlying problem is the need for a clearer understanding with industry as to rights and interests in data and more efficient means for speedily determining these rights and interests

as between the Government on the one hand and prime contractors and subcontractors on the other. Our joint efforts with industry to develop a solution to this problem are well advanced.

The last recommendation is that "regulations of the Department of Defense be amended to prohibit the use of open contracts for other than emergency procurement of urgently needed supplies."

This recommendation recognizes the usefulness of the open contract when speedy procurement is essential. In addition, whether or not urgency is involved, the open contract is a highly efficient instrument for handling large numbers of orders which necessarily must be placed with the same contractor over a period of time. For this purpose, the open contract is a money-saver as well as a time-saver and we think its advantages should be exploited to the fullest.

At the same time, however, we recognize that appropriate measures are needed to insure against the misuse of the open contract. Instructions have been issued by the military departments requiring that, before any part may be bought under the open contract, it must be separately evaluated to determine whether competitive procurement or procurement from other than the original source is practicable. As brought out in the hearings, determinations of this nature have been made for some time but less formally than current instructions call for. To insure uniformity, requirements to this effect will be spelled out in ASPR. The use of the open contract must be effectively limited to those items which are individually found eligible for procurement only from the original source.

There are two related problems. First, the use of the Military Interdepartmental Purchase Request (MIPR) requires a thorough review to make sure that this procedure does not contribute unnecessarily to noncompetitive procurement because of the separation of requiring and procuring activities and the possible failure to communicate information that would indicate breakout potentialities.

Second, pricing under open contracts requires special review because of the varying practices employed and because of the sheer proportions of the problem involved in attempting to arrive at reasonable prices for hundreds of thousands of items.

The various measures referred to above in response to the recommendations are discussed more fully in the enclosures to this letter. We believe you will find that significant action has already been taken to come to grips with the deficiencies discussed in the report. The problems however are still formidable and will require better methods and more effective coordination of our efforts.

We are organizing a special full-time staff to undertake the necessary studies, analyze current policies, organizations and procedures,

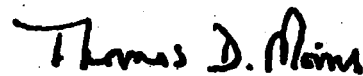
and assist us in developing improved methods for dealing with the problems that confront us. We should be highly pleased if the General Accounting Office could also assign full-time people to work with us in this effort. We have no illusions about the magnitude of the problems that we face in attempting to achieve a major increase in competitive procurement. We believe the problems are difficult enough and the potential benefits in dollar savings and broadened industry participation in the defense effort are great enough to warrant a major cooperative effort by all concerned.

In undertaking this effort, we will of course bear in mind that cost considerations, however significant, must be viewed in relation to other vital considerations. In particular, we must take every precaution to insure that each step in the direction of greater competition and cost reduction does not in any way impair the performance of the military mission.

Enclosure (1) to this letter reviews the major problems that have to be dealt with and indicates our general plan of action. Enclosures (2), (3), and (4) contain detailed information on programs that the Air Force, Navy, and Army respectively have put into effect, together with information on the results that are being obtained. In addition, these enclosures discuss many of the specific procurements that were reviewed in the report and in the hearings, as well as other matters that directly affect each of the departments concerned.

We shall be very appreciative of receiving your views on the measures already taken to increase competition. We shall also welcome your cooperation in working with us to the extent practicable in developing the additional measures necessary to achieve our objective.

Sincerely yours,



THOMAS D. MORRIS
Assistant Secretary of Defense
Installations and Logistics

4 Enclosures
As stated

The Honorable
The Comptroller General
of the United States
Washington 25, D. C.

Problems to be Dealt with in
Achieving Greater Competition

This paper reviews some of the major difficulties that confront us in our efforts to increase competition in the procurement of aeronautical replacement spare parts. By defining the problems that need to be worked on, the paper indicates also the broad outlines of our action program.

None of the problems are new, although most have become more serious as a result of the rapid technological advance of recent years. They have all been recognized and made the subject of specific measures put into effect by the military departments either independently or as part of a joint Department of Defense effort. These measures are discussed in enclosures (2), (3), and (4).

As is evident from the enclosures, the programs to increase competition in the procurement of aeronautical spare parts are in varying stages of development. Some procuring activities have advanced further than others. The over-all effort, however, is producing very appreciable results. It will be seen, for example, that a very significant portion of the millions of engineering drawings in our files have been reduced to microfilm and put in form for machine processing; tens of thousands of aeronautical replacement spare parts have been subjected to detailed screening within the past year to determine their susceptibility to competition, and thousands of parts have been broken out and competitively procured for the first time. Although the full potential of these programs will not be realized for some time, the savings already amount to several million dollars annually.

We believe that the present rate of progress can be speeded up by encouraging and extending existing programs, by insuring that each department takes full advantage of the most successful techniques developed by the other departments, and by thoroughly analyzing the obstacles to competitive procurement so that we may devise and put into effect the additional measures necessary to increase the opportunities for competition.

Problems Beyond the Control of the Contracting Officer

A thorough re-examination will be needed not only of our contracting procedures but of our logistics operation generally in order to isolate the many factors which are beyond the control of the contracting officer but which have a bearing on our ability to purchase competitively. For example, the report discusses at length the problem relating to the acquisition, control, and effective use of engineering drawings and other data procured from contractors. The persistence of this problem undoubtedly constitutes a major impediment to competition.

Other factors that are largely or entirely beyond the authority and control of the contracting officer include the early determination of requirements, the timely preparation of specifications, the establishment of qualified alternative sources of supply, and the provision of funds sufficiently in advance to allow time to solicit and evaluate optimum competition. Planning for competition must be introduced during the development and initial production stages of new weapons in order to avoid decisions that may preclude competition for ensuing procurements of the same or similar items. One of the major projects we have undertaken is designed to insure that judgments at these critical stages are made with full consideration of competition as a significant objective.

Specific Problems in Achieving Competition

We recognize that our present evaluation of the problems that are discussed below is preliminary in nature. This evaluation will undoubtedly be revised as our studies continue and more experience is gained in the application of the programs that we are putting into operation. As we proceed we will learn more precisely the extent to which these problems represent inherent limitations on how far we can reasonably go in increasing competition and, conversely, the extent to which these problems can be effectively dealt with and resolved.

The Data Problem: (1) Controlling the Data

The pertinent figures give some indication of the scope of the data problem. At the present time there are an estimated 50 million drawings in the system, 13 million of which apply to aeronautical parts. Large quantities of these are obsolete or incomplete and must be segregated from those that can be used to meet current needs. The drawings vary in format and detail depending on the source and the purpose for which they were prepared. A portion were acquired to permit reprourement, but the bulk were designed to meet one or more of about 17 other requirements such as testing, repair, overhaul, identification, design, and production inspection.

This massive quantity of documentation does not include specifications, standards, material lists, manuals, and other varieties of technical information which are needed to provide the complete description and quality control features necessary for competitive procurement.

In order to be of practical value not only must these documents be readily accessible and immediately identifiable with the particular part or equipment to which they pertain, they must also reflect the continuing design changes and developments which in relatively short time affect a vast proportion of all equipment in the military inventory.

The annual increase in this documentation runs in the millions as existing material is modified and new weapons and equipment enter the system

at a growing rate. Conventional methods which may at one time have been adequate to provide control have become obsolete and inadequate under the impact of the accelerated technological advances of recent years. The resulting increase in the volume and complexity of documentation creates increasing demands for improvement in our methods of collecting, recording, and retrieving information. Our studies are being projected far into the future in order to enable us to achieve and maintain continuing control.

Enclosures (2), (3), and (4) cite measures which have been instituted by the military departments either on their own initiative or in collaboration with the Armed Forces Supply Support Center. These measures cover a wide variety of actions including, for example, a program to facilitate the recording of data by the establishment of a DOD-wide system of microfilming engineering drawings; the use of aperture cards to permit high-speed machine processing; a project for developing greater machine compatibility between the systems used by Government and industry; and the development in cooperation with industry of standard data requirements for the provisioning of spare parts. The full list of measures already in operation represents a major attack on the problem. Nevertheless, it is evident that the job is of such dimensions that with maximum effort it will still require considerable time before it can be substantially completed.

The Data Problem: (2) Obtaining the Data

In addition to achieving control of data, the GAO report and the hearings have observed the need for measures to assure that we obtain all the data that we are entitled to receive. The report recommends that we take appropriate steps to enforce contract terms providing for the Government to receive complete technical data and unrestricted rights to use the data for Government purposes. We concur in this objective and appropriate contract language and other measures are now being worked out.

The basic purpose of course is to insure that we obtain all the data that we need for competitive procurement. In part this is a matter of contract enforcement, and we fully agree that our contracts should be vigorously enforced. But the problem is obviously more than a matter of matching paper received with paper called for by the contract. It requires a detailed analysis of the data to determine whether every characteristic essential for the performance of the part has been specified and whether the manufacturing processes and quality control techniques are described sufficiently to permit manufacture by other than the original source. This may present technical difficulties requiring high quality engineering capability to resolve. We obviously cannot dispense with such determinations by holding the contractor financially responsible in the event the documentation turns out to be inadequate.

The problem is complicated by the fact that data which may be fully satisfactory for use by the original source may be inadequate for manufacture of the item by other sources because of shop practices, special skills, individual workers' methods, special equipment, know-how and experience acquired in the original development (including attempts that failed), and other factors which cannot readily be stated on paper and which have not, therefore, traditionally been included in data packages.

This means that part of the job is to develop our data specifications to the point where we may be confident that our full requirements are clearly identified and stated. This task is well in hand. However, we are still confronted with the problem of the heavy demands that would be placed on engineering capability if we were to attempt an evaluation of all data packages during preparation or within a reasonable time after receipt in order to insure compliance with the contract. Some preliminary estimates indicate that even if the engineers needed could be obtained, the cost might well be prohibitive. This is a facet of the problem that clearly requires much more careful examination.

The Data Problem: (3) Rights in Data

As a facet of the problem of insuring that we obtain all the data that pertain to parts that we buy, we intend to take appropriate steps to preclude the application of restrictive legends on data which are in fact non-proprietary. We cannot permit contractors to withhold information which they agreed to furnish us and we cannot permit them to load our data with restrictive legends claiming proprietary rights when we have contracted for the right to use such data without restriction. This too however is far from simple. The problems of determining respective interests in data, particularly in connection with components and equipment procured by the prime contractor from other sources, presents legal and administrative difficulties almost as imposing as the technical and engineering difficulties involved in determining whether the data package furnished by a contractor is in fact complete.

In any event, as long as private initiative has a significant contribution to make to the military inventory, we will continue to encourage such development by affording protection to equipment developed at private expense. We should therefore avoid indiscriminate use of data now in our possession which are the legitimate subject of proprietary rights. We may try to buy such rights where desirable for economic or military reasons. However, respect for private property interests will necessarily continue to limit competitive potentialities.

We emphasize the data problem at such length because it is, after all, a basic factor in any effort to promote greater competition. At the same time, we recognize that the "complete data package," even if it were

obtainable for every item, would not be a complete solution. It cannot, for example, substitute for unique know-how and special skills. It cannot take the place of tested and proven performance. A complete data package will not induce a company to submit a bid if the size of the procurement is too small to justify the cost of undertaking the production of a new item. Major limitations on competition will therefore persist despite the availability of technical data.

On the other hand, high quality data can to a great extent mitigate the adverse effect of many of the factors that limit competition.

It is evident from the previous discussion that a wide range of specific tasks have to be accomplished if we are to develop a fully effective high quality data system. We have to be able to identify our data requirements with more precision; we need more efficient methods to assure that the data we receive from contractors is satisfactory in quality and completeness; we must be able to determine the status of proprietary rights without costly and time-consuming research; we should obtain information regarding vendors and multiple sources as part of the data package; we need more dependable means of keeping the data current with design development; and we need to manage the data we receive by the most effective methods that can be devised to insure speedy identification and accessibility and more effective interchange and utilization of data among the services and with industry. Projects are underway to develop a coordinated program to deal with this entire gamut of requirements.

Design Development

A vital factor referred to in the discussion of the data problem is the necessity of keeping up with the state of the art. Although this is of primary concern in the developmental stages of new aircraft, there will be times later also when technology is moving so rapidly that specifications cannot be stabilized. Price competition is best suited to products that have reached a fair degree of design stability. When the design is fluid, we run the risk of purchasing unusable or obsolete parts if we prematurely stabilize specifications in order to obtain competition. Accordingly, we have to forego competition where the potential dollar savings may be obtained only at the risk of retarding essential development.

On the other hand, we need to exercise effective control over design development to insure that we are obtaining worthwhile increments in quality and effectiveness. To the extent that we can identify and minimize changes that result in only marginal improvements, the prospects for competition will be enhanced. This problem is typical of many continuing problems which have been effectively tackled in the past but which require renewed attention because of changing circumstances.

Quality

There is no question that where competition can be obtained only at the risk of compromising quality, the "savings" are too expensive. It is axiomatic that we cannot gamble with the reliability of parts essential to the dependable functioning of aircraft. Accordingly, any change in the procurement channels through which such parts are obtained calls for utmost caution to insure that no risk of depreciated quality is incurred.

An ability to discriminate is necessary between those parts which must, in the interests of reliability assurance, remain in the control of the design activity and those that may be safely released and procured from other sources. While we should be alert to recognize and exploit all reasonable opportunities for breaking out particular items from the exclusive control of the design activity, we cannot ignore the unique experience acquired by the design activity in designing and developing the equipment and in controlling the parts entering into it to assure complete compatibility. We should continue to avail ourselves of this experience as long as it provides us with an assurance of quality and design control that cannot be obtained from other sources except at prohibitive cost. This experience is one of the valuable returns on our investment and we should take full advantage of it as long as it is economical and prudent to do so.

The necessity of preserving the integrity of the aircraft as a functioning unit is the first consideration in every aspect of the problem that we are discussing. This consideration will necessarily deter procurement personnel from leaving proven channels of supply until adequate assurance of effective quality control can be provided through other channels. There are probably a great many parts for which such assurance can never as a practical matter be obtained. Undoubtedly, however, there are many other critical parts which, with reasonable effort and expense and without incurring intolerable risk, can be broken out either for competitive procurement or for purchase from present subcontractors.

Time as a Factor in Limiting Competition

Competitive procurement is time-consuming. An illustration was given during the hearings to show that competitive procurement may require ten times as many manhours as noncompetitive procurement under the open contract and an even greater difference in the time elapsed between receipt of the requisition and placing the order. Because of this difference, competitive procurement is often precluded when requirements are urgent.

One of our projects is directed toward streamlining procurement procedures in order to cut down this differential and thereby reduce the impact of urgency on competitive potentialities. We recognize of course that progress in this direction is limited. For example, the time before

an award can be made has been extended by additional requirements for review of negotiation results by higher authority. To the extent that such review is necessary to protect the Government's interests, we obviously cannot eliminate it. Additional time is needed also to determine whether the data package is adequate and up to date, and to complete it if it is not. New sources selected competitively must be surveyed to determine their capabilities. These sources may require extended make-ready and production startup time; first samples of their output may require highly detailed inspection and qualification testing procedures. Thus, it is apparent that many of the time-consuming steps in the process are inherent or serve important needs.

There are however many things we can do to minimize the time factor. Reference has already been made to the need for better planning. A variety of techniques developed by the military departments illustrates the possibilities. The basic idea of course is to anticipate procurement requirements by advance identification of parts for which demand can be reasonably predicted. This will permit advance performance of time-consuming procedures such as screening to determine adequacy of data and to complete data packages which are incomplete.

We recognize that critical needs will necessarily arise which will not tolerate any delay whatever. Unanticipated breakdowns will occur creating immediate demands for replacement parts. New missions calling for a sudden step-up in operations and increased need for maintenance support will continue to occur. Technological breakthroughs will render existing stocks obsolete or unusable and require rapid replacement with new parts. Nevertheless, we believe that by fully exploiting the opportunities for advance and concurrent action, competitive procurement can be made speedy enough to handle many procurements which are now necessarily made sole source. Moreover, it is recognized that urgency is often attributable to inadequate planning. Even in legitimate emergencies that cannot be anticipated, we need to be alert for opportunities. For example, we refer to the approach discussed in the hearings by the Air Force of splitting procurements where an urgent requirement exists but the quantity to be bought exceeds the immediate need. In these circumstances the quantity needed quickly may be bought sole source but the balance is set aside for competitive procurement if practicable.

Small Quantity Buys

A related problem is the fact that the buys of particular parts are often of such small quantity and dollar value as to make competition impracticable. Competitive prospects are particularly poor where the item is one requiring considerable startup expense which has already been incurred by the original manufacturer but which would have to be included in the new price of any competitor. The likelihood of attracting new sources is further reduced when the future need for the item is limited or uncertain.

This problem - and the problem of urgent requirements - stem in part from the policy of maintaining low inventories of replacement spare parts. This policy, however, is itself a cost-saving measure. It would be prohibitively expensive to attempt to maintain an inventory adequate to meet the wide range of contingencies that affect the need for parts. Large amounts of funds critically needed for other military requirements would be tied up on shelves. Moreover, expenditures for a large part of the stock could end up as a total loss because of technological advances or changes in requirements. Accordingly, while a reduced level of inventory reduces the prospects of competition, we cannot resolve this problem without standing to lose more than we might gain.

These considerations place an even higher premium on effective planning in managing our inventories and in determining economical order quantities. Our present criteria and procedures for determining how much and when to buy are being reviewed to insure maximum economy and efficiency.

Economical Use of Available Resources

These are among the principal problems in attempting to increase competition. Without going into other specific problems, we think it important to note that implicit throughout is the problem of limited resources, particularly personnel. The shortage of engineers is a recognized handicap. Trained talent generally is highly limited. Accordingly, we have to be careful to apply available resources to the most productive uses.

Perspective is needed to avoid focusing attention on one area while neglecting greater potentialities that may exist in other areas. Thus, the capabilities that are required to determine whether adequate data are available or whether competition is technically possible are the same capabilities needed to analyze and improve existing equipment. A legitimate question arises whether engineers should be assigned to determining if particular parts are susceptible to competition or assigned to improve equipment performance and serviceability and thereby reduce the need for replacement spare parts. This same talent is needed also to advance the over-all state of the art and insure that our arsenal does not fall into a position of relative obsolescence. In seeking to increase competition we need to be sure that the performance of these essential functions is not impaired.

High Value Programs

Limited resources compel us to concentrate on the highest value payoffs for our investment. This principle is repeatedly noted in connection with the programs discussed in the attachments. It will be seen that the big effort is being directed to those procurements which offer the greatest returns even though this means that other procurements may temporarily have to be slighted.

We believe that the concentration of effort currently being applied to the problem of reducing the extent of sole source procurement of aeronautical replacement spare parts is justified because the principles and techniques that will promote increased competition in this area should enable us to increase competition in other major segments of military procurement as well.

By the same token, we consider the cost of achieving control over technical data to be justified not only because of the significant contribution that an effective data system will make to competitive procurement generally, but also because such a system will serve other basic needs as well. For example, it will greatly benefit design and development. By providing a library of accessible information regarding existing equipment and processes and by assuring adequate interchange between industry and the Government and between one military department and the others, it will help prevent the unnecessary and costly proliferation of military items. It will accelerate the solution of design problems while avoiding duplication of effort and products. And incidentally, by promoting standardization and the greater use of existing equipment, it will further enhance competitive opportunities.

Pricing

Another area in which very significant efforts are now being made, and where we believe it worthwhile to apply additional effort, is in the field of pricing.

Although the report on aeronautical spare parts did not go into pricing considerations, it necessarily raised questions as to the effectiveness of the pricing procedures that were used. These questions arose in part because the report used many examples in which the difference between the subcontractor's price and the prime contractor's price was far in excess of the typical differential. In addition, the extent to which the differential was attributable to the cost of functions performed by the prime contractor, such as inspection and testing, was not ascertained. In a number of cases also, the price used in the report was the prime contractor's billing price or target price which generally was higher than the price actually paid by the Government.

We recognize that discrepancies such as these would not have occurred if pricing had been within the scope of the GAO review. But we think that the figures do mislead and that it would be helpful to correct the erroneous impression that results.

Preliminary reviews indicate that pricing today has been appreciably strengthened by various techniques including increased pre-negotiation audit support and detailed cost and price analysis. The General Accounting Office is of course aware of these and other measures which have been increasingly emphasized during the past two or three years to assure the reasonableness of prices in the absence of adequate competition. Such techniques were apparently employed, although with varying degrees of effectiveness, in the pricing of the aeronautical replacement spare parts covered by the GAO review.

Nevertheless, we are not satisfied that we are doing a wholly adequate job in the pricing of those spare parts which we must buy non-competitively. In the procurement of such spare parts, and in fact in our procurements generally, we need to observe our pricing operation very carefully to assure continued improvement in the results we obtain. An important facet of the problem is to assure adequate surveillance over the effectiveness with which our prime contractors are performing their part of the job, particularly in connection with placing and pricing subcontracts. When we cannot avoid awarding contracts on a sole-source basis, we must protect the Government's interest (1) by actively promoting the prime contractor's use of competitive procurement wherever feasible in awarding subcontracts, (2) by reviewing subcontract pricing to be sure that sound principles and techniques are being used by the prime contractor, and (3) by effectively using our pricing tools to assure the reasonableness of the prime contractor's price to the Government. We believe that an important step in the direction of better pricing is represented by the detailed surveys that the military departments have been making of contractors' estimating and purchasing systems. In the past two years hundreds of such surveys have been completed and significant improvements have been made in estimating and purchasing organizations and methods.

Management Tools to Evaluate Performance: (1) Internal Audit

A continuing problem for management is to insure a sufficient flow of information with which to evaluate the adequacy of existing policies and procedures and the effectiveness of their implementation. A few months ago we initiated a project designed to improve our self-auditing capability and enable us to evaluate our performance more promptly and more dependably. We are especially concerned with our pricing policies and procedures, since accurate estimating and sound pricing are a basic prerequisite for economical and efficient procurement. However, a major effort to expand internal audit to evaluate management and operations generally is now underway.

There was some discussion in the hearings of evaluation techniques being used by the military departments, including, for example, techniques for evaluating personnel effectiveness. With respect to the specific problem of increasing competition, new statistical requirements that went into effect

on 1 July 1961 will aid us in measuring our progress. Reports on all procurement actions over \$10,000 will henceforth clearly indicate whether or not competition was obtained and whether the competition was based on price proposals or design and technical proposals.

Management Tools: (2) GAO Audits and Reports

It should be clear beyond any question that the Department of Defense regards GAO audits and examinations as a valuable management tool. Many current policies and procedures are directly attributable in considerable measure to GAO findings.

The General Accounting Office has on occasion noted that, because of staff limitations, its examinations are necessarily selective and are therefore directed to specific areas of apparent weakness rather than toward over-all evaluations of procurement programs or contractors' activities. While the latter approach would be desirable, the fact is that GAO's focusing on problem areas has been of great assistance in enabling the Department of Defense to locate deficiencies and develop the necessary corrective measures. Clearly, the present report and the Congressional hearings that followed have been highly useful for this purpose.

As our internal reviews and audit programs are intensified, we will seek closer coordination with the GAO programs in order to ensure that we get the most out of our mutual efforts. For maximum benefit for management it would be helpful also if the reports regarding deficiencies could be supplemented, to the extent that this is practicable, by observations that GAO auditors and examiners may have an opportunity to make of areas where sound and effective work is being done. Such information in conjunction with our own review, would enable us to reach more dependable conclusions as to where our efforts should be concentrated.

Goal for Competitive Procurement

We have reviewed the problems that confront us because we believe that in order to make maximum headway it is essential that we realistically recognize the difficulties, the limitations, and the real hazards that action to increase competition will entail. Without doubt, despite the most intensive effort we can make, many of the problems will persist for some time to come.

We do not believe it is possible at this time to estimate with any degree of accuracy what the ultimate potential is for competition in the procurement of aeronautical replacement spare parts. There are undoubtedly large numbers of items of non-critical nature that may be opened to competition without the scrupulous, time-consuming and costly evaluations needed for critical items. But these are generally items of low value. At this point, taking into consideration the problems to be dealt with, we think a realistic target for the near future would be the achievement of competition in the range of 30% of total dollars. If our sights are too low, we shall be very pleased to revise them upward based on the experience we gain.

Principal Management Officials
of the Departments of Defense and the Air Force, Army,
and Navy during the Period of this Report

Department of Defense

Secretary of Defense

Robert S. McNamara	January 1961 to date
Thomas S. Gates, Jr.	December 1959 to January 1961
Neil H. McElroy	September 1957 to December 1959

Deputy Secretary of Defense

Roswell L. Gilpatric	January 1961 to date
James H. Douglas	December 1959 to January 1961
Thomas S. Gates, Jr.	June 1959 to December 1959
Donald A. Quarles	May 1957 to May 1959

Assistant Secretary of Defense (Installations and Logistics)

Thomas D. Morris	January 1961 to date
(Position created January 1961)	

Assistant Secretary of Defense (Supply and Logistics)

Perkins McGuire	January 1957 to January 1961
(Position merged with As- sistant Secretary, Instal- lations and Logistics, Jan- uary 1961)	

Department of the Army

Secretary of the Army

Elvis J. Stahr, Jr.	January 1961 to date
Wilber M. Brucker	July 1955 to January 1961

Under Secretary of the Army

Stephen Ailes	February 1961 to date
Hugh M. Milton, II	August 1958 to January 1961
Charles C. Finucane	September 1954 to April 1958

Assistant Secretary of the Army (Logistics)

Paul Ignatius	May 1961 to date
Courtney Johnson	April 1959 to January 1961
Frank Higgins	August 1954 to March 1959

Commander, U.S. Army Transportation Materiel Command

Major General William B. Bunker	October 1955 to date
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Department of the NavySecretary of the Navy

John B. Connally	January 1961 to date
William B. Franke	June 1959 to January 1961
Thomas S. Gates, Jr.	April 1957 to June 1959

Under Secretary of the Navy

Paul B. Fay, Jr.	February 1961 to date
Fred A. Bantz	June 1959 to January 1961
William B. Franke	April 1957 to June 1959

Assistant Secretary of the Navy (Installations and Logistics)
(Formerly designated Assistant Secretary of the Navy (Material))

Kenneth E. Belieu	January 1961 to date
Cecil P. Milne	April 1959 to January 1961
Fred A. Bantz	April 1957 to April 1959

Chief, Bureau of Naval Weapons

Rear Admiral Paul D. Stroop	December 1959 to date
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Commander, U.S. Navy Aviation Supply Office

Rear Admiral Joseph M. Lyle	June 1959 to date
Captain J. J. Appleby	April 1959 to June 1959
Rear Admiral J. W. Crumpacker	June 1956 to April 1959

Department of the Air ForceSecretary of the Air Force

Eugene M. Zuckert	January 1961 to date
Dudley C. Sharp	December 1959 to January 1961
James H. Douglas	May 1957 to December 1959

Under Secretary of the Air Force

Joseph V. Charyk	January 1960 to date
Dudley C. Sharp	August 1959 to December 1959
Malcolm A. MacIntyre	June 1957 to July 1959

Assistant Secretary of the Air Force (Materiel)

Joseph S. Imirie	April 1961 to date
Philip B. Taylor	April 1959 to February 1961
Dudley C. Sharp	October 1955 to January 1959

Commander, Air Force Logistics Command

General William F. McKee	August 1961 to date
General Samuel E. Anderson	March 1959 to August 1961
General Edwin W. Rawlings	July 1951 to February 1959

Commander, Middletown Air Materiel Area

Major General Donald L. Hardy	July 1960 to date
Major General Paul E. Ruestow	February 1959 to June 1960
Major General George R. Acheson	July 1958 to January 1959

Commander, Mobile Air Materiel Area

Brigadier General Emmett B. Cassady	July 1961 to date
Major General Daniel F. Callahan	July 1958 to July 1961

Commander, Oklahoma City Air Materiel Area

Major General Lewis L. Mundell	August 1960 to date
Major General Thomas P. Gerrity	July 1958 to August 1960

Commander, San Antonio Air Materiel Area

Major General William T. Hudnell	August 1960 to date
Major General Lewis L. Mundell	January 1959 to August 1960
Major General Thetus C. Odom	July 1958 to January 1959

Commander, Warner Robins Air Materiel Area

Major General William T. Hefley	December 1960 to date
Major General A.V.P. Anderson, Jr.	July 1958 to November 1960

Commander, Dayton Air Force Depot

Brigadier General William W. Veal	December 1960 to date
Brigadier General Charles E. Jung	February 1959 to November 1960