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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

FEB 16 1977

B-187553

The Honorable Melvin Price
Chairman, Committee on Armed Services
House of Representatives

Dear Mr. Chairman:

This is in reply to your October 8, 1976, letter on behalf of Congressman Bob Wilson, Ranking Minority Member of your Committee. Congressman Wilson requested an examination of the apparently calculated practice of the Garrett Corporation and its AiResearch Division of "buying-in" on contracts for the production of auxiliary power units. Your letter requested that our Office proceed with that examination as expeditiously as possible and provide you with a copy of the results.

We agreed with Congressman Wilson's office to limit our efforts to examining two subcontracts between Garrett and McDonnell Douglas Corporation under the F-15 program. These awards subsequently resulted in a law suit by Garrett against McDonnell Douglas. We reviewed the case file documents associated with Garrett's complaint and other contract data at the prime contractor facilities in St. Louis, Missouri.

From these sources we compiled a chronological summary of the subcontracts award, the events surrounding the Garrett litigation and its settlement, and information on the buy-in aspects of this particular procurement.

Generally, our review disclosed the following:

- We found evidence that Garrett submitted bids lower than their estimated costs on the F-15 subcontracts. Garrett admits to making what it referred to as an "investment" in the F-15 program. The extent of this investment was expected to be about \$3 million. The company said that investing in a program at prices less than anticipated costs for early phases of a program is a common practice in the aerospace-defense industry.
- Whether Garrett has followed a consistent pattern of buy-ins cannot be determined by examining two subcontracts. However, a consistent pattern can be inferred from statements Garrett made in court affidavits.

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--McDonnell officials said they were aware Garrett's offered price was less than the cost it expected to incur, or, at best, Garrett would make little profit. McDonnell suspected at the time of the award that Garrett was investing in the program but did not know the actual dollar extent of this investment.

--It is evident that McDonnell recognizes the concept of "investment." It is concerned when such proposals are received and carefully evaluates them. Use of priced options is one method of preventing future purchase of items at excessive prices. If a supplier wins by intentionally underbidding its costs, McDonnell believes that the supplier should be held accountable for such commitments. Accordingly, such a supplier is expected to responsibly perform its contractual obligations. In this connection we have consistently held that the submission of a low price or below-cost bid is not a basis upon which to challenge the validity of an award, and that the question of whether a bidder can perform at its offered price is one of bidder responsibility.

--Before the initial procurement of the F-15 components involved in this report, competitive bids were solicited from many suppliers. The selection of Garrett on both items was based on technical superiority as well as lower prices.

--Garrett's financial experience on the subcontracts was that it:

1. Certified that it incurred losses in excess of \$25 million for work performed, as of June 1, 1975, on the design, development, test and evaluation phase and on production options 1 to 3 of the subcontracts.

2. Obtained financial relief of \$21.7 million over the option prices for fiscal years 1975 and 1976 procurements. The relief was provided through a negotiated out-of-court settlement of breach-of-contract litigation. Also, the settlement included a \$2.4 million price increase for costs associated with development/qualification testing.

BACKGROUND

According to Armed Services Procurement Regulation 1-311, the term "buying-in" refers to the practice of attempting to obtain a contract award by knowingly offering a price or cost estimate less than anticipated costs with the expectation of either (1) increasing the contract price or estimated cost during the period of performance through change orders or other means or (2) receiving future follow-on contracts at prices high enough to recover any losses on the original buy-in contract. Such a practice is not favored by the Department of Defense since its long-term effects may diminish competition and it may result in poor performance. Where there is reason to believe that buying-in has occurred, contracting officers are to assure that amounts thereby excluded in the development of the original contract price are not recovered in the pricing of change orders or of follow-on procurements subject to cost analysis.

Our Office has consistently held that the submission of a low price or below-cost bid is not a basis on which to challenge the validity of an award, and that the question of whether a bidder can perform at its offered price is one of bidder responsibility.

COMPETITION FOR ITEMS BEING PROCURED

On January 1, 1970, McDonnell Douglas was awarded a prime contract by the United States Air Force to design, develop, and manufacture the F-15 aircraft in accordance with the prime contract performance specifications. Included in these specifications were requirements for a number of systems, among them an air cycle air conditioning system; an auxiliary power unit, later called the integrated jet fuel starter; and an airframe mounted accessory drive system (later referred to respectively as air conditioning system, power unit, fuel starter and drive system). The F-15 prime contract was divided into six phases-- a design, development, test, and evaluation phase; and five successive production options. The competition for award of the various systems was based on the requirements for the six phases.

All potential suppliers submitted firm-fixed-price bids which were offered as maximum prices subject to audit substantiation and negotiation. In addition, the maximum prices for

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options 4 (fiscal year 1975) and 5 (fiscal year 1976) were subject to an economic adjustment for inflation and other fluctuations in the economy.

Integrated jet fuel starter/airframe mounted
accessory drive system

Before initial procurement of the F-15 fuel starter/drive system in September 1970, competitive proposals were solicited by McDonnell Douglas in April 1970 from the following prospective suppliers:

- For the power unit portion of the system; (Garrett AiResearch, Solar, Sundstrand, and Williams Research.)
- For the drive system portion; Garrett AiResearch, Curtis Wright, Hewitt-Robbins Division of Litton Industries, Speco Division of Kelsey-Hayes, Sundstrand, and Western Gear.

In addition to proposing on the requirements in the Request For Proposal each of the suppliers was also encouraged to submit recommendations for alternate approaches with alternate proposals for cost effectiveness. With the exception of Williams Research, the other three prospective suppliers submitted proposals on the power unit and all six prospective suppliers submitted proposals on the drive system. On the basis of the evaluation of the proposals, the prime contractor's procurement review board selected Garrett and Sundstrand for further negotiations on various combinations of equipment, including the integration of the power unit and drive system as part of a system. Preaward negotiations were conducted with both companies and culminated in the selection of Garrett for the procurement of the fuel starter/drive system. Both price and weight advantages were associated with choosing the integrated Garrett proposal.

Air cycle air conditioning system

Competitive proposals were solicited in June 1970 from Garrett AiResearch and the Hamilton Standard Division of the United Aircraft Corporation. A third potential supplier, Stratos Division of the Fairchild Miller Corporation, had advised that it was not interested in competing on the air conditioning system procurement and requested to be removed as a potential supplier. Preaward negotiations were conducted with both companies and resulted in the selection of Garrett as the winner of the air conditioning system competition. Garrett's selection was based on technical preference and the fact that it quoted a substantially lower total program price.

ORIGINAL CONTRACT PRICES

The purchase order contract prices, excluding technical publications at the date of the award to Garrett in September 1970 were: \$14,371,702 for the fuel starter/drive system, of which \$5,595,162 was allocable to the design, development, test, and evaluation phase; and \$11,882,593 for the air conditioning system with \$3,419,068 allocable to the design, development, test, and evaluation phase.

GARRETT'S BREACH OF CONTRACT COMPLAINT

During the course of performing under the design, development, test, and evaluation program and options 1 and 2, Garrett submitted for negotiation various change proposals for price adjustments in accordance with the contractual procedures required by the purchase orders. However, prior to the exercise of option 3 for the fiscal year 1974 procurement, Garrett AiResearch advised McDonnell Aircraft Company, a Division of McDonnell Douglas, that the Garrett Corporation (AiResearch's parent organization) was reviewing the F-15 subcontracts to determine its legal obligations and directed that no further negotiations be conducted by Garrett AiResearch.

On February 1, 1974, Garrett and McDonnell Aircraft discussed the losses incurred and projected under the F-15 program. Garrett submitted a claim requesting a total price increase of \$41,176,000 in purchase order and option prices. McDonnell Aircraft indicated that Garrett's request for the price increase was unacceptable in that it was based on broad general theories and without substantiation. McDonnell Aircraft made it clear that it had no intention of offering any adjustments for claims unless they could be justified as being compensable within the terms of the subcontracts. Garrett maintained that it would not proceed with performance of the work required under option 3 until its request for claim adjustments had been substantially met.

McDonnell Aircraft then decided to exercise option 3 and issued formal purchase orders before the option expiration dates. AiResearch rejected McDonnell Aircraft's demand for adequate assurance of due performance and advised that Garrett would file a law suit against McDonnell. On February 20, 1974, the Garrett Corporation filed a law suit against the McDonnell Douglas Corporation (of which McDonnell Aircraft is a division) in the U.S. District Court for the Central District of California in Los Angeles. Garrett alleged a breach of contract on the part of McDonnell Aircraft with regard to the air conditioning system and fuel starter/drive system

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subcontracts and requested the U.S. District Court to do the following:

- Reform the subcontracts so as to convert them to the same contracting basis as McDonnell Aircraft had under the prime contract with the U.S. Air Force (i.e., from firm-fixed-price to cost-plus-incentive-fee for the design, development, test, and evaluation program and to fixed-price-incentive for the production options).
- Require McDonnell Aircraft to pay Garrett such other damages as would be determined.

COURT'S GRANTING OF PRELIMINARY INJUNCTION

On April 26, 1974, the U.S. District Court granted McDonnell Aircraft's request for a preliminary injunction ordering Garrett to perform option 3. At the same time, the Court ordered McDonnell to negotiate all of Garrett's claims which have occurred in the past and which will occur in the future with reference to Garrett's allegation of an inequitable price structure and change orders.

DIFFICULTIES EXPERIENCED IN NEGOTIATIONS

Pursuant to the U.S. District Court's order, formal negotiations commenced in May 1974 during which Garrett submitted its subcontract claims. In the negotiation sessions, various difficulties were experienced in evaluating the claims and resulted in significant differences of opinion between Garrett and McDonnell. Impasses occurred at various stages of the negotiations. In the meantime, relative to Garrett's pursuance of litigation, the U.S. Court of Appeals on April 21, 1975, upheld and affirmed the lower U.S. District Court decision in favor of McDonnell Aircraft and against Garrett.

DECISION TO OFFER F-15 SUPPLIERS AND GARRETT SOME FINANCIAL RELIEF

Although options were previously obtained from most F-15 suppliers for the anticipated fiscal years 1975 and 1976 procurements, significant changes occurred in a turbulent economy over the last 3 years that had, in many instances, a drastic cost impact on the option performances required of the suppliers. McDonnell Aircraft reviewed the cost problems and their causes and concluded that it was in the best interest of the F-15 program to provide suppliers, who were projecting losses on the anticipated procurements, with relief from the option prices for fiscal years 1975 and 1976. Accordingly,

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McDonnell Aircraft decided, from a practical standpoint, to also offer Garrett essentially the same type of financial relief as had been offered to other suppliers for the contemplated fiscal years 1975 and 1976 procurements in order to settle the law suit and obtain better performance from Garrett.

OUT-OF-COURT SETTLEMENT OF LITIGATION

An interim agreement between McDonnell Aircraft and Garrett, establishing new prices for fiscal years 1975 and 1976 and settling previous disagreements on responsibility for development/qualification testing, was reached on May 30, 1975. A definitive memorandum of agreement was executed on June 3, 1975. This agreement included the following prices:

<u>Procurements</u>	<u>Air conditioning system</u>	<u>Fuel starter/drive system</u>	<u>Total negotiated price</u>
FY-1975 (72 sets)	\$ 6,129,288	\$ 7,845,408	\$13,974,696
FY-1976 (135 sets)	\$11,253,600	\$14,177,700	25,431,300
Development/qualification testing		2,436,000	2,436,000
Total	<u>\$17,382,888</u>	<u>\$24,459,108</u>	<u>\$41,841,996</u>

McDonnell Aircraft's liability of \$2,436,000 for costs associated with fuel starter/drive system development/qualification testing was to be partly offset by Garrett's agreement in the settlement to reduce McDonnell Aircraft's liability (by more than \$1,000,000) for changes under the air conditioning system subcontracts. These changes were previously acknowledged as at least partly McDonnell Aircraft's cost responsibility.

NET EFFECT OF NEGOTIATED PRICES OVER OPTION PRICES

According to McDonnell Aircraft the negotiated prices in the settlement reflect a total price increase of \$21,773,376 over the option prices available to McDonnell Aircraft for

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fiscal years 1975 and 1976 procurements. A comparison of these prices is as follows:

<u>Air conditioning system</u>	<u>FY-1975 (72 sets)</u>	<u>FY-1976 (135 sets)</u>	<u>Total</u>
Negotiated price	\$6,129,288	\$11,253,600	\$17,382,888
<u>less option price</u>	<u>2,685,168</u>	<u>6,452,265</u>	<u>9,137,433</u>
Increase over option	\$3,444,120	\$ 4,801,335	\$ 8,245,455
<u>Fuel starter/drive system</u>	<u>FY-1975 (72 sets)</u>	<u>FY 1976 (135 sets)</u>	<u>Total</u>
Negotiated price	\$7,845,408	\$14,177,700	\$22,023,108
<u>less option price</u>	<u>2,264,832</u>	<u>6,230,355</u>	<u>8,495,187</u>
Increase over option	\$5,580,576	\$ 7,947,345	\$13,527,921
Total increase	<u>\$9,024,696</u>	<u>\$12,748,680</u>	<u>\$21,773,376</u>

By structuring the out-of-court settlement in the manner that it was negotiated, whereby the vast preponderance of the price increase is reflected in fiscal years 1975 and 1976 procurements, McDonnell Aircraft noted that Garrett will not receive any significant benefit of the negotiated prices until it delivers under the fiscal years 1975 and 1976 purchase orders. Accordingly, the structure of the settlement provides significant motivation for Garrett to diligently perform.

GARRETT'S LOSSES OVER AND ABOVE
NEGOTIATED FINANCIAL RELIEF

Notwithstanding the negotiated financial relief, Garrett certified that as of June 1, 1975, its divisions had incurred losses in excess of \$25 million for work performed under the air conditioning system and fuel starter/drive system subcontracts. McDonnell Aircraft noted that as of that date Garrett had only delivered a small part of the fiscal year 1974 subcontracts and that the financial relief given to Garrett on the fiscal years 1975 and 1976 procurements will not offset

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the losses incurred on prior procurements through fiscal year 1974.

GARRETT'S INVESTMENT (BOY-IN) IN THE
F-15 PROGRAM

There is evidence that Garrett submitted bids lower than its estimated costs on the F-15 subcontracts, and this is claimed to be a common practice in the aerospace-defense industry. Our review of the affidavits in the case file disclosed the following statements by Garrett officials:

"Garrett knowingly offered prices and contracted with McDonnell for systems and products at prices less than the anticipated cost thereof. This has been a common practice in the aerospace industry as we believe we were making a reasonably definitive investment in the F-15 program..."

A Garrett response in opposition to McDonnell's motion for a preliminary injunction produced the following:

"It is common practice in the aerospace-defense industry to, in fact, make an investment in a program during its DDT&E [design, development, test, and evaluation] phase, or when production hardware is priced at fixed prices before the DDT&E phase is completed. In such cases, contractors enter the program investing in the future of the program. They expect to make a return on their investment through the vehicle of the separate pricing of spare parts during the period that fixed price production items are being manufactured. In addition, the investment is recovered through the continued sale of both additional production quantities after the initial production run, and spares..."

A statement by Garrett also indicates that McDonnell was aware of this investment:

"Defendant knew this to be the case in both of the contracts in question here, because plaintiff was required to submit, and did submit Forms DD 633 reflecting its actual costs of performance projected at the date of contract execution. These costs of performance were greater than the contract price."

McDonnell officials advised us that Garrett's offer indicated that its contract price was less than the cost it expected to incur, or, at best, Garrett would make little profit. McDonnell suspected at the time of the award that Garrett was investing in the program but it did not know the actual dollar extent of this investment. (Garrett later

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revealed that the extent of its expected investment was about \$3 million.)

Although McDonnell recognizes the concept of "investing into a program," it says it is concerned about proposals received in this manner. It carefully evaluates their impact, including the financial viability of the supplier and the effect on the competition. The use of priced options is one method of protecting for the future purchase of items at predetermined prices. If a supplier wins a competition by intentionally underbidding its costs, McDonnell believes that the supplier should be held accountable for such commitments and the reliance placed on the proposal. Accordingly, such supplier is expected to responsibly perform his contractual obligations.

GARRETT'S INVESTMENTS IN OTHER PROGRAMS

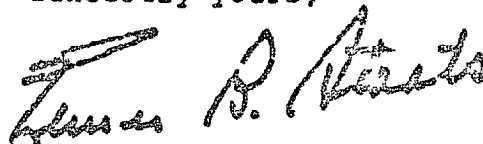
Indications are that Garrett also made similar investments in other procurement programs. The Contract Administrator of the AiResearch Division stated the following in an affidavit:

"During my approximately 10 years in sales and contract administration in the aerospace field, I have been contract administrator or sales administrator for AiResearch products on the following programs: Lockheed C-5, Vought A-7, and Lockheed S3-A. In each case, the procurement of spares at the production prices was never contemplated, agreed or permitted by AiResearch. It is a common practice in the industry that when there are substantial nonrecurring costs required to be expended in the DDT&E phase of a contract, or when production hardware is priced at fixed prices before the DDT&E phase is completed, the initial prices established for hardware, or for DDT&E, are often less than the actual costs to accomplish the DDT&E or to fabricate such hardware. In such cases, AiResearch and other subcontractors would enter such a program, in effect making an "investment" in the future of the program. A portion of the return on the investment made in these cases is achieved through the vehicle of the separate pricing of the spare parts during the period that firm-fixed-price production option quantities were being manufactured. In addition, the investment in many cases is recovered through the continued sales of both production quantities and spare parts after the period during which firm-fixed-prices for the equipment were initially established."

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We trust the above information is responsive to your needs. As you know, Congressman Wilson has expressed interest in this matter and a similar letter is being sent to him today. If we can be of further assistance, please let us know.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Thomas B. Stewart". The signature is written in dark ink and is positioned above the typed name.

Comptroller General
of the United States