

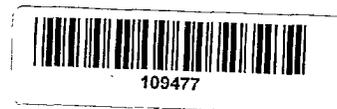


UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

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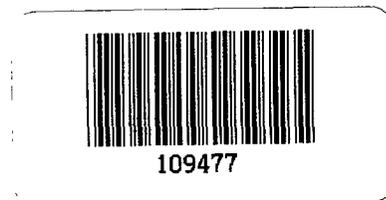
PROCUREMENT AND SYSTEMS  
ACQUISITION DIVISION



B-168450

MAY 25, 1979

The Honorable Harold Brown  
The Secretary of Defense



Attention: Assistant for Audit Reports  
Room 3A336  
ASD (Comptroller)

Dear Mr. Secretary:

We have reviewed the pricing of fixed-priced incentive contract DAAH01-77-C-0111. This contract was awarded to the Raytheon Company, Missile Systems Division, Andover, Massachusetts, by the U.S. Army Missile Materiel Readiness Command (Mircom), Redstone Arsenal, Alabama. It provides for furnishing 526 Improved Hawk (Ihawk) ground-to-air defense missiles. The negotiated target price of the contract is \$31,771,040, and the negotiated ceiling price is \$34,749,575.

This contract was selected as part of a nationwide review of the pricing of negotiated noncompetitive contracts awarded by the Department of Defense. Our objective was to determine contract price reasonableness in relation to cost or pricing data available to the contractor at the time of contract negotiation, as required by Public Law 87-653.

Our review was performed at the contractor's facility where we reviewed documents and held discussions with contractor personnel. We also reviewed work done by Defense Contract Audit Agency (DCAA) and Defense Contract Administration Services Office staffs at the contractor's location.

The details of our review are in the enclosure. In summary, we estimate that the target cost of the contract was overstated by about \$710,000 because certain cost or pricing data the contractor provided the Army to support proposed material costs were not accurate, complete, and current. We believe this overstatement will result in approximately \$300,000 of excess cost to the Government. Also,

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the contracting officer did not obtain adequate support from Raytheon for proposed maintenance and modification of tooling and test equipment costs. Failure to do so caused the contract price to be overstated by about \$160,483.

In response to our draft report, Raytheon officials advised us that data used to support its material price was reasonable and that all data was submitted to or was available to DCAA for evaluation. While we agree that Raytheon periodically provides DCAA with reports and that other data is available for evaluation, we found no indication that Raytheon officials informed DCAA or the contracting officer that the information furnished or available for review could affect the proposal being negotiated. As stated in the Defense Acquisition Regulation (DAR),

"mere availability of books, records and other documents for verification purposes does not constitute submission of cost or pricing data."

Mircom agreed with our position that Raytheon's material cost data may not have been accurate, complete, and current. Mircom also concurred with our facts relating to maintenance and modification costs. Accordingly, Mircom has requested that DCAA do a postaward audit of the contract to determine if a defective pricing claim is warranted and what the amounts involved are.

Because of actions taken by Mircom in response to our draft report, further recommendations are not being made in this report. However, we would appreciate being advised of actions taken by Mircom and would be happy to discuss any questions that you may have.

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We are sending copies of this letter to the Raytheon Company; the Office of Management and Budget; the Secretary of the Army; the Commander, Mircom; and the Director, DCAA. We are also sending copies to the Chairmen of the House and Senate Committees on Appropriations and Armed Services, the House Committee on Government Operations, and the Senate Committee on Governmental Affairs.

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As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of this report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "J. H. Stolarow".

J. H. Stolarow  
Director

Enclosure

REVIEW OF PRICING OF CONTRACTDAAH01-77-C-0111 WITH RAYTHEON COMPANYBACKGROUND

Contract DAAH01-77-C-0111 was awarded to the Raytheon Company, Missile Systems Division, Andover, Massachusetts, in December 1976, for producing 526 Ihawk ground-to-air missiles by Mircom, Redstone Arsenal, Alabama. The contractor submitted an initial proposal on August 20, 1976, which was revised on October 27, 1976. Mircom and Raytheon conducted negotiations between October 27 and November 19, 1976. The contractor executed a Certificate of Current Cost or Pricing Data, effective November 19, on November 22, 1976. A defective pricing clause was also incorporated into this contract.

The proposed and negotiated target amounts and ceiling price for the contract are:

	Proposal (8-20-76)	Revised proposal (10-27-76)	Negotiated (11-19-76)
Target cost	\$30,103,709	\$29,313,537	\$28,367,000
Target profit	3,913,462	3,810,760	3,404,040
Target price	34,017,171	33,124,297	31,771,040
Ceiling price	37,629,636	36,641,922	34,749,575

The fixed-price incentive agreement provides for a sharing of 70-percent Government and 30-percent Raytheon on underruns and 80-percent Government and 20-percent Raytheon on overruns.

Raytheon's initial proposal was reviewed by the Defense Contract Administration Services Plant Representative Office at Raytheon and by Mircom. DCAA conducted a preaward audit of the initial proposal between August and September 1976. The DCAA audit report was qualified because the results of Mircom's review were not available for incorporation in the report. The contractor's revised proposal was not reviewed by either the representative office or DCAA.

As of December 31, 1978, the contract was approximately 92-percent complete, with a projected underrun of about \$2.648 million.

MATERIAL COSTS OVERSTATED

We estimate that the negotiated target cost of the contract was overstated by about \$710,000 because certain cost or pricing data provided the Army to support proposed material costs was not accurate, complete, and current. We estimate that this overstatement will result in excess cost to the Government of about \$300,000.

In its initial submission (Aug. 20, 1976), Raytheon proposed material costs of \$7,497,084, to which a price reduction factor of 2.3 percent, or \$172,433, was applied for estimated reductions anticipated during negotiations with vendors. On October 27, 1976, Raytheon updated its submission and, based on estimated material costs of \$7,301,084, proposed a reduction factor of 3.1 percent, or \$226,333. In neither instance was support provided for the price reduction proposals. The initial reduction was based on subjective forecasts of purchasing department managers; the revised reduction was a management decision. The negotiated price reduction amounted to about 3.4 percent.

DCAA did not review the contractor's proposed price variance of 2.3 percent because it was based on subjective forecasts and, as such, was not auditable. Instead, DCAA computed an estimate for the price variance based on prices paid by Raytheon for material on prior buys in 1975 and 1976. Based on these prior buys where the actual price variances were 12 percent and 9.7 percent, respectively, DCAA estimated that the price variance for the 1977 buy would be about 3.4 percent. DCAA's estimate considered a reduced 1977 quantity requirement of 526 missiles compared to the 1,904 and 1,518 missile requirement for 1975 and 1976 buys, respectively.

Our review confirmed DCAA's position that prices paid for material parts have not changed significantly over the past few years and that actual material prices for the fiscal year 1975 and 1976 buys were lower than those proposed for those contracts by 12.0 and 9.7 percent, respectively. Also, at the time of the fiscal year 1977 proposal, Raytheon was placing orders with vendors at 14-percent lower prices for like parts on a quantity of 590 Ihawk missiles for commercial sales. In this regard, Raytheon officials stated that (1) prior purchase data on all material parts is provided to DCAA periodically throughout the year in the form of microfiche reports, (2) the report dated November 9, 1976, contained the information relating to parts purchased for the 590 missiles, and (3) purchase requisitions are available to DCAA for review.

Although DCAA does receive material reports periodically and the November 9, 1976, report did contain the information cited by Raytheon officials, the DCAA auditor-in-charge said that DCAA had completed its preaward audit on September 27, 1976, and, absent any indication by Raytheon that more current information affecting the proposal under consideration was available, DCAA did not review the November 9 report or purchase requisition files.

While we agree that Raytheon periodically provides DCAA with prior purchase reports and that purchase requisitions are available for evaluation, we found no indication that Raytheon informed DCAA or the contracting officer that the reports contained more current information which could affect the proposal being negotiated. The report containing purchase data relative to the material for the commercial sale of the Ihawk was prepared on November 9, 1976, and was submitted to DCAA at Andover, Massachusetts, while negotiations, which concluded on November 19, were underway at Redstone Arsenal, Alabama. Further, as stated in the DAR,

"mere availability of books, records and other documents for verification purposes does not constitute submission of cost or pricing data."

To satisfy this provision, Raytheon should have specifically identified that information was available which could affect the proposal being negotiated.

#### CONCLUSION

We believe that the price variance factor of at least 9.7 percent should have been used in proposing material cost. If a 9.7-percent factor had been used, the negotiated target cost of the contract would have been reduced by about \$709,906. This overstatement could result in excess cost to the Government of about \$298,161, as the following table shows.

Negotiated target costs  
overstated:

Material costs negotiated based on 3.4-percent price reduction factor	\$7,029,833
Material costs based on 9.7- percent price reduction factor	<u>-6,571,366</u>
	458,467
Material usage factor (7 percent)	<u>32,093</u>
	490,560
Material overhead	<u>90,950</u>
	581,510
Impact on maintenance and modifi- cation of tooling and test equipment	<u>52,336</u>
	633,846
General and administrative costs	<u>76,060</u>
Total	<u>709,906</u>

## Excess cost to the Government:

Target profit 12 percent of overstated costs	85,189
Incentive profit, 30 percent of overstated costs	<u>212,972</u>
Total	<u>\$ 298,161</u>

Agency comments

Mircom agreed with our position that the data provided by Raytheon to support its proposed material cost may not have been accurate, complete, and current and, in this regard Mircom has requested that DCAA do a postaward audit of the contract to determine if a defective pricing claim should be made and, if so, the amounts to be claimed.

Maintenance and modification costs

The contracting officer did not obtain adequate support for Raytheon's proposed costs for maintenance and modification of tooling and test equipment (M&M).

Raytheon's documentation to support its estimate of \$1,657,721 for M&M costs for the contract was incomplete and did not identify the methodology, judgment factors, and/or assumptions used in its development. The following table shows the proposed, recommended, and negotiated M&M rates and amounts.

	<u>1977</u>	<u>1978</u>	<u>Amount</u>
Proposed rates	9.3	9.8	\$1,657,721
Recommended	7.8	8.2	1,302,139
Negotiated	9.0	9.1	1,540,646

For the contract period 1977 through 1978, Raytheon proposed M&M rates of 9.3 percent for 1977 and 9.8 percent for 1978, or \$1,657,721 on an estimated base of \$17,425,497. Current and complete documentation was not provided to support these proposed M&M rates.

The 1977 M&M rate of 9.3 percent was the rate used in a prior year contract. No support was provided for the 1978 rate. As stated, Raytheon provided the base cost for both 1977 and 1978, but did not provide any estimate of each year's M&M expenses which would be necessary to compute the M&M rates for those years.

DCAA's recommended M&M rates of 7.8 and 8.2 percent for 1977 and 1978, respectively, were used as the Government's negotiating position. DCAA's audit report covered the initial proposal only. DCAA used prior price data from calendar years 1971-75 to compute its rates. The results of DCAA's analysis were then applied to Raytheon's initial proposed base costs adjusted for probability factors recommended by Mircom which differed from Raytheon's projected future business volume.

Using DCAA's application of linear regression to Raytheon's revised estimated total base costs for 1977 and 1978--which were adequately supported--the resultant M&M rates would have been 7.9 and 8.4 percent, respectively. Applying these rates to the negotiated base cost for contract DAAH01-77-C-0111 of \$17,039,060 would have resulted in estimated M&M costs of \$1,380,164, or \$160,483 less than actually negotiated.

#### Agency comments

Mircom concurred with the facts in our report about maintenance and modification costs. Mircom has requested

ENCLOSURE I

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that DCAA do a postaward audit of the contract to determine if a defective pricing claim should be made and, if so, the amounts to be claimed.