



UNITED STATES GENERAL ACCOUNTING OFFICE
 REGIONAL OFFICE
 ROOM 717, GATEWAY II BUILDING
 4TH AND STATE
 KANSAS CITY, KANSAS 66101

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January 5, 1975

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Lieutenant General James T. Stewart
 Commander
 Aeronautical Systems Division (AF30) 194
 Wright-Patterson Air Force Base, Ohio 45433



Dear General Stewart:

We have reviewed contract F33657-74-C-0043 which the Aeronautical Systems Division (ASD) negotiated with the McDonnell Douglas Electronics Company, St. Charles, Missouri. This fixed-price incentive contract is for two Trainer Mission Simulators for A-7D aircraft. We made the review to determine whether the price negotiated was reasonable in relation to cost or pricing data available to McDonnell at the time the price was negotiated. P.00666

Contract F33657-74-C-0043 provided for the procurement of one A-7D simulator with an option to purchase an additional one. The negotiations for the first simulator were completed on September 18, 1973. The option price for the second simulator was negotiated on November 16, 1973, and ASD exercised its option in August 1974. The negotiated prices for the two simulators were \$5,406,500 and \$5,750,000. Certificates of Current Cost or Pricing Data were signed by McDonnell on October 2, 1973, and November 16, 1973.

We believe the negotiated price reflected an overstatement of costs in the net amount of about \$2,513. Overstatements were due to: 1) the contractor's and ASD's failure to consider residual inventory in the calculation of estimated material costs, 2) duplication of proposed material items, 3) a price extension error, and 4) a resultant change in the material growth rate. Understatements resulted from the use of incorrect prior costs for certain material estimates and the omission of an item in the contract proposal. The effects of the overstatements and understatements on the proposed and negotiated prices are shown in Attachment I.

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Background

McDonnell determined the cost of material requirements for the subject contract by obtaining price quotations for items representing the majority of the dollar value of material requirements of the prior contract. For the remainder of the items for which no quotations were received, McDonnell determined their estimated current cost by subtracting the prior costs of the quoted items from the total recorded cost and applying an economic growth factor to the result. The recorded cost is the average cost of materials charged to produce one simulator, based upon the experience of a prior Air Force procurement from McDonnell of three A-7D simulators. The economic growth factor was determined by comparing the current and prior prices of the quoted items.

RESIDUAL ASSETS

McDonnell's records showed assets costing about \$30,700 were transferred from the prior A-7D contract for use on this contract. These assets were not considered, however, in arriving at material costs included in McDonnell's proposal. Had McDonnell ascertained that these residual assets could be utilized in this contract prior to submitting the pricing proposal, it would not have been necessary to obtain current quotations or apply an economic growth factor to the acquisition cost of these items as they were on hand at prior prices. As shown in Attachment II, McDonnell overstated its proposal by \$40,583 by including these items at current prices rather than at the acquisition prices.

DUPLICATION OF PROPOSED MATERIAL ITEMS

Our review of price quotations obtained by McDonnell for material items disclosed that 39 items valued at \$33,556 were included twice in the list of items for which quotations were received. In adjusting for this error, a corresponding adjustment of the value of the items for which no quotations were received is required and growth and other factors must be considered. These adjustments resulted in an understatement of about \$23,201 in the proposed price for the two simulators primarily because the growth rate factor for the duplicated items (53.3 percent) was less than that experienced on all quoted items (79.5 percent). (See Attachment III)

PRICE EXTENSION PRICE

McDonnell's original proposal included a \$10,832 price extension error for part number 05580003-1. This error applied to both simulators procured under the contract -- therefore, the total overstatement was \$21,664. After applying the addition factors and profit, the error resulted in a \$36,796 overstatement to McDonnell's proposed price.

REVIEW OF GROWTH FACTOR
FOR THE PROPOSED CONTRACT

Our review of about 5 percent of the dollar value of the price for certain items for which current vendor quotations were obtained showed that McDonnell's bid increment price cost in exceeding its material estimate. This resulted in an understatement of the proposed contract price of \$4,124. Support for the remaining 5 percent of the value of the items was not immediately available. Therefore, the total effect to the contract price could not be determined.

We also noted that McDonnell did not include a doppler control panel in the updated proposal. McDonnell advised us that this item was originally proposed as Government furnished equipment but later changed to contractor furnished equipment. The net effect of this omission was an understatement of the proposed contract price by \$7,769.

GROWTH FACTOR CHANGE

McDonnell's proposal included a factor for price growth of the items for which vendor quotations were not obtained. The application, extension and price for items mentioned above resulted in a reduction in this growth factor. As shown in Attachment II, we computed a revised proposed growth factor of 7.5 percent, as compared to the rate of 16.5 percent used in the proposal. This revised growth rate reduces the proposed price by \$12,431.

RECOMMENDATION

We recommend that you consider the above findings along with any additional information available to determine the extent to which the Government may be entitled to a price adjustment and to identify procurement procedures that need to be improved.

We would appreciate a written reply within 30 days advising us of the actions taken or contemplated.

Sincerely yours,

H. L. Weary

H. L. Weary
Regional Manager

cc: RLD/GP - John Hender on
/10/61

ATTACHMENT I

SUMMARY OF PRICING OVERSTATEMENTS/(UNDERSTATEMENTS)

	<u>Contract Price</u>	
	<u>Proposed</u>	<u>Negotiated</u>
Pricing of residual assets at current values rather than at acquisition cost	\$40,583	\$19,916
Duplication of quoted material items	(23,201)	2,123
Price extension error	36,796	34,176
Use of incorrect prior costs	(34,124)	(25,956)
Omission of item in proposal	(7,709)	(7,162)
Growth factor change	<u>12,436</u>	<u>19,416</u>
Net overstatement of contract price	<u>\$24,781</u>	<u>\$42,513</u>

EFFECT OF PRICING RESIDUAL ASSETS
AT CURRENT VALUES RATHER THAN
AT ACQUISITION COST

	<u>Contract Price</u>	
	<u>Proposed</u>	<u>Negotiated</u>
Acquisition cost of residual assets from prior A-7D contract used on current contract	<u>\$30,707</u>	<u>\$30,707</u>
Growth -- 79.5 and 40 percent of \$30,707	\$24,412	\$12,283
Allocations -- 14 percent	<u>3,418</u>	<u>1,720</u>
	\$27,830	\$14,003
Profit -- 12 and 10 percent	<u>3,340</u>	<u>1,400</u>
	\$31,170	\$15,403
General and administrative expenses -- 30.2 and 29.3 percent	<u>9,413</u>	<u>4,513</u>
Overstatement of contract price due to not pricing residual assets at acquisition cost	<u>\$40,583</u>	<u>\$19,916</u>

EFFECTS OF DUPLICATED ITEMS
ON PROPOSED AND NEGOTIATED CONTRACT PRICE

DUPLICATED ITEMS

	<u>Proposed Amount</u>	<u>Prior Cost</u>
Supplier quotes for LTV items	\$18,069	\$ 8,621
<u>Part number (Other than LTV items)</u>		
B66T006	7,544	6,588
B34G0002-2	5,564	4,351
1-67006-4	185	145
67031-3	698	1,346
BF-6-2	148	138
NBC-28-2	181	168
3-1948-5016D	628	150
IM-220	278	258
IMC-15	139	115
IMD-12	219	149
B55S0111-2	253	85

Value of duplicated items

\$33,906\$22,114(Growth factor $\frac{311,792}{322,114} = 53.3$ percent)FACTORED EFFECT OF DEDUPLICATION

<u>Value of Quoted Items</u>	<u>Proposed</u>	<u>Negotiated</u>
Unit prices greater than \$750	\$27,917	\$27,917
Unit prices less than \$750	\$ 5,989	\$ 5,989
Extension to early 1971 --		
5 percent	1,396	299
Usage -- 5 and 3 percent	379	314
Receiving-inspection --		
4 percent	1,208	838
Allocations -- 14 percent	924	1,150
Totals (Forwarded)	<u>\$31,400</u>	<u>\$29,905</u>
	<u>\$ 7,526</u>	<u>\$ 7,168</u>

ATTACHMENT III
(Continued)

FACTORED EFFECT OF DUPLICATION (Continued)

	<u>Proposed</u>	<u>Negotiated</u>
Total value of quoted items (\$31,400 plus \$7,526 and \$29,905 plus \$7,168) -- (Brought Forward)	<u>\$38,926</u>	<u>\$37,073</u>
<u>Value of Unquoted Items</u>		
Prior cost of duplicated items	\$22,114	\$22,114
Usage -- 3 percent	663	663
Growth -- 79.5 and 40 percent	18,108	9,111
Allocations -- 14 percent	<u>5,724</u>	<u>4,464</u>
Total value of unquoted items	<u>\$46,609</u>	<u>\$36,352</u>
Net difference	(\$ 7,683)	\$ 721
General and administrative expenses-- 30.2 and 29.3 percent	(2,320)	211
Profit -- 12 and 10 percent	<u>(1,200)</u>	<u>93</u>
Total effect on simulator No. 4	(\$11,203)	\$ 1,025
Computation of effect on simulator No. 5 -- (107.1 percent of simulator No. 4 material cost)	<u>(11,998)</u>	<u>1,098</u>
Total overstatement/(understatement) of contract price	<u>(\$23,201)</u>	<u>\$ 2,123</u>

EFFECTS OF CHANGES TO GROWTH FACTORSCOMPUTATION OF ADJUSTED GROWTH FACTORS (Using McDonnell's method
in submitting its proposal).

	<u>Prior Cost</u>	<u>Current Quotes</u>
Total value of items with current quotations (Per updated proposal 9/7/73)	\$554,606	\$1,025,687
PMDS Display, Mount and Converter— previously furnished by Government but now con- tractor-furnished		(77,800)
Duplicated items	(22,114)	(33,906)
Extension error		(10,832)
Portion of items with incorrect prior costs which affect growth rate computation	3,513	
Projection of current quotations to February 1974 -- 5 percent		<u>45,157</u>
Comparable totals	<u>\$536,005</u>	<u>\$ 948,306</u>
Adjusted growth factor $\frac{\$412,301}{\$536,005}$	= 77 percent	

COMPUTATION OF ADJUSTED GROWTH FACTOR (Using McDonnell's method but
adjusted for items deleted
during negotiations)

Total currently quoted items	\$554,606	\$1,025,687
PMDS Display, Mount and Converter		(77,800)
Items deleted by ASD (Per Price Negotiation Memo)	(112,416)	(328,400)
	\$442,190	\$ 619,487
Duplicated items	(22,114)	(33,906)
Extension error		(10,832)
Net correction to prior cost	<u>3,513</u>	
Comparable totals	<u>\$423,589</u>	<u>\$ 574,749</u>
Adjusted growth factor $\frac{\$151,160}{\$423,589}$	= 36 percent	