

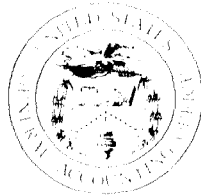
GAO

Report to the Commander, Armament
Division, U.S. Air Force Systems
Command

April 1989

CONTRACT PRICING

Material Prices Overstated on GBU-15 Bomb Weapon System



Atlanta Regional Office

101 Marietta Tower—Suite 2000
Atlanta, GA 30323

B-219741

April 27, 1989

Brigadier General K. E. Staten
Commander, Armament Division
U.S. Air Force Systems Command
Eglin Air Force Base, FL 32542

Dear General Staten:

As part of our continuing review of compliance with the Truth in Negotiations Act, we reviewed material prices under firm fixed-price contract F08635-84-C-0119, awarded to Rockwell International Corporation, Missile Systems Division, Duluth, Georgia. The Armament Division awarded Rockwell the contract to produce module sets¹ for the GBU-15 Modular Guided Weapon System. The GBU-15 weapon system is a precision guided bomb capable of destroying various targets.

Our objective was to determine whether Rockwell complied with the Truth in Negotiations Act, Public Law 87-653, as amended, by providing accurate, complete, and current cost or pricing data to the contracting officer. We found that Rockwell did not disclose accurate, complete, and current cost or pricing data for 13 material items. The nondisclosures caused the contract to be overpriced by \$5,580,724, including overhead, profit, and warranty costs.

Rockwell officials do not believe the nondisclosures caused the contract to be overpriced. We disagree with their position and believe this report provides a basis for you to initiate action to recover the overstated material prices from Rockwell. We recommend that you take such action.

Appendix I contains detailed information on the material overpricing and the views of Rockwell officials and the contracting officer. We would appreciate being informed of any action taken on this matter.

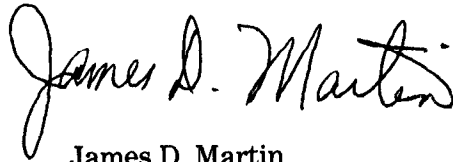
Copies of this report are being sent to the Vice President and General Manager, Missile Systems Division, Rockwell International Corporation, Duluth, Georgia; the Department of Defense, Office of the Inspector General, Washington, D.C.; and the Regional Director, Defense Contract Audit Agency, Eastern Region, and the Commander, Defense Contract

¹ A module set consists of four components—target detecting device, control unit, airfoil group, and guidance section adapter—which are attached to a 2,000-pound bomb.

Administration Services, Atlanta Region, Marietta, Georgia. Copies will also be made available to others upon request.

The major contributors to this report are listed in appendix II.

Sincerely yours,



James D. Martin
Regional Manager

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GBU-15 Material Prices Overstated

Background

The Truth in Negotiations Act, Public Law 87-653, as amended, requires that, with certain exceptions, contractors submit cost or pricing data to support proposed prices for noncompetitive contracts. The act also requires contractors to certify that the data submitted are accurate, complete, and current. When Public Law 87-653 applies, the government has the right to a price reduction if the contracting officer determines that the contract price was overstated because the data submitted were not accurate, complete, or current.

Rockwell's contract proposal to the Air Force provided for 350 module sets for a 1984 basic buy and 530¹ sets for a 1985 option buy. After entering contract negotiations in December 1983, the Air Force increased the quantity for the basic buy to a maximum of 533 module sets. Rockwell did not revise its proposal to reflect the increased quantities. Instead, the Air Force and Rockwell negotiated a price for the basic buy of 350 module sets, then used this price as a basis for negotiating the prices for the other quantities.

Based on this methodology, the Air Force and Rockwell agreed to the contract price for the 1984 basic and 1985 option buys on January 27, 1984. Rockwell issued a Certificate of Current Cost or Pricing Data for the contract on February 3, 1984, and certified that data supplied to the government were accurate, complete, and current as of January 27, 1984.

The Air Force awarded firm fixed-price contract F08635-84-C-0119 to Rockwell for 1,063 GBU-15 module sets under a basic and option buy as shown in table I.1.

Table I.1: Negotiated Contract Quantities and Prices

Contract action	Date	Quantity	Price
Basic buy—1984:			
Basic award	03/14/84	438	\$47,521,518
Modification P00001	06/27/84	95	10,272,789
Option buy—1985:			
Modification P00004	12/21/84	530	56,192,169
Total		1,063	\$113,986,476

¹Rockwell's proposal was based on providing 525 target detecting devises and control units, 12 training control units, and 537 airfoil groups and guidance section adapters. The Air Force considered these components to be equivalent to 530 module sets.

Responsibility for administering contract F08635-84-C-0119 was transferred from the Air Force Systems Command's Armament Division to the Ogden Air Logistics Center, Hill Air Force Base, Utah, on January 9, 1986.

Noncompliance With Public Law 87-653 Resulted in Overstated Material Prices

The contract price was overstated by \$5,580,724, including overhead, profit, and warranty costs because Rockwell did not disclose accurate, complete, and current pricing data for 13 material items. Specifically, Rockwell did not disclose lower subcontractor price quotations, information obtained during fact-finding visits to subcontractor plants, a company negotiation position for one of the subcontractors, and actions to negotiate a long-term purchase agreement. Table I.2 summarizes the overstated material costs.

Table I.2: Summary of Overstated
Material Costs

Cause of overstatement	Basic buy	Option buy	Amount of overpricing
Lower available quotations	\$284,410	\$272,122	\$556,532
Fact-finding information	1,060,358	1,302,289	2,362,647
Price negotiation position	(952)	110,900	109,948
Long-term purchase agreement	181,753	283,500	465,253
Total	1,525,569	1,968,811	3,494,380
Overhead, profit, and warranty costs	902,031	1,184,313	2,086,344 ^a
Total	\$2,427,600	\$3,153,124	\$5,580,724

^aOverhead and profit were calculated by using Rockwell's proposed rates. Warranty costs were computed by using the rate negotiated between Rockwell and the contracting officer.

Nondisclosure of Lower Available Price Quotations

Rockwell did not disclose that it had obtained lower price quotations from its suppliers for seven of the material items before the January 27, 1984, contract price agreement date. As a result, material costs were overstated by a net of \$556,532, as shown in table I.3.

**Appendix I
GBU-15 Material Prices Overstated**

Table I.3: Overstated Material Costs Resulting From Nondisclosure of Lower Vendor Price Quotations

Nomenclature	Contract buy	Unit price		Difference	Number of units	Amount of overpricing
		Disclosed	Not disclosed			
Roll gyroscope	Basic	\$2,155.00 ^a	\$2,025.00 ^a	\$130.00	533	\$69,290
	Option	2,201.46 ^a	2,162.90 ^{a, b}	38.56	525	20,244
Total						89,534
Directional gyroscope	Basic	2,951.76 ^a	2,775.00 ^a	176.76	533	94,213
	Option	3,048.89 ^a	2,963.98 ^{a, b}	84.91	525	44,578
Total						138,791
Optical lens assembly	Basic	468.00	491.21	(23.21)	533	(12,371)
	Option	468.00	385.58	82.42	525	43,271
Total						30,900
Optical dome	Basic	260.00	213.00	47.00	533	25,051
	Option	260.00	216.00	44.00	525	23,100
Total						48,151
Battery	Basic	2,606.03	2,425.53	180.50	533	96,207
	Option	2,788.87	2,590.71 ^b	198.16	525	104,034
Total						200,241
Strake assembly:						
Painted	Basic	178.60	172.88	5.72	1,672	9,564
Unpainted	Basic	166.95	161.61	5.34	460	2,456
Painted	Option	197.06	184.65 ^b	12.41	2,148	26,657
Total						38,677
Guidance casting	Option	148.50	129.00	19.50	525	10,238
Total						\$556,532

^aExcludes proposed testing costs.

^bOur option buy unit price was calculated by escalating the basic buy price quotation to account for inflation associated with the later delivery date.

The following two examples illustrate the overpricing conditions we found for these seven material items.

Optical dome—Rockwell proposed to provide optical domes for the 1984 basic and 1985 option buys at a unit price of \$260. Rockwell based its proposed price on a Pacific Optical quotation dated August 15, 1983. In response to Rockwell's request, Alpha Optical Systems, Incorporated² on November 28, 1983, quoted unit prices of \$213 and \$216 for the basic and option buys, respectively.

²Rockwell visited Alpha Optical Systems, Incorporated on June 17, 1983, and found the subcontractor to be a qualified supplier.

Rockwell did not disclose Alpha Optical Systems' lower quotations to the contracting officer. As a result, Rockwell's proposed material costs for the basic and option buys were overstated by \$48,151, as shown in table I.3. After contract award, Rockwell purchased the optical domes from Alpha Optical Systems, Incorporated for the 1984 basic and 1985 option buys for \$182 each.

Battery—Rockwell proposed unit prices for batteries of \$2,606.03 and \$2,788.87 for the 1984 basic and 1985 option buys, respectively. The proposed price for the basic buy was based on a revised Yardney Corporation quotation dated November 9, 1983, for 362 batteries, and the proposed price for the option buy was based on a Yardney quotation dated October 27, 1983, for 527 batteries.

On January 5, 1984, Rockwell requested that Yardney provide a quotation for 525 batteries, plus or minus 25 batteries, for the basic buy. Rockwell requested a quotation for this quantity because the Air Force increased the basic buy requirement from 350 to a maximum of 533 module sets during contract negotiations.

On January 9, 1984, Yardney responded by quoting a \$2,425.53 unit price. Rockwell did not disclose the lower quotation to the contracting officer. As a result, Rockwell's proposed material costs for the basic buy were overstated by \$96,207, as shown in table I.3. After contract award, Rockwell purchased the 1984 basic buy batteries for \$2,100.37 each.

The nondisclosure of the basic buy quotation also caused the 1985 option buy to be overstated. Yardney's January 9, 1984, quotation for the basic buy showed that Rockwell could obtain a lower unit price for the 1985 option buy. Had the relevant cost or pricing data been disclosed, the contracting officer could have made an appropriate adjustment to Rockwell's proposed price for the 1985 option buy.

To determine the amount of overpricing, we calculated the option buy unit price by increasing Yardney's nondisclosed January 9, 1984, basic buy quotation to account for inflation resulting from the later option buy delivery schedule. We used the same inflation factors that Rockwell would have used. We then compared our calculated option buy unit price with the option buy price Rockwell proposed. The nondisclosure resulted in Rockwell's proposed material costs for the option buy being overstated by \$104,034, as shown in table I.3. After contract award, Rockwell purchased the 1985 option buy batteries for \$2,021.02 each.

Nondisclosure of Fact-Finding Information

From January 5 through 10, 1984, Rockwell made fact-finding visits to subcontractor plants for four material items. During these visits, Rockwell officials obtained cost and pricing data showing that the four items could be purchased at prices lower than those proposed to the government. Although the data were obtained before the January 27, 1984, price agreement date, Rockwell did not disclose the information to the Air Force contracting officer. The nondisclosure caused the proposed material costs for the four items to be overstated by \$2,362,647, as shown in table I.4.

Table 1.4: Overstated Material Costs Resulting From Nondisclosure of Fact-Finding Information

Nomenclature	Contract buy	Certified unit price	Cost of analysis information	Unit price difference	Quantity	Amount of overpricing
Gimbal platform	Basic	\$9,434.15	\$8,568.61	\$865.54	533	\$461,333
	Option	10,170.57	8,769.84	1,400.73	525	735,383
Total						1,196,716
Wing assembly:						
Painted	Basic	1,439.00	1,359.11	79.89	1,672	133,576
Unpainted	Basic	1,370.00	1,290.14	79.86	460	36,736
Painted	Option	1,516.00	1,434.23	81.77	2,148	175,642
Total						345,954
Control surface:						
Painted	Basic	379.00	351.75	27.25	1,672	45,562
Unpainted	Basic	357.00	329.59	27.41	460	12,609
Painted	Option	398.00	358.14	39.86	2,148	85,619
Total						143,790
Actuator	Basic	9,039.01	8,343.81	695.20	533	370,542
	Option	9,386.27	8,804.09	582.18	525	305,645
Total						676,187
Total						\$2,362,647

The following examples show the overpricing conditions we found.

Gimbal platform—Rockwell based its proposed unit prices of \$9,434.15 and \$10,170.57 for the 1984 basic and 1985 option buys, respectively, on an August 25, 1983, General Electric quotation. On January 10, 1984, Rockwell officials visited General Electric and obtained cost and pricing data which showed that the gimbal platforms could be purchased for less than Rockwell had proposed to the government.

For example, Rockwell officials obtained manufacturing labor hours expended by General Electric on previous contracts and used the data to question 9,730 manufacturing labor hours proposed by General Electric. Rockwell officials also examined material price quotations provided to General Electric by its suppliers as well as General Electric's scrap allowance records. Rockwell used the data to question General Electric's proposed material costs. Although the data were available before the January 27, 1984, price agreement date, Rockwell did not disclose it to the contracting officer.

Following the fact-finding visit, Rockwell prepared a negotiation plan dated March 5, 1984, setting out its objectives for price negotiations with General Electric. The negotiation objectives shown in table I.5 were taken from an undated Rockwell cost analysis report that was based on the pricing data Rockwell obtained during its January 10, 1984, fact-finding visit.

Table I.5: Rockwell Negotiation Objectives for Gimbal Platform

Contract buy	Quantity	Unit price objectives	
		Recommended	Upper limit
Basic	548	\$8,352.56	\$8,568.61
Option	526	8,464.48	8,769.84

Using Rockwell's upper limit negotiation objective, the nondisclosure of the fact-finding information caused proposed material costs to be overstated by \$1,196,716, as shown in table I.4. After contract award, Rockwell purchased the gimbal platforms from General Electric at unit prices of \$8,400 and \$8,575 for the basic and option buys, respectively.

Wing assembly—Rockwell proposed unit prices of \$1,439 and \$1,370 for painted and unpainted wing assemblies, respectively, for the basic buy and \$1,516 for painted wing assemblies for the option buy. Rockwell's proposed prices were based on a Reynolds and Taylor, Inc., quotation dated October 21, 1983.

On January 5 and 6, 1984, Rockwell officials visited Reynolds and Taylor and obtained cost and pricing data showing the wing assemblies could be purchased for less than Rockwell had proposed to the government. Although obtained before the January 27, 1984, price agreement date, Rockwell did not disclose the information to the contracting officer.

For example, Rockwell officials obtained actual manufacturing labor hours for the three prior wing assembly procurements and used the data to question about 10,500 labor hours proposed by Reynolds and Taylor. Rockwell officials also examined material price quotations provided to Reynolds and Taylor by its suppliers and, on the basis of the data, questioned proposed material escalation costs. Rockwell officials also obtained information that they used to question Reynolds and Taylor's proposed raw material costs and the general and administrative expense rate.

Following the fact-finding visit, Rockwell prepared a negotiation plan dated March 19, 1984, setting out its objectives for price negotiations with Reynolds and Taylor, as shown in table I.6.

Table I.6: Rockwell Negotiation Objectives for Wing Assembly

Contract buy	Type	Quantity	Unit price objectives	
			Recommended	Upper limit
Basic	Painted	1,681	\$1,186.92	\$1,359.11
	Unpainted	482	1,137.34	1,290.14
Option	Painted	2,158	1,236.37	1,434.23

The negotiation objectives were taken from an undated Rockwell cost analysis report based on pricing data obtained by Rockwell during its January 5 and 6, 1984, fact-finding trip to Reynolds and Taylor. Using Rockwell's upper limit negotiation objective, the nondisclosure of the fact-finding information caused proposed material costs to be overstated by \$345,954, as shown in table I.4.

Nondisclosure of Price Negotiation Position

Rockwell proposed unit prices of \$2,542 and \$2,635 for inverter converters for the 1984 basic and 1985 option buys, respectively. Rockwell based its proposed prices on a September 19, 1983, quotation from Varo, Inc. Varo updated its quotation on December 17, 1983, and again on January 5, 1984. At Rockwell's request, Elbit Computers Limited also provided a quotation on October 14, 1983, for the basic and option buys and submitted an update to its quotation on December 22, 1983.

Based on these quotations, Rockwell evaluated splitting the award between Varo and Elbit and prepared a negotiation position for the split award before the January 27, 1984, price agreement date. During their January 9, 1984, presentation to the Director of Operations, Rockwell

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procurement officials recommended that the award be split between Varo and Elbit.

For the basic buy, the presentation established a unit price negotiation objective of \$2,222.31 from Elbit and \$2,618.03 from Varo. For the option buy, the presentation showed that Rockwell established target unit prices of \$2,148.54 from Elbit and \$2,923.43 from Varo. Rockwell did not disclose the information to the contracting officer. The nondisclosure caused Rockwell's proposed material costs to be overpriced by \$109,948, as shown in table I.7.

Table I.7: Overpricing of Inverter Converter Resulting From Nondisclosure of Price Negotiation Position

Contract buy	Unit prices			Supplier	Quantity	Amount of overpricing
	Disclosed	Not disclosed	Difference			
		\$2,618.03	(\$76.03)	Varo	433	(\$32,921)
Basic	\$2,542.00					
		2,222.31	319.69	Elbit	100	31,969
Total					533	(952)
		2,923.43	(288.43)	Varo	194	(55,955)
Option	2,635.00					
		2,148.54	486.46	Elbit	343	166,856
Total					537	110,900
Total						\$109,948

After prime contract award, Rockwell purchased the inverter converters for \$159,750 less than the price certified to the government. Rockwell paid an average unit price of \$2,448 as compared with its \$2,542 proposed unit price for the basic buy. For the option buy, Rockwell paid an average unit price of \$2,431 as compared with its \$2,635 proposed unit price.

Nondisclosure of Long-Term Purchase Agreement

Rockwell proposed unit prices of \$3,047 and \$3,246 for vidicon tube assemblies for the 1984 basic and 1985 option buys, respectively. Rockwell's proposed prices were based on a September 8, 1983, RCA Corporation quotation. On January 11, 1984, Rockwell's subcontract administrator and cost analyst visited RCA and discussed potential cost-reduction measures for the basic and option buys.

On January 20, 1984, Rockwell's Manager of Subcontracts Administration and RCA officials discussed a 5-year purchase agreement for the

vidicon tube assemblies. According to the record of telephone discussions, the officials discussed specific terms for the agreement, including (1) Rockwell's use of RCA as the exclusive supplier for the part, (2) the procurement of 500 assemblies annually, and (3) the application of an inflation factor for future procurements. The record of telephone discussions also showed that Rockwell and RCA discussed \$2,706 as an initial base unit price.

Rockwell did not disclose any information about the long-term purchase agreement to the contracting officer. As a result, Rockwell's proposed material costs were overstated by \$465,253, as shown in table I.8.

Table I.8: Overpricing of Vidicon Tube Assemblies Resulting From Nondisclosure of Long-Term Purchase Agreement

Contract buy	Unit prices			Quantity	Amount of overpricing
	Disclosed	Not disclosed	Difference		
Basic	\$3,047.00	\$2,706.00	\$341.00	533	\$181,753
Option	3,246.00	2,706.00	540.00	525	283,500
Total					\$465,253

After prime contract award, Rockwell purchased the vidicon tube assemblies for the basic and option buys at average unit prices of \$2,703.24 and \$2,422.77, respectively.

Rockwell and Contracting Officer Views

Rockwell stated that it inadvertently failed to disclose accurate, complete, and current cost or pricing data for the 13 material items. However, Rockwell officials contend that the contracting officer did not rely on its cost or pricing data. Rockwell argues that the contracting officer relied on, or had available, data from Defense Contract Audit Agency audits of Rockwell's major subcontractors and an Air Force evaluation of the company's contract proposal, both of which recommended lower material prices. In addition, Rockwell notes that reductions were made during negotiations to recognize that the increased basic buy quantities would result in lower prices. As a result, Rockwell does not believe the nondisclosures caused the contract price to be overstated.

We disagree with Rockwell's position. Contrary to Rockwell's assertion, the Price Negotiation Memorandum shows that the contracting officer relied on all factual data provided by Rockwell, including the inaccurate, incomplete, and noncurrent data described in this report. In addition, the contracting officer's record of negotiations shows that the Defense

Contract Audit Agency's audit reports on major subcontractor proposals were not used in establishing the Air Force's negotiation objective.

We agree that the Air Force and Rockwell negotiated a reduced price for the increased basic buy quantities. The reduction, however, amounted to less than \$100,000 and applied to all costs, including labor, material, and overhead. We do not believe it is appropriate to apply the negotiated reduction to the overpricing we found. Moreover, Rockwell had a distinct negotiation advantage because it had more accurate, complete, and current cost or pricing data.

We discussed the undisclosed cost or pricing data with the Air Force contracting officer, price analyst, and contract negotiator. The contracting officer confirmed that Rockwell did not disclose accurate, complete, and current cost or pricing data and told us that a different pricing technique would have been considered for negotiating material costs had the data been disclosed.

Objective, Scope, and Methodology

Our objective was to determine whether Rockwell complied with the Truth in Negotiations Act, Public Law 87-653, as amended, in providing accurate, complete, and current cost or pricing data in support of its proposed material prices. We conducted our review at Rockwell International Corporation, Missile Systems Division, Duluth, Georgia; Armament Division, Eglin Air Force Base, Florida; Ogden Air Logistic Center, Hill Air Force Base, Utah; and the Defense Contract Administration Services Plant Representative Office and the Defense Contract Audit Agency resident office located at Rockwell.

To evaluate Rockwell's proposed material prices, we examined the company's contract price proposals and the bills of material that supported Rockwell's February 3, 1984, Certificate of Current Cost or Pricing Data. For 37 selected items with a unit price of over \$100, we examined various pricing information contained in the company's purchase order, cost analysis, and other files to identify cost and pricing data available to the company before the January 27, 1984, price agreement date and compared this data with Rockwell's certified prices.

In addition, we examined the Air Force's contract files, proposal evaluation reports, and negotiation records. We discussed the results of our review with (1) the Air Force contracting officer, price analyst, and negotiator and (2) Rockwell officials.

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Our review was performed in accordance with generally accepted government auditing standards between April and November 1988.

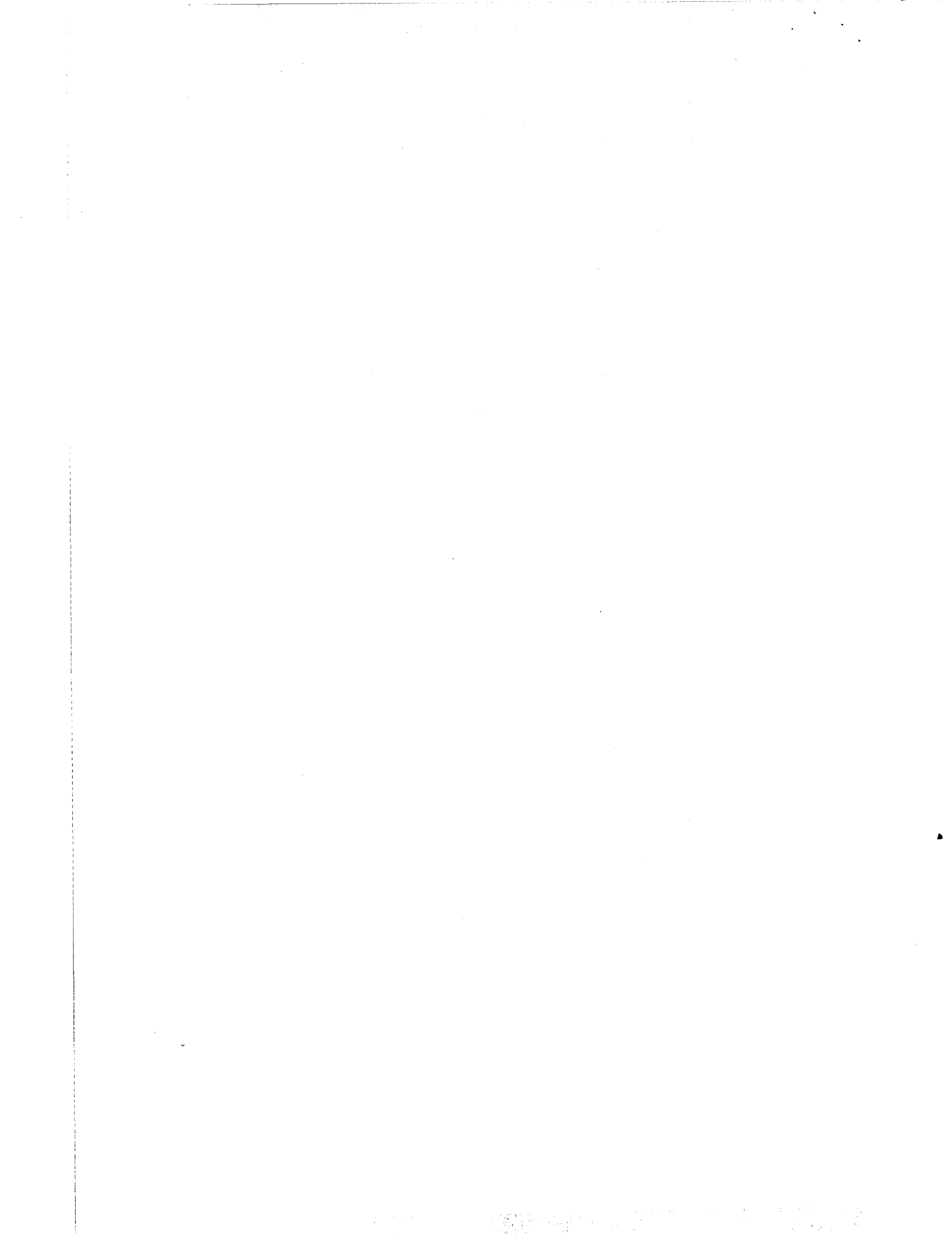
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