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BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Ranking Minority Member, Subcommittee On Preparedness, Committee On Armed Services, United States Senate

Army Contracting Practices For Conventional Ammunition At Its Government-Owned, Contractor-Operated Plants

During 1983, the Army spent about $926 million for contracts for its 25 government-owned, contractor-operated ammunition plants.

GAO evaluated the Army's contracting methods--the type of contracts being used and the extent to which competition was obtained. GAO found that, given existing circumstances, the Army's contracting practices comply with the criteria for contract type and competition in the Federal Acquisition Regulation.

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

NATIONAL SECURITY AND INTERNATIONAL AFFAIRS DIVISION

B-216610

The Honorable Carl Levin
Ranking Minority Member
Subcommittee on Preparedness
Committee on Armed Services
United State Senate

Dear Senator Levin:

Your November 23, 1983, request expressed the Preparedness Subcommittee's continuing interest in the efficient operation of the ammunition production base and specific concern that a large majority of the government-owned, contractor-operated (GOCO) Army ammunition plants are reportedly being operated under cost-plus contracts. You requested that we review the types of contracts being used and the extent of competition for them and that we compare the Army's contracting methods at its GOCO ammunition plants with those at similar facilities in the other military services.

The U.S. Army Armament, Munitions, and Chemical Command (AMCCOM) is responsible for both acquiring conventional ammunition needed by the services and maintaining GOCO ammunition plants to ensure their readiness in the event of a national emergency. AMCCOM has awarded a mix of contract types to firms for operating its 13 active and 12 inactive GOCO plants. AMCCOM typically awards a single contract for all activities at a plant, including production, modernization, expansion, and the maintenance of the inactive portion of the facility. The initial contract has generally been awarded competitively. However, follow-on contracts are awarded noncompetitively. A new competition is held when the Army is dissatisfied with the contractor's cost or performance, there is an impasse on contract terms, or the contractor is no longer interested in the work.

We assessed the appropriateness of contract types the Army is using to operate its GOCO ammunition plants and the extent of competition for them. We also compared the Army's GOCO contracting practices with those of other departments. Details of our study, including the scope of our work, are included in the appendix.

ARMY IS SELECTING APPROPRIATE CONTRACT TYPES

The appropriateness of contract types depends upon the specific conditions existing at the time of contract award. When there is a definitive scope of work and the contracting officer has a basis to establish a fair and reasonable price, a fixed-price contract is appropriate. Otherwise, a cost-reimbursement type is appropriate. In selecting the type of contract, the Army has complied with criteria in federal regulations.

Contract types are grouped into two broad categories: fixed-price contracts and cost-reimbursement contracts. The specific contract types range from firm fixed price, in which the contractor has full responsibility for the performance costs and resulting profit (or loss), to cost plus fixed fee, in which the contractor has minimal responsibility for the performance costs and the negotiated fee (profit) is fixed. In between are the various incentive contracts in which the contractor's responsibility for the performance costs and the profit or fee incentives offered are tailored to the uncertainties involved in contract performance.

The selection of the appropriate type of cost-reimbursement contract depends primarily on the extent to which cost responsibility can be established. If it can be done to a large extent, then a cost-plus-incentive-fee contract is appropriate; if not, then a cost-plus-fixed-fee contract is appropriate.

The Army has tailored the contract for each GOCO plant to the circumstances at that plant. One active plant is operating under a fixed-price contract. During the past several years, contracts at five active GOCO plants have been changed from cost-plus-fixed-fee to incentive contracts. In calendar year 1983, almost 70 percent of the GOCO contract costs were incurred under incentive contracts. AMCCOM also plans to change the contracts with three active plants still operating under cost-plus-fixed-fee contracts to incentive contracts. The current mix of contracts is as follows:

	No.	1983 value
Firm fixed price	4	$ 48.1
Cost plus incentive fee	8	465.3
Cost plus award fee	2	108.0
Cost plus fixed fee	11	304.5
Total	25	$925.9

At most Army GOCO ammunition plants, the contractor's work scope changes frequently throughout the 12-month contract period. Some changes are due to AMCCOM being directed to make changes due to changing military requirements or delays in receipt of or reprogramming of ammunition funds. The late delivery of government-furnished materials (GFM) or the failure of GFM to meet quality standards also causes changes. In addition, the scope may change due to unplanned government requests for special items, manufacturing problems, product failures, or technical changes. The current environment would necessitate continuing negotiations during the contract year under a firm-fixed-price contract. These conditions, in our view, affirm the appropriateness of the variety of cost-reimbursement contracts the Army is using to operate its GOCO ammunition plants.

The Defense Acquisition Regulation (recently changed to the Federal Acquisition Regulation) recognizes firm-fixed-price contracting as the preferred method to give a contractor an incentive to control costs and competition as the preferred method for ensuring reasonableness of price. The regulation also sets forth guidance for awarding firm-fixed-price contracts and obtaining competition, as well as other appropriate contracting methods when the necessary conditions do not exist. We believe the prevailing contracting environment under which the Army's GOCO plants operate lacks, in most cases, the conditions necessary for firm-fixed-price contracting. The major impediment is the procurement activity's inability to determine a fixed scope of work. This appears to be attributed largely to uncontrollable factors. These factors include the volatility of product requirements, delays and reprogramming of funds, and problems with receipts and quality of government-furnished materials.

ARMY'S USE OF FOLLOW-ON NONCOMPETITIVE CONTRACTS IS CONSISTENT WITH FEDERAL REGULATIONS

While the Army generally competes new starts and necessary changes of plant operators, follow-on contracts are generally awarded noncompetitively. These awards are based on an annual review of the contractor's performance and consideration of the appropriate contract type. This approach is consistent with criteria in the Federal Acquisition Regulation.

A disadvantage of automatic recompetition would be the cost associated with displacing an incumbent, both in terms of disruption in the plant's operations, as well as personnel severance pay and unfunded pension costs. There are also administrative costs associated with conducting a complex source selection, evaluation, and negotiation. The Army's demonstrated willingness to recompete contracts for unsatisfactory performance should help control contractor costs and performance.

OTHER GOVERNMENT GOCOs

The services award contracts to operate and maintain about 36 additional GOCO plants. In general, these GOCOs were not operating under the same contracting conditions as the Army's ammunition GOCOs. The Department of Energy awards contracts for 54 GOCOs, of which about 8 operate under cost-plus-award-fee contracts. Eighteen months prior to each contract's expiration, the Department reviews the contract for possible recompetition. On the basis of these reviews, the Department has generally used noncompetitive follow-on contracts.

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We presented our findings to the Commanding General at AMCCOM. The command concurred in our findings. The command also emphasized its commitment to award incentive contracts to shift part of the responsibility for the costs of performance to the contractor, as well as its determination to compete facilities when a contractor fails to perform satisfactorily. A draft of this report was sent to the Department of Defense on September 14, 1984, for its review and comment. A Department official advised us on October 11, 1984, that Defense concurred in our findings.

We are sending copies of this report to the Senate Committees on Armed Services, Appropriations, and Governmental Affairs; the House Committees on Armed Services, Appropriations, and Government Operations; and the Secretaries of Defense and the Army.

Sincerely yours,

Frank C. Conahan

Frank C. Conahan
Director

ANALYSIS OF THE ARMY'S CONTRACTING PRACTICES-- CONTRACT TYPE AND EXTENT OF COMPETITION-- FOR THE OPERATION OF ITS GOVERNMENT-OWNED, CONTRACTOR-OPERATED AMMUNITION PLANTS

BACKGROUND

The Army has 25 ammunition plants, with an estimated replacement value of about $18 billion, which are operated by contractors. They are commonly referred to as government-owned, contractor-operated (GOCO) plants and are located throughout the country. In contract year 1983, these plants employed about 20,000 personnel and incurred about $926 million in costs. In addition, about 700 on-site government personnel monitor contractor performance. Thirteen of the plants are in production (active), and 12 are shut down (inactive). The inactive plants are maintained in a state of readiness in the event of a national emergency.

The plants are classified according to their production capability. Five produce nonexplosive components, such as empty projectiles, and are called metal parts plants. Another five produce propellants and/or explosives. Six others assemble the metal parts, other components, propellants, and explosives into complete ammunition rounds and are called load, assemble, and pack (LAP) plants. Two plants produce small caliber ammunition of the type used in rifles and machine guns and are called small arms plants. The remaining seven plants have dual capability; i.e., metal parts production and LAP.

The Army generally awards 5-year umbrella operating contracts, which set forth general terms and conditions, but negotiates the contract types, estimated cost bases, and fees annually. While most operating contracts were initially awarded competitively, the Army's policy is to recompete the plants only for cause; that is, when the Army is dissatisfied with the contractor's performance, there is an impasse on contract terms, or the contractor asks to be replaced. All the contracts in place during calendar year 1983 were noncompetitive follow-on contracts of the following types (dollar amounts are expressed in millions):

	Active		Inactive		Total[a]	
	No.	Value	No.	Value	No.	Value
Firm fixed price	1	$ 46.6	3	$ 1.5	4	$ 48.1
Cost plus incentive fee	7	458.9	1	6.4	8	465.3
Cost plus award fee	2	108.0	-	-	2	108.0
Cost plus fixed fee	3	230.3	8	74.2	11	304.5
Total	13	$843.8	12	$82.1	25	$925.9

[a]Two contractors also held cost-reimbursable-no-fee contracts for facility maintenance, and one contractor holding a firm-fixed-price maintenance contract also held a cost-plus-fixed-fee contract for project work.

The U.S. Army Armament, Munitions, and Chemical Command (AMCCOM) awards the contracts for operation of GOCO ammunition plants and controls the scheduling of work among them throughout the year. Scheduling is critical to the collective efficiency of the GOCO operations because in peacetime the active plants are operated at levels considerably lower than their productive capacity. There is also a high degree of interdependence between GOCO plants for materials, as well as between other private suppliers and GOCO plants for which AMCCOM is responsible; i.e., materials are bought by AMCCOM and furnished to GOCOs as government-furnished material.

OBJECTIVES, SCOPE, AND METHODOLOGY

We assessed the appropriateness of the types of contracts the Army uses to operate GOCO ammunition plants and the adequacy of competition for them. We also compared the contracting practices with those used for GOCO facilities owned by other services and the Department of Energy. Our work, performed from December 1983 through March 1984, was done at AMCCOM, Rock Island, Illinois; the Iowa Army Ammunition Plant, Middletown, Iowa; and the Radford Army Ammunition Plant, Radford, Virginia.

At AMCCOM, we reviewed contract files, negotiation records, and production schedules. We obtained information on the review process used to select the contract type. We developed information on GOCO activities, including the status of plants, types of contracts, operating costs, and contractors' fees. We interviewed AMCCOM officials regarding obstacles to both fixed-price contracting and the periodic competition of the plants and evaluated the significance of those obstacles. At the Iowa and Radford plants, we interviewed officials and gathered data to determine the feasibility of fixed-price contracting and periodic competition for those plants. We also contacted other military commands and federal agencies to determine their contracting methods for GOCO facilities. The review was conducted in accordance with generally accepted government auditing standards, except for selected product cost data, which was obtained from reports without audit, and information obtained on other service and agency GOCO contracts, which was obtained through telephone interviews but not verified to documentation. In addition, we did not assess the merits of the Army's overall justification for its contracting practices, i.e., mobilization base requirements.

CONTRACT TYPES APPROPRIATE FOR EXISTING CONDITIONS

AMCCOM awarded a mix of contract types for the 1983 operation, maintenance, and production at its 25 GOCO plants. The majority of the expenditures were incurred under incentive contracts as opposed to cost-plus-fixed-fee or firm-fixed-price contracts. Our analysis suggests that under current conditions, the appropriate type of contract was selected for each plant. Further, we believe the extensive use of incentive contracts reflects a concern to control costs.

In our view, the current major impediment to the use of firm-fixed-price contracts at GOCO plants is the uncertainty in fixing the scope of work. Also, most of these uncertainties are beyond the control of AMCCOM and appear to be the product of many complex issues and systems impacting on determining procurement requirements. Analyzing these issues and systems was beyond our scope.

Contract types

Several contract types provide the government and contractors the needed flexibility to acquire the large variety and volume of supplies and services required by agencies. The Defense Acquisition Regulation (DAR) states that the appropriateness of a contract type depends on the conditions surrounding the procurement. The Army's selection of contract type has conformed to the criteria set forth in the DAR.

Contract types vary according to the degree and timing of the responsibility assumed by the contractor for the costs of performance and the amount and nature of the profit incentive offered to the contractor for achieving specified goals. The contract types are grouped into two broad categories--fixed price and cost reimbursement.

Specific contract types range from firm fixed price, where the contractor has full responsibility for the performance costs and resulting profit (or loss) to cost plus fixed fee, where the contractor has minimal responsibility for the performance costs and the negotiated fee is fixed. In between are the various incentive fee and award fee contracts. Under the incentive fee contract, the contractor's responsibility for the performance costs and the fee incentives offered are tailored to the uncertainties involved in contract performance. Under the award fee contract, the fee is based upon meeting various incentives, e.g., delivery, safety, etc. The amount of the award fee to be paid is determined by the government's judgmental evaluation of the contractor's performance in terms of the criteria stated in the contract.

According to the Federal Acquisition Regulation (FAR) and the DAR, a firm-fixed-price contract is suitable when fair and reasonable prices can be established on the basis of costs of performance. According to the regulations, a cost-reimbursement contract is suitable when the uncertainties involved in contract performance are such that cost of performance cannot be reasonably estimated. As noted on page 2, AMCCOM has used a mix of contract types for its GOCO operations, and over half the total dollar value is under incentive contracts.

Reviews of selected contract types

The contract type used for each GOCO plant is reviewed at various levels before issuance. AMCCOM annually submits a class determination and findings to the Assistant Secretary of the Army (Research, Development and Acquisition) requesting authority to negotiate the GOCO contracts without formal advertisement. The planned contract type is also furnished as part of the acquisition plan submitted in support of the determination and findings.

Contract types are also reviewed within AMCCOM. Although AMCCOM's contracting officers make the final determination on which contract type to use, they consider the recommendations made by other authorities. For example, should-cost teams[1] and a Business Clearance Review Board[2] evaluate contract type. Finally, negotiated contracts are reviewed and approved by the Board of Award.[3]

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[1]A multidisciplinary team of AMCCOM technical/manufacturing, management, pricing, and audit specialists who review contract proposals and recommend negotiation objectives to the contracting officers.

[2]An independent group of AMCCOM officials from AMCCOM's Policy and Plans and Legal Office and members from other functional groups, as required, who review the contracting officers' proposed negotiation positions and types of contracts and make recommendations to the contracting officers.

[3]An independent group composed of the same types of persons who are on the Business Clearance Review Board.

Use of firm-fixed-price contracts

Currently, one active and three inactive GOCO plants operate under firm-fixed-price contracts. All four produce metal parts.

According to AMCCOM officials, a firm-fixed-price contract was suitable at the active plant because production schedules were firm, the plant did not depend on government-furnished materials (GFM), the technical data package was stable, and explosive materials were not involved. Further, the plant produces only two items at a given time. Completed items are shipped to LAP plants that can store temporary surpluses of metal parts until they are needed. According to the contracting officer, the significant problems encountered by other GOCO plants related to GFM do not occur at this plant and typically only one or two production schedule changes are made during the contract year.

According to AMCCOM officials, firm-fixed-price contracts are suitable at the three inactive metal parts plants because their scopes of work are firm and they neither produce nor use explosive materials. Also, they are small compared with the other inactive plants. The three plants averaged about 13 employees compared with the 255 employees at other inactive plants and covered an average of 13 acres compared with an average of 10,024 acres at the other inactive plants. Only minimal maintenance and security are performed at the three plants in contrast to most inactive plants, which have either modernization programs or other ongoing activities.

AMCCOM officials state that the hazardous risks associated with manufacturing ammunition inhibit the awarding of firm-fixed-price contracts. The Army insures GOCO contractors which have been awarded cost-reimbursement contracts but has not extended this coverage to contractors awarded firm-fixed-price contracts. This policy does not affect metal parts plants because they do not handle explosives. Without indemnification, contractors that handle explosives would have to obtain insurance from the private sector if they were awarded firm-fixed-price contracts. The cost of such insurance may be prohibitive. According to a Radford contractor official, it cost $200,000 to obtain $20 million of coverage for 1 year on work it did for third parties.

Use of cost-plus-fixed fee
or cost-plus-incentive-fee contracts

According to the DAR and the FAR, the contractor has minimal responsibility for performance costs under cost-plus-fixed-fee contracts. Under cost-plus-incentive-fee contracts, the contractor shares responsibility with the Army for performance costs. AMCCOM is using cost-plus-fixed-fee contracts at three active plants and eight inactive plants.

During our review, AMCCOM officials were planning to convert contracts at two of the active plants to cost-plus-incentive-fee contracts. The third plant is undergoing prove-out testing. AMCCOM officials plan to award an incentive contract when the plant is fully operational.

AMCCOM is currently using cost-plus-fixed-fee contracts at eight inactive plants. These plants do not lend themselves to incentive contracts since the contractor cannot control major cost items. Analysis of the costs at one of the plants showed that 91 percent of the costs are generally beyond the contractor's control. For example, costs for security guards and fire protection were to provide levels of protection prescribed by the Army.

AMCCOM has reviewed its cost-plus-fixed-fee contracts during the last 4 years to determine if cost-plus-incentive-fee or cost-plus-award-fee contracts would be more appropriate. As a result, five active plants that had cost-plus-fixed-fee contracts were converted to incentive contracts since 1981.

As noted on page 2, there are 10 cost-plus-incentive-fee and cost-plus-award-fee contracts which accounted for over 50 percent of the costs at all GOCO plants during 1983.

Favorable cost trends indicated under incentive contracts

The Army maintains a core group of surveillance staff at each GOCO plant and requires compliance with its Uniform Cost Accounting and Reporting System at production plants having cost-reimbursement contracts. This system can produce monthly detailed cost reports by product. Summarized below are the results of LAP cost trends for selected high dollar value items, excluding costs of GFM.

Plant and item	Unit costs--1980 dollars		
	1981	1982	1983
Iowa:			
Projectile, 155 mm. M549A1	$72.16	$60.91	$55.23
Kansas:			
Projectile, 155 mm. M483A1	54.84	58.98	46.50
Lone Star:			
Projectile, 155 mm. M483A1	62.07	57.06	55.49
Louisiana:			
Cartridge, 4.2 in. M329A2	19.17	16.28	14.27

We also tested 27 items produced at the Radford plant in both 1982 and 1983. Unit costs for 16 of the 27 decreased from 1982 to 1983, after conversion to constant 1980 dollars.

All of the above plants have been operating under cost-plus-incentive-fee contracts, and the figures suggest that production costs are being controlled. We did not, however, analyze the causes for the cost decreases.

Current impediments to firm-fixed-price contracts

Firm-fixed-price contracts require firm production schedules established several months before the contract year begins. Lead time is required to solicit and analyze the contractors' proposals as well as negotiate an equitable price. The following factors currently preclude establishing definitive work statements and thus firm-fixed-price contracts.

Uncertain work scope

AMCCOM has multiple objectives in determining the annual scope of work for each GOCO plant. First, production is scheduled to satisfy customer requirements, stabilize the labor force among the plants, and support industrial readiness. Second, expenditures for modernization and expansion are programmed to ensure an adequate production base to meet mobilization requirements. Finally, funds are programmed for maintaining the inactive portion of the GOCO plants to ensure their state of readiness.

Fixing the scope of work is complicated because of the multiplicity of items produced by the GOCOs. For example, the Iowa plant is scheduled to produce 28 different items in 1984, including both final ammunition end items as well as subunits for shipment to other plants. In 1983, the Radford plant produced 41 different types of propellants and explosives.

The Army frequently directs AMCCOM to adjust the types and quantities of ammunition to be supplied. The changes normally are the result of the military or other customers adjusting their requirements or problems encountered in obtaining timely receipt of funding or the reprogramming of funds. Changes also occur because of delays in receiving government-furnished materials.

Both war reserve and training requirements are regularly revised; changes in the force structure and planned mix of weapons will change ammunition requirements. Such changes may cause the Army to recall funds and cut back production for certain items or increase funding for others. For example, because of concern for adequate stockpiles of certain explosives, the Army recently proposed reprogramming $48.6 million of funds into increased production of these items, drawing the funds from the appropriations for three other ammunition items.

Other services incorporate their requirements into the Army's procurement plans, but they too make unexpected requests and changes during the year. The Marine Corps has already made three "walk-in" orders to add to its original 1984 buy of a projectile produced at the Iowa plant. In addition, foreign military sales often are made unexpectedly.

The Army's reprogramming of funds to other activities also affects the ammunition program. The Army recently proposed reprogramming $40.2 million of fiscal year 1984 ammunition appropriations to fund an aircraft project. In past years, funds have also been reprogrammed from ammunition procurement to fund shortfalls in areas such as maintenance and personnel.

Government-furnished materials

The late delivery of GFM or the failure of material to meet quality standards also causes changes to production schedules. AMCCOM purchases materials from GOCO plants and from private industry and ships them to other GOCO plants, usually LAP plants, that complete the manufacturing process. Any problems in the flow of materials can cause schedule changes.

A GOCO LAP plant's dependence on GFM can be illustrated by identifying the materials used by the Iowa plant in assembling the 155-mm. M549A1 projectile. The GFM furnished to Iowa for the M549A1 includes all major components and accounts for over 98 percent of the total material costs of the projectile. The Iowa plant procures only various small value items, such as caps, rings, and seals, which represent less than 2 percent of the materials cost. The materials used in the assembly of the M549A1 and related procurement data are shown in the following table.

Item	How obtained	Supplier	Type of contract with supplier	1984 unit cost	Percentage of total
Motor body	GFM	Private industry	FFP	$152.10	-
Warhead	GFM	Private industry	FFP	148.93	-
Lifting plug	GFM	Private industry	FFP	1.99	-
Grommet	GFM	Private industry	FFP	1.51	-
Subtotal, private industry				304.53	62.0
Grain propellant forward	GFM	Radford plant	CPIF	85.51	-
Grain propellant aft	GFM	Radford plant	CPIF	58.85	-
Explosive	GFM	Holston plant	CPFF	17.33	-
Delay element	GFM	Lone Star plant	CPIF	16.10	-
Subcharge assembly	GFM	Lone Star plant	CPIF	.77	-
Subtotal, other GOCOs				178.56	36.4
Various caps, rings seals, etc.	Iowa plant	Various	-	7.99	1.6
Total cost				$491.08	100.0

Other factors

Other production schedule changes are attributable to various causes, such as Army requests for special ammunition lots, production equipment failures, product performance failures, or difficulties encountered in manufacturing new items. Finally, requirements could also change unexpectedly because of the Army's response to depletions in war reserves.

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All the foregoing issues collectively cause AMCCOM to continuously change production schedules throughout the contract year. Our analysis of calendar year 1983 changes at two GOCOs showed they were both frequent and substantial. For example, officials at the Iowa plant identified 240 changes in the 1983 production schedules. The Army also issued 312 manufacturing instructions, e.g., instructions requesting special lots for testing or changes in the manufacturing process.

Our analysis of calendar year 1983 production changes for the four major items produced at the Iowa plant showed the following.

Item	Quantities Original schedule	Quantities Actual production	Percent decrease
I-TOW warhead M207E1	24,096	21,941	8.9
Projectile, 155 mm. M549A1	113,616	111,620	1.8
Projectile, 155 mm. M718/M741	45,144	44,626	1.1
Projectile, 8" HERA M650	38,808	11,640	70.0

Our analysis of the variance on the M650 projectile showed that production schedules were not reduced at one time but were reduced in stages as the year progressed and manufacturing problems continued. Initially, a shortage of metal parts that were delivered as GFM from a private industry supplier was the problem. Later, delays in furnishing rocket motor bodies, which were to be furnished as GFM from the private sector, caused problems. The projectile's failure to function at high temperatures caused additional production delays. The Iowa plant was directed to reduce its production until technical and safety evaluations were completed.

At the Radford plant, we analyzed the changes that occurred for the 12 highest dollar value production items which accounted for 80 percent of the plant's production costs in 1983. The following table shows the changes between scheduled production at the time the contractor prepared the 1983 cost proposal and the actual quantities produced.

APPENDIX

Item	Quantities		Percentage increase (decrease)
	Original schedule	Actual production	
	(thousands)		
Propellants:			
Single base M6 (lbs.)	12,400	12,834	3.5
Single base M1 (lbs.)	8,077	5,332	(34.0)
Multibase M30 M490 (lbs.)	1,800	1,518	(15.7)
Multibase M30 M774 (lbs.)	1,500	1,992	32.8
Multibase M31A1 (lbs.)	9,200	5,760	(37.4)
Multibase M30 M456A2 (lbs.)	1,500	1,665	11.0
Rocket-assisted projectile grain:			
M549A1 forward (units)	120	90	(25.0)
M549A1 aft (units)	120	90	(25.0)
M650 (units)	30	29	(3.3)
MK-43 grain (units)	153	240	56.9
Other:			
TOW launch motor (ea.)	24	24	-
TNT (lbs.)	15,000	8,094	(46.0)

One of the larger variances occurred because facilities used to produce the proposed quantities of multibase M31A1 propellant were diverted to manufacturing propellant for an experimental tank round. Another, TNT production, was attributed to problems encountered with new Army-furnished equipment.

AWARD OF NONCOMPETITIVE FOLLOW-ON CONTRACTS

Historically, the Army has authorized the noncompetitive award of follow-on GOCO contracts under the authority and guidance in the DAR. Noncompetitive procurement has been justified on the basis that (1) contractor performance is satisfactory, (2) mobilization base readiness needs to be supported, (3) continuity and efficiency in plant management could be degraded, and (4) recompetition costs are high. The Army's reasons for noncompetitive procurement are consistent with the criteria set forth in the FAR. For example, the FAR states that:

> ". . . Replacement of an incumbent contractor is usually based largely upon an expectation of meaningful improvement in performance or cost. Therefore, when reviewing contractor performance, contracting officers should consider-- (1) The incumbent contractor's overall performance, including, specifically, technical, administrative, and cost performance; (2) The potential impact of a change in

contractors on program needs, including safety, national defense, and mobilization considerations; and (3) Whether it is likely that qualified offerors will compete for the contract."

In addition, both the FAR and the Competition in Contracting Act of 1984 recognize industrial mobilization as a valid exception to using competitive procedures.

We found that when a new operator was to be selected, the Army competed the procurement. For example, since 1970, there were competitions for nine plants for the following reasons: twice[4] because the incumbent contractor's performance was unacceptable to the Army, twice for new starts, four times because the incumbent contractor declined further participation, and once because there was an impasse on contract terms.

The Army believes that competition is not necessary when it is satisfied with the contractor's performance. In addition, competition is costly and time consuming and the time involved for a new contractor to become established is also a drawback to frequent competition.

AMCCOM estimates that it could take 17 staff-years at a cost of more than $525,000 to compete a single GOCO plant contract. The total process can take 15 months from the planning until the new contractor becomes operational. The Army is now competing its Lake City, Missouri, plant, one of its largest production volume plants, because it is not satisfied with the incumbent contractor. According to an AMCCOM official, the costs to compete will total about $1 million and it will involve such an extensive effort that it could not compete a second plant at the same time.

Changing contractors may also result in additional costs as the government is potentially liable for severance pay and unfunded pension costs. These costs are difficult to predict since the government's liability depends on the number of employees who go to work for the new contractor and on how the Internal Revenue Service and the new contractor treat the old contractor's pension plan. The Army's estimate of its approximate maximum liability for severance pay and unfunded pension liability is almost $150 million for all GOCO ammunition plants. The Army's estimate for the single plant with the largest work force is $47 million. The estimate for another plant with 2,600 contractor personnel is over $20 million. About 12 years ago, the government paid an estimated $2.6 million for severance pay and unfunded pensions for a plant it competed because of unsatisfactory performance.

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[4]The Army is currently recompeting an additional plant for the same reason.

The loss of continuity in plant management also causes unquantifiable costs when there is a change in contractors. According to an AMCCOM official, a new plant contractor will spend the first year dealing with employee turnover and union negotiations. This official believed it took about 2 years before the new contractor's performance exceeded that of the prior contractor for the competition mentioned above.

The lack of firm work statements hinders competition

As discussed earlier, the Army cannot develop firm production quantities and schedules. When GOCO plant contracts are competed, the contractors are basing their cost estimates on a proposed product mix and quantities which generally do not materialize. The lack of firm plans for production items and quantities means that contractors cannot be bound by their cost estimates. Therefore, when competing cost-reimbursement GOCO contracts, cost competition exists only on the basis of the competing contractors' nonbinding cost estimates. The potential exists for contractors to underestimate their costs to help win the contract.

When a GOCO plant is competed, a risk exists that the new contractor could incur higher costs than proposed. A new contractor might also be unable to meet other technical or management goals established in the contract. Given the choice between retaining a satisfactory contractor or competing the contract, with the possibility that a less effective contractor may be selected, the Army's choice has been to retain contractors doing a satisfactory job and compete GOCO contracts only for cause.

OTHER GOCOs

The military services operate and maintain about 36 other GOCOs. However, the operation of these facilities is generally not comparable to AMCCOM's administration of ammunition plant contracts. For example, the operations typically deal with several commands and possibly more than one of the services, while the Army's ammunition plants deal with one command. Further, some of the other production contracts were for a fixed number of a single high value item, while the Army ammunition plant has a single contract for the total production of multiple low value items. While the Army is responsible for the total plant output under a single contract, other GOCOs typically have several contracts from different customers. Where similarities existed, for example, contracts for the operation of facilities, the contracts were generally not recompeted and were cost-reimbursement contracts. Further, where high dollar value items were involved--tanks, aircraft, aircraft engines--follow-on contracts were not recompeted.

Department of Energy officials advised us that the agency has 54 GOCO plants, of which 8 produce weapons under 5-year cost-plus-award-fee contracts. Further, consistent with its own regulations and the FAR, the contracts are reviewed 18 months prior to their expiration dates to determine whether there is a reasonable expectation that recompeting the contracts would improve the government's position in terms of cost or performance. They stated that in most instances, contracts have been extended rather than recompeted.

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