

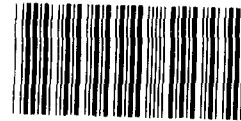
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Briefing Report to the Chairman,
Subcommittee on Defense,
Committee on Appropriations,
House of Representatives

March 1986

AMMUNITION FUND

Analysis of the Army's Conventional Ammunition Working Capital Fund



129342



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

NATIONAL SECURITY AND
INTERNATIONAL AFFAIRS DIVISION

March 7, 1986

B-217840

The Honorable Joseph P. Addabbo
Chairman, Subcommittee on Defense
Committee on Appropriations
House of Representatives

Dear Mr. Chairman:

This responds to your request that we review the Army's implementation of the Conventional Ammunition Working Capital Fund. As requested, we assessed (1) how the fund was working, (2) whether the benefits claimed by the Army were being achieved, and (3) whether the fund was worth continuing. As agreed in subsequent conversations with your office, we also examined the Army's claim that advance contract authority was needed to achieve additional savings and shorten the ammunition procurement process.

We have provided your office an interim briefing on our analysis, and this report provides additional information on our findings. Details of our study, including the scope of our work, are included in appendixes I to IV.

As the Department of Defense's designated single manager for conventional ammunition, the Army is responsible for procuring ammunition for the military services. These responsibilities are performed by the U.S. Army Armament, Munitions, and Chemical Command (AMCCOM) at Rock Island, Illinois, and the Conventional Ammunition Working Capital Fund is used as a mechanism to finance and account for these procurements.

The fund was established in 1981 to (1) improve and simplify the ammunition procurement process, (2) reduce paperwork associated with the process, and (3) reduce ammunition costs by consolidating procurements and awarding contracts earlier, thereby partially avoiding the effect of inflation on prices. Although the purposes of the fund seem sound, we found paperwork may not have been reduced and savings, attributed to consolidating work orders, may instead have resulted from larger overall item requirements.

Our examination of the need for advance contract authority showed earlier release of funds from the services to the single manager could yield much of the benefits the Army expects to receive from advance contract authority. The fact that advance contract authority could limit the discretion of congressional committees leads us to the conclusion that such contract authority should not be granted.

During our analysis of savings attributable to the fund, we learned that AMCCOM has taken the position that it can retain and use remaining funds from fiscal years 1982 and 1983 to reduce prices on future customer orders. In our opinion, these funds cannot be used in future years since under our decision at 59 Comp. Gen. 563 (B-196404, June 26, 1980) and 31 U.S.C. 1552(a) those funds which remain at the end of the period of availability lapse and, thereafter, are no longer available for obligation. The unused amount is withdrawn at the end of the period of availability for obligation--a 3-year period for procurement appropriations--and reverts to the Treasury. We are advising the Secretary of Defense that in our opinion these funds have lapsed and should be returned to the Treasury.

Although we did not request official agency comments on this document, we did discuss our findings with Army officials and considered their views in preparing it.

As arranged with your office, we are sending copies of this report to the Secretaries of Defense, the Army, the Navy, and the Air Force and other interested parties in the ammunition community.

Sincerely yours,



Frank C. Conahan
Director

INTRODUCTION

The U.S. Army Armament, Munitions, and Chemical Command (AMCCOM) is the Army's designated single manager for conventional ammunition and as such is responsible for procuring conventional ammunition for the Departments of the Army, the Navy, and the Air Force; the Marine Corps; foreign governments; and other federal agencies.

The Conventional Ammunition Working Capital Fund is a revolving fund used by the Army to finance and account for ammunition procurements. It was established on October 1, 1981, and is managed by AMCCOM, a subordinate command of the U.S. Army Materiel Command (AMC). When AMCCOM receives an order for ammunition, it procures the required components and assembles them into finished end rounds at government- or contractor-operated ammunition plants. Deliveries are then made against customer orders.

The fund was established to (1) improve and simplify the ammunition procurement process, (2) reduce paperwork associated with the process, and (3) reduce ammunition costs by consolidating procurements and awarding contracts earlier, thereby partially avoiding the effect of inflation on prices.

OBJECTIVES, SCOPE, AND METHODOLOGY

We conducted this review at the request of the Chairman, Subcommittee on Defense, House Committee on Appropriations. The Chairman wanted an assessment of how the fund was working, whether claimed benefits were being achieved, and whether the fund was worth continuing. The Chairman's office also asked us to determine whether authority should be given to AMCCOM to contract for munitions components before the Congress appropriates funds for the items. This authority--called advance contract authority--would, according to the Army, lower prices and shorten delivery schedules.

To determine how the fund was working, we reviewed reports and documents AMCCOM had submitted in support of its proposal to establish a working capital fund and we reviewed AMCCOM's organizational structure, its management information system, the fund's financial statements, and reports and documents describing the progress and status of the fund. We also interviewed officials at AMCCOM, service headquarters, and the Office of the Secretary of Defense (OSD). Finally, using a case study approach, we reviewed the standard prices AMCCOM had established for three major end rounds and eight major components of these end rounds. We selected these because they accounted for a

large dollar value of services' orders--16 percent of the services' 1984 ammunition budget. We also reviewed the procurement history for these same end rounds and components to determine to what extent ammunition orders had been consolidated and how this had affected prices AMCCOM paid for the items.

To determine whether claimed benefits were being achieved, we reviewed Army documents supporting claimed savings in dollars and reduced paperwork. We assessed the Army's methodology in computing these savings and determined the degree to which the savings were attributable to the fund or other factors, such as changes in ammunition programs, competition, and inflation. We reviewed the procurement history for several ammunition items to determine whether savings had resulted through consolidation of ammunition orders. In assessing paperwork reductions, we tried to determine whether reductions were offset by any increased administrative costs associated with the fund.

To determine whether advance contract authority is needed, we tried to determine whether existing mechanisms, if used, provided many of the benefits of advance contract authority. We determined the extent to which the services used continuing resolution authority (CRA) and how long it took them to release funds to AMCCOM. In addition, we discussed the need for advance contract authority with OSD, service headquarters, and AMCCOM officials and reviewed a DOD Inspector General report which concluded that advance contract authority was not needed. Finally, we reviewed the provisions of the Congressional Budget Act of 1974 (Public Law 93-344), to determine its relevance to the issues.

We conducted our review at OSD; AMCCOM Headquarters, Rock Island, Illinois; the Departments of the Army, the Navy, and the Air Force, Washington, D.C.; and Headquarters, U.S. Army Materiel Command, in Alexandria, Virginia. We did not request official agency comments on this report. We did discuss our findings with Army officials and considered their views in preparing it. We conducted our review in accordance with generally accepted government auditing standards.

HOW WELL IS THE FUND WORKING?

The fund concept seems well conceived, but the fund has not been implemented well and, therefore, is not operating as effectively as it could. The major problem is that standard prices used by AMCCOM in billing the military services for the ammunition procured are not being used as originally envisioned. AMCCOM originally planned to establish a standard price for each end item that would apply over the life of a customer order. The services would reimburse the fund at this standard price for ammunition procured by AMCCOM. The use of standard prices was considered a key factor in reducing AMCCOM's burgeoning paperwork and the need for frequent adjustments of funded orders. Instead of establishing one standard price for both budgeting and program execution, prices are frequently being revised after the services submit their budgets. This defeats the original intent, complicates rather than simplifies the procurement process, and creates an administrative burden and paperwork.

Furthermore, the standard prices AMCCOM established have significantly exceeded projected final costs to procure the items. There were numerous reasons why the standard prices differed significantly from actual costs. For example, the most current contract information was not always used to help set standard prices and ammunition requirements increased substantially from 1981 to 1984 resulting in quantity price reductions. In addition, prices may have been further influenced by changes in competition and actual inflation rates which were lower than the inflation rates projected by OSD and the Office of Management and Budget and used by AMCCOM in computing standard prices.

Other operational problems associated with AMCCOM's management information system and internal controls have further compounded the problems. In early 1984, AMCCOM completed a study of fund operations, apparently because the Office of the Assistant Secretary of Defense (Comptroller) was concerned that \$1 billion in fiscal years 1982 and 1983 funds remained unobligated. The study identified numerous deficiencies in fund operations, including

- inadequate or nonexistent policies and procedures on fund operations,
- lack of agreement among directorates on the roles and responsibilities of staff who manage and operate the fund,

--inadequate management information system (reports used were seldom accurate), and

--lack of a designated person to monitor the operation of the fund.

STANDARD PRICES HAVE NOT BEEN
IMPLEMENTED AS INTENDED

According to AMCCOM, it has established standard prices for about 95 percent of the end items. But these prices have been revised several times during a program year. The fund charter, approved October 1, 1981, and later modified, allows for revisions of standard prices. According to the charter, prices can be revised when actual costs differ by more than 15 percent from standard prices or when costs vary by 5 percent on customer-directed changes. AMCCOM subsequently revised the criteria allowing price revisions when prices differed by more than either 10 percent or \$1 million on a customer order.

The changes in the standard price for the M483 projectile, between October 1981 and August 1984 for program years 1982-85, illustrate how often the standard prices have been revised. (See table II.1.) These revisions to standard prices have created additional paperwork and added to AMCCOM's and the services' administrative burden. The Army and the other services believe that such frequent revisions are not necessary and defeat the original purpose of the fund.

Most of the price revisions were directed by OSD which according to AMCCOM officials, instituted a requirement in November 1982 that price lists be published quarterly. According to OSD officials, the frequent revisions were necessary because the prices AMCCOM charged customers (1) were overstated when compared with the most current contract costs and (2) exceeded projected costs for the ammunition.

Standard prices were also generally higher than actual costs and generated \$397 million in excess funds in the Working Capital Fund for program years 1982-83. (See app. III.)

Table II.1Standard Prices For M483 Projectiles

	<u>Unit price^a</u>	<u>Amount of price change</u>
Program year 1982:		
Oct. 21, 1981	\$ 570.11	\$
Mar. 1, 1982	469.96	-100.15
Dec. 22, 1983	438.41	- 31.55
June 22, 1984	454.86	+ 16.45
July 31, 1984	464.19	+ 9.33
Aug. 20, 1984	454.86	- 9.33
Program year 1983:		
July 6, 1982	539.08	
Oct. 1, 1982	539.30	+ 0.22
Mar. 25, 1983	539.32	+ 0.02
Apr. 1, 1983	539.30	- 0.02
Dec. 22, 1983	464.96	- 74.34
Program year 1984:		
June 1, 1983	507.35	
Jan. 17, 1984	424.89	- 82.46
Jan. 17, 1984	424.44	- 0.45
Feb. 1, 1984	438.74	+ 14.30
Program year 1985:		
Feb. 1, 1984	421.80	
July 25, 1984	415.02	- 6.78

^aThis price represents the price AMCCOM will charge customers for orders received for the stated fiscal year program, including orders already received for the fiscal year.

Reasons for Frequent Price Changes

In determining standard prices, program analysts have not always followed established procedures which require the use of the best or the most current contract prices in estimating future component costs. As a result, estimated prices for the

components have often been overstated. In addition, the analysts have not always considered the impact of significant quantity increases on prices and the prices they established have apparently not been adequately reviewed.

It is inevitable that prices will change over time because of changes in ammunition requirements, competition, and economic conditions. For example, the value of DOD's ammunition program increased from \$1.5 billion in fiscal year 1981 to \$3.8 billion in fiscal year 1984. As a result, procurements of required components increased proportionately. By purchasing larger quantities, AMCCOM was able to get lower prices from suppliers for some items.

AMCCOM procedures provide that current contract prices be used for computing base prices. When multiple contractors are involved, a weighted average price should be computed. The base price should also be raised or lowered if the quantity to be procured differs substantially from the previous year's quantities used in computing the base cost.

In 21 of 30 pricing actions we reviewed, program analysts either did not use the best or the most current price data or the analysts arbitrarily rounded computed prices. In 13 of the 21 cases, the end rounds were overpriced and the other 8 were underpriced as compared with the most current contract prices.

For example, during a 1982 program buy (53.3 million fuzes), analysts used a price based on a small quantity option (910,000 fuzes) rather than the weighted average from the 1981 program. The option price used was \$0.35 whereas the 1981 weighted average price was \$0.28 per fuze. AMCCOM actually purchased 36.8 million fuzes in 1982 at an average unit cost of \$0.221. Furthermore, in the 1983 program year, AMCCOM again used the \$0.35 unit price rather than \$0.221, thereby overstating the fuze estimate by \$9.1 million.

AMCCOM officials have stated they are now doing a much better job of pricing ammunition items. They have said the variance between standard prices and actual costs has been narrowing and at the present is negligible.

HAVE CLAIMED SAVINGS AND OTHER BENEFITS BEEN ACHIEVED
AND ARE THEY ATTRIBUTABLE TO THE FUND?

Based on an internal review of the fund in January 1984, AMCCOM reported to the Defense Subcommittee of the House Appropriations Committee that the fund saved \$397 million during program years 1982 and 1983. AMCCOM computed these savings by comparing the difference between the estimated prices AMCCOM charged for ammunition ordered by the services and projected final prices for the items. Of the \$397 million, \$270 million was returned to the services in December 1983 and January 1984 and \$127 million was retained to reduce ammunition prices to the services in fiscal year 1985.

According to more recent AMCCOM estimates, \$112.2 million remained unused from the 1982 program year as of September 30, 1984 and \$109.9 million remained unused from the 1983 program year as of December 18, 1985. Table III.1 shows the retained amounts by service. AMCCOM has taken the position that it can retain and use these funds to reduce prices on future customer orders.

We believe these funds cannot be used in future years since under our decision at 59 Comp. Gen. 563 (B-196404, June 26, 1980) and U.S.C. 1552(a) those funds which are unused at the end of the original period of availability lapse and, thereafter, are no longer available for obligation.¹ The unused amount is withdrawn at the end of the period of availability for obligation and reverts to the Treasury.

Table III.1

	<u>Retained Funds Remaining From the</u> <u>1982 and 1983 Ammunition Programs</u>		
	<u>1982</u>	<u>1983</u>	<u>Total</u>
	----- (millions) -----		
Army	\$ 62.5	\$ 58.7	\$121.2
Navy	15.5	5.9	21.4
Air Force	12.0	18.7	30.7
Marine Corps	<u>22.2</u>	<u>26.6</u>	<u>48.8</u>
	<u>\$112.2</u>	<u>\$109.9</u>	<u>\$222.1</u>

¹Procurement appropriations remain available for obligation for 3 fiscal years. Funds that remain unused for 3 fiscal years expire for obligation purposes.

AMCCOM officials told us that the \$397 million figure had not been validated and should not have been reported to the Committee. The amount that was validated was a \$76 million cost avoidance which the Executive Director for Conventional Ammunition reported in his annual report in November 1983. However, our review showed that the same method had been used to compute both the \$397 million and the \$76 million cost avoidances. We believe that neither figure can be attributed solely to the fund. The lower ammunition prices AMCCOM obtained may have been due to overstated cost estimates, increased procurement quantities, competition, and other factors.

We believe one reason AMCCOM obtained lower prices from contractors was that program quantities increased significantly. For example, M483 projectile procurement requirements increased from 304,000 in 1981 to 606,000 in 1983. Similarly, requirements for the M509 projectile increased from 6,000 in 1981 to 143,000 in 1983. These increased requirements for the M483 and M509 projectiles required increased quantities of selected major components common to both end rounds, as shown in table III.2.

Table III.2

Quantities Required for Program Years 1981 and 1983

Components common to M483 and M509 <u>projectiles</u>	<u>1981</u>		<u>1983</u>	
	<u>Average</u>		<u>Average</u>	
	<u>unit</u>	<u>Quantity</u>	<u>unit</u>	<u>Quantity</u>
	<u>price</u>	<u>Quantity</u>	<u>price</u>	<u>Quantity</u>
		(millions)		(millions)
M42 grenade	\$1.02	21.2	\$.97	58.5
M223 fuze	.28	28.8	.26	70.7

Procurements of the above components were not consolidated to any greater extent in 1983, after the fund was established, than they were in 1981, before it was established. The requirement to maintain a production base and uncertainties of when orders would be received from the services limited the amount of consolidation AMCCOM achieved.

PAPERWORK NOT NECESSARILY REDUCED

One of the intended benefits to be achieved by the fund was reduced paperwork. Before the fund was established, AMCCOM had to issue a separate work order for each component of each customer's order to procure ammunition components. If two customers ordered the same end item and the end item had 10 components, AMCCOM had to issue 20 work orders--10 for each customer order.

The fund eliminated the need to issue separate work orders for every component of a customer's order. AMCCOM's Cost Control Reporting System can combine common components onto fewer work orders. Under the fund, AMCCOM needs to issue only 10 work orders in the above example instead of the 20 required under the previous system.

During the first 2 years of the fund's operation, AMCCOM estimated that 63 percent fewer work orders and 54 percent fewer amendments were required compared with the previous 3 years. AMCCOM estimated that compared with fiscal year 1981, about 250,000 fewer pieces of paper were generated in fiscal year 1982. AMCCOM also estimated that the reductions in paperwork had saved 1.8 staff-years of work and allowed AMCCOM to

- eliminate the backlog of program change requests on other procurements,
- reduce program document processing time by 17 percent,
- reduce processing time for foreign military sales orders by 64 percent, and
- reduce overtime by 80 percent.

The reductions in paperwork AMCCOM achieved in work orders and amendments, however, are being countered by other administrative burdens which have increased since 1982. For example:

- In the past two fiscal years, the fund's budget has been revised seven times. The fiscal year 1984 fund budget was revised three times and the fiscal year 1985 budget four times. These revisions were necessitated by changes in the services' requirements, changes in inflation indexes, internal reviews, and OSD-directed revisions of prices. Such frequent revisions were not anticipated before the fund was established.
- "Scrubs"² are being done more frequently. Prior to the fund, scrubs were done monthly. More recently, scrubs were sometimes being performed every week. AMCCOM estimated that each year since 1982 this effort took about 2,570 staff-days at an estimated salary cost of \$250,000. AMCCOM estimated that before the fund, it expended only 432 staff-days on this function annually.

Officials from the Air Force and the Navy said they believe that overall paperwork has increased under the fund, mostly because of the more frequent revisions in prices.

²AMCCOM performs cost analyses to ensure that customers have provided sufficient funds to cover the projected final cost of their orders. AMCCOM refers to these analyses as "scrubs."

SHOULD ADVANCE CONTRACT AUTHORITY BE PROVIDED?

We believe advance contract authority should not be provided because according to the Office of the Assistant Secretary of Defense, much of the expected benefits of advanced contract authority can be achieved with existing mechanisms. In addition, advance contract authority could reduce congressional discretion in funding the ammunition program and could result in the Army's contracting for items which are not needed or which should more appropriately be procured in later years.

ARMY'S JUSTIFICATION FOR
ADVANCE CONTRACT AUTHORITY

Originally in support of the fund concept, AMCCOM projected that use of the fund would save the Army \$800 million over the first 10 years, 1982 to 1991. AMCCOM based these projections on the idea that the fund would receive advance contract authority to procure some common components and materiel before the Congress appropriates the funds and in advance of actual orders. They stated that savings would result from accelerated obligations and consolidated procurements. Savings through accelerated obligations were to be achieved with advance contract authority by speeding up the acquisition process and awarding contracts 3 to 6 months earlier. AMCCOM believed this would reduce the effect inflation has on ammunition prices and thus result in an estimated 2-percent savings.

The fundamental problem that advance contract authority was to resolve is the late receipt of funds for the ammunition program. For fiscal years 1980-84, it was 4 to 5 months after the start of the fiscal year before the Office of the Secretary of Defense released to the services 90 percent or more of the conventional ammunition funds appropriated by the Congress. One or two additional months elapsed before the services submitted funded orders to AMCCOM. Thus, it was March 30 or later before most of the funds earmarked for ammunition procurement were made available to AMCCOM.

AMCCOM believed use of advance contract authority would also provide other benefits, including

- substantial reductions in administrative costs;
- earlier deliveries of end items and thus a related improvement in readiness posture;

--more stable production schedules, thus encouraging contractors to invest in capital equipment and remain in the production base; and

--more effective workloading, reduced production stoppages, and maintenance of a more stable and well-trained work force at government-owned contractor-operated ammunition plants.

To ensure that advance contract authority would not be abused, the Army planned to institute a preacquisition committee that would consider, among other things,

--actual and estimated ammunition requirements over a 3-year period;

--economies of scale and opportunities for price competition;

--procurement and production lead time;

--costs for care, maintenance, and surveillance;

--shelf-life; and

--availability of industrial stocks.

Each year during our annual ammunition budget review we evaluate the services' requests for ammunition items. We identify items which should not be procured or which should more appropriately be procured in later years. The Congress, using data presented in our report, eliminates items or reduces quantities which, based on the services' budget submission would be contracted for if advance contract authority was available.

USE OF EXISTING MECHANISMS

Advance contract authority cannot be provided to the Conventional Ammunition Working Capital Fund without congressional action. In this respect, the House Appropriations Committee report on the Department of Defense Appropriations for fiscal year 1984 (Report No. 98-427, Oct. 20, 1983, at p. 136) points out that additional improvements and experience under current procedures should be made before such a change could be justified.

Granting AMCCOM advance contract authority would reduce congressional discretion in funding the ammunition program by permitting AMCCOM to contract for items before the Congress

provides funds for them. A key purpose of the Congressional Budget Act of 1974 (Public Law 93-344) was to improve congressional control over budget outlays.

According to the Office of the Assistant Secretary of Defense (Comptroller) and DOD's Inspector General, greater use of continuing resolution authority (CRA) and quicker release of funds by the services could achieve much of what advance contract authority is expected to achieve.

Continuing Resolution Authority

CRA is an interim appropriation that the Congress enacts to cover the period from the beginning of the fiscal year until the time it enacts fiscal year appropriations. CRA language varies from year to year and frequently provides, among other things, that no new programs be started, no ongoing programs be expanded, and no new increases be made in programs which the Congress has criticized or in which it has shown special interest.

The Office of the Assistant Secretary of Defense (Comptroller) said that the Army's problem of late receipt of funds for procurement could be partially alleviated by better use of CRA, insisting that the services forward funding to the Single Manager within 60 days after receiving the funds from the Office of Assistant Secretary of Defense and process associated documents and program fund approvals more expeditiously. The Office of Assistant Secretary of Defense said if the Army took these steps, it could achieve a significant portion of the projected savings without the risk of wasting money by buying ammunition which is ultimately not needed or not authorized.

A June 28, 1984, report by DOD's Inspector General on an audit of the Single Manager for Conventional Ammunition Program also concluded that AMCCOM could achieve many of the economic benefits expected from contract authority if more pressure were exerted on the services to submit their ammunition orders early in the year and if the Army relied more heavily on continuing resolution authority.

AMCCOM does not agree that better use of CRA is an effective alternative to advance contract authority. It gives two reasons for disagreeing. First, there are no guarantees that the CRA requested by the services will be approved in the quantities and amounts requested for each ammunition end round. Secondly, not all services receive funding authority at the same time. According to AMCCOM, in order to consolidate orders, the CRA must be released to all services at the same time and the services must release these funds to AMCCOM at the same time.

AMCCOM has tried to speed up the procurement process by using short-of-award authority to compensate for the slow receipt of appropriated funds for ammunition procurement. Issued by AMCCOM's Office of Comptroller, this mechanism authorizes procurement personnel to prepare procurement packages to the point of contract award. Contracts can then be awarded as soon as funded orders are received from the services.

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