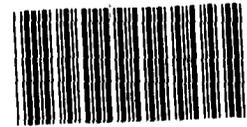


September 1993

1994 DEFENSE BUDGET

Potential Reductions to Ammunition Programs



149982



United States
General Accounting Office
Washington, D.C. 20548

**National Security and
International Affairs Division**

B-216058

September 20, 1993

The Honorable Daniel K. Inouye
Chairman, Subcommittee on Defense
Committee on Appropriations
United States Senate

The Honorable John P. Murtha
Chairman, Subcommittee on Defense
Committee on Appropriations
House of Representatives

As you requested, we reviewed the military services' justifications for their fiscal year 1994 budget requests for ammunition items and the Army's request for ammunition production base support. In addition, we examined selected segments of prior-year ammunition programs. In June 1993, we briefed your staffs on the results of our review. This report includes the information provided at those briefings and the final results of our review.

We are sending copies of this report to the Chairmen and Ranking Minority Members of the Senate and House Committees on Armed Services and on Appropriations; the Secretaries of Defense, the Army, the Navy, and the Air Force; the Commandant of the Marine Corps; and other interested parties. We will also make copies available to others upon request.

This report was prepared under the direction of Louis J. Rodrigues, Director, Systems Development and Production Issues, who may be reached on (202) 512-4841 if you or your staff have any questions. Major contributors to this report are listed in appendix I.

Frank C. Conahan
Assistant Comptroller General

Executive Summary

Purpose

The Chairmen of the Subcommittees on Defense, Senate and House Committees on Appropriations, asked GAO to review the military services' justifications for their fiscal year 1994 budget requests for ammunition and the Army's request for ammunition production base support to determine whether the programs should be funded in the amounts requested. GAO also reviewed selected segments of appropriations for prior years for some items to determine whether unused funds could be rescinded or used to reduce the fiscal year 1994 request.

Background

As shown in table 1, the military services requested about \$1.3 billion for ammunition and ammunition production base support in fiscal year 1994.

Table 1: Military Services' Fiscal Year 1994 Budget Requests for Ammunition and for Ammunition Production Base Support

Dollars in millions	
Service	Amount
Army	
Ammunition	\$527.2
Production base support	207.2
Navy	277.1
Air Force	239.3
Marine Corps	85.1
Total	\$1,335.9

The services justified their ammunition requests by stating that the ammunition was needed for training and a war reserve stockpile. The Army justified its request for production base support by stating that the funds were needed to modernize and expand the ammunition production base, to lay away production facilities no longer required for active production and maintain inactive facilities being retained for possible future production, to provide components for use in demonstrating production capacities, and to destroy excess and obsolete conventional ammunition.

Results in Brief

GAO concluded that most items in the services' \$1.129 billion fiscal year 1994 request for ammunition and the Army's \$207.2 million request for production base support are justified. However, as shown in table 2, GAO believes \$197.9 million, or 14.8 percent, of the fiscal year 1994 request is not justified and should not be funded. Further, \$63.9 million from the services' fiscal year 1993 appropriations and \$55.2 million from the

services' fiscal year 1992 appropriations are no longer needed for the ammunition items for which the funds were appropriated. These prior-year funds could be rescinded or used to reduce the fiscal year 1994 budget. Table 2 identifies the potential reductions and rescissions to the military services' ammunition programs for fiscal year 1994 and prior years.

Table 2: Potential Reductions and Rescissions to the Services' Ammunition Programs

Service	Fiscal year			Total
	1994	1993	1992	
Dollars in millions				
Army				
Ammunition	\$114.7	\$50.6	\$30.2	\$195.5
Production base support	3.5	0	0	3.5
Navy	57.9	0	0	57.9
Air Force	21.5	6.8	14.7	43.0
Marine Corps	0.3	6.5	10.3	17.1
Total	\$197.9	\$63.9	\$55.2	\$317.0

In addition, the Air Force might not need the \$26.5 million it requested for fiscal year 1994 for 30-mm training cartridges. Although GAO did not identify any specific budget reduction for this item, GAO has included information on the item because the Committees on Appropriations should be aware of the issue when considering the Air Force's budget request.

Principal Findings

Army Ammunition and Ammunition Production Base Support Programs

The Army's \$527.2 million fiscal year 1994 request for ammunition and \$207.2 million fiscal year 1994 request for production base support could be reduced by \$118.2 million for the following reasons:

- \$77.7 million is requested for 155-mm Sense and Destroy Armor projectiles that will not be approved for production and troop use in fiscal year 1994,
- \$37 million is requested for seven ammunition items for which program quantities are greater than needed in fiscal year 1994, and
- \$3.5 million is requested for three production base support layaway projects for which funding will not be needed in fiscal year 1994.

In addition, \$50.6 million of the Army's fiscal year 1993 appropriation for ammunition for three items and \$30.2 million of the Army's fiscal year 1992 appropriation for two items are not needed because the Army has an adequate inventory of the items for which the funds were provided.

Navy Ammunition Program

The Navy's \$277.1 million fiscal year 1994 request for ammunition could be reduced by \$57.9 million for 11 items for which program quantities are greater than needed.

Air Force Ammunition Program

The Air Force's \$239.3 million fiscal year 1994 request for ammunition could be reduced by \$21.5 million for three items for which program quantities are greater than needed. The Air Force reduced the buying levels for many items due to decreased requirements brought about by a diminished worldwide threat and the resulting decrease in force structure.

In addition, the Air Force might not need the \$26.5 million it requested for about 3.4 million 30-mm training cartridges in fiscal year 1994. Although the Air Force has more than an adequate inventory of 30-mm training cartridges to meet its fiscal year 1994 training needs, about 9 million rounds in its inventory produced in prior years cannot be released for use until they have been tested to determine whether they meet the Air Force's specifications. Therefore, the Air Force's need for fiscal year 1994 funding for this item is contingent upon the results of the tests.

Further, \$6.764 million of the Air Force's fiscal year 1993 appropriation for ammunition for three items and \$14.72 million of the Air Force's fiscal year 1992 appropriation for four items could be rescinded or used to reduce the fiscal year 1994 request because the Air Force did not indicate a specific need for these funds for the items for which the funds were provided.

Marine Corps Ammunition Program

The Marine Corps' \$85.1 million fiscal year 1994 request for ammunition could be reduced by \$0.3 million because program quantities for two items are greater than needed in fiscal year 1994.

In addition, \$6.5 million of the Marine Corps' fiscal year 1993 appropriation for ammunition for four items and \$10.3 million of the Marine Corps' fiscal year 1992 appropriation for ammunition for three items are not needed. The Marine Corps does not need to procure the items for which the funds

were provided because the Marine Corps has an adequate inventory of the items.

Recommendations

GAO recommends that the Senate and House Committees on Appropriations reduce the Department of Defense's fiscal year 1994 ammunition budget by the following amounts:

- \$114.7 million for 8 items in the Army's ammunition request,
- \$3.5 million in the Army's production base support request,
- \$57.9 million for 11 items in the Navy's request,
- \$21.5 million for 3 items in the Air Force's request, and
- \$0.3 million for 2 items in the Marine Corps' request.

In addition, GAO recommends that the following amounts that were included in the Department of Defense's fiscal years' 1993 and 1992 ammunition appropriations be rescinded or used to reduce the Department of Defense's fiscal year 1994 request:

- \$50.6 million from the Army's fiscal year 1993 appropriation for three items,
- \$30.2 million from the Army's fiscal year 1992 appropriation for two items,
- \$6.8 million from the Air Force's fiscal year 1993 appropriation for three items,
- \$14.7 million from the Air Force's fiscal year 1992 appropriation for four items,
- \$6.5 million from the Marine Corps' fiscal year 1993 appropriation for four items, and
- \$10.3 million from the Marine Corps' fiscal year 1992 appropriation for three items.

Agency Comments

As requested, GAO did not obtain fully coordinated Department of Defense comments on this report. However, GAO discussed the results of its work with officials from the Office of the Secretary of Defense, the Army Materiel Command's Office of the Deputy Chief of Staff for Ammunition, the Office of the Deputy Chief of Naval Operations for Logistics, the Air Force's Office of the Deputy Chief of Staff for Logistics, and the Marine Corps' Office of Program Manager for Ammunition. They agreed with some, but not all, of GAO's recommended reductions and GAO has included their views in the report where appropriate. In addition, Army and Navy officials identified items for which they believed additional funding was

Executive Summary

needed in fiscal year 1994 but for which funds had not been requested. GAO included in its report, but did not evaluate, the potential funding increases identified by these officials.

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Abbreviations

BL&P	blind, load, and plug
GAO	General Accounting Office
SADARM	Sense and Destroy Armor munition

Introduction

As shown in table 1.1, the military services requested about \$1.3 billion for ammunition and ammunition production base support in fiscal year 1994.

Table 1.1: Military Services' Fiscal Year 1994 Budget Requests for Ammunition and for Ammunition Production Base Support

Dollars in millions	
Military service	Amount
Army	\$734.4
Navy	277.1
Air Force	239.3
Marine Corps	85.1
Total	\$1,335.9

The services indicated that the requested funds for ammunition would be used to meet training needs and build a war reserve stockpile. The Army stated that the requested funds for ammunition production base support would be used to modernize and expand the ammunition production base, to lay away production facilities no longer required for active production and maintain inactive facilities being retained for possible future production, to provide components for use in demonstrating production capacities, and to destroy excess and obsolete conventional ammunition.

Objectives, Scope, and Methodology

The Chairmen of the Subcommittees on Defense, Senate and House Committees on Appropriations, asked us to review the military services' justifications for their fiscal year 1994 budget requests for ammunition and the Army's request for ammunition production base support to determine whether the programs should be funded in the amounts requested. We also reviewed the services' use of prior years' appropriations for the procurement of ammunition to determine whether unused funds could be rescinded or used to reduce the fiscal year 1994 request.

In conducting our review, we evaluated the ammunition and production base support requests involving large dollar amounts, ammunition items being bought for the first time, and ammunition items that were having production and/or performance problems. In reviewing the budget requests, we considered such factors as ammunition requirements, inventory levels, item quality, testing and development, funded program status, unit costs, and field malfunctions to identify items with potential problems. We also analyzed production schedules, production capacities, past production, procurement lead times, and component deliveries to determine whether the services can execute the ammunition programs efficiently and economically. We compared projected inventory levels to

training usage to ensure that inventories would not greatly exceed objectives. We also determined whether there will be sufficient quantities of components to produce end items. We did not verify the accuracy of data the services provided, such as inventory levels and training usage, but compared such information with data provided in prior years to evaluate its reasonableness.

To evaluate projects for production base support, we determined whether their designs had been completed prior to budget submission and whether the projects were still needed.

In conducting our evaluation, we interviewed ammunition production managers, procurement officials, and quality assurance and engineering staff. We also reviewed various documents, such as information papers, test data analyses, training consumption reports, and budget support data, which we obtained from the following:

- Army, Navy, Air Force, and Marine Corps headquarters, Washington, D.C.;
- U.S. Army Materiel Command, Alexandria, Virginia;
- U.S. Army Armament, Munitions and Chemical Command, Rock Island, Illinois;
- U.S. Army Armament Research, Development and Engineering Center, Dover, New Jersey;
- U.S. Army Production Base Modernization Activity, Dover, New Jersey;
- Project Manager's Office for Sense and Destroy Armor, Dover, New Jersey;
- Project Manager's Office for Mortar Systems, Dover, New Jersey;
- Project Manager's Office for Mines, Dover, New Jersey;
- Marine Corps Systems Command, Washington, D.C.;
- Naval Air Systems Command, Arlington, Virginia; and
- Ogden Air Logistics Center, Ogden, Utah.

We conducted our review from November 1992 to September 1993 in accordance with generally accepted government auditing standards. We discussed a draft of this report with officials from the Office of the Secretary of Defense, the Army Materiel Command's Office of the Deputy Chief of Staff for Ammunition, the Navy's Office of the Deputy Chief of Naval Operations for Logistics, the Air Force's Office of the Deputy Chief of Staff for Logistics, and the Marine Corps' Office of Program Manager for Ammunition. We have incorporated their comments in the report, where appropriate. As requested, we did not obtain fully coordinated Department of Defense comments on this report.

Army Ammunition Program

The Army requested \$527.218 million for ammunition and \$207.209 million for ammunition production base support in its fiscal year 1994 ammunition budget request.

Our review indicates that the Army does not need \$118.188 million in its fiscal year 1994 ammunition and ammunition production base support requests—\$114.664 million for eight ammunition items and \$3.524 million for ammunition production base support. The items for which we identified potential reductions and a summary of our basis for the reductions are identified in table 2.1.

Table 2.1: Potential Reductions to the Army's Fiscal Year 1994 Ammunition Budget Request

Dollars in millions

Description of Item	Amount requested	Potential reduction	Basis for reduction
155-mm XM898 SADARM artillery projectile	\$77.661	\$77.661	Not ready for production.
7.62-mm M82 cartridge	11.309	7.156	Inventory will exceed needs.
7.62-mm 4-ball/1-tracer cartridge	1.460	1.460	Inventory will exceed needs.
7.62-mm M118 cartridge	1.028	1.028	Inventory will exceed needs.
.45 caliber M1911 cartridge	0.325	0.325	Inventory will exceed needs.
.50 caliber 4-ball/1-tracer cartridge	19.055	1.717	Inventory will exceed needs.
25-mm M910 cartridge	27.451	25.000	Inventory will exceed needs.
.22 caliber match cartridge for rifle	0.317	0.317	Inventory will exceed needs.
Subtotal	138.606	114.664	
Layaway of industrial facilities	51.532	3.524	Production lines will operate through fiscal year 1994.
Total	\$190.138	\$118.188	

In addition, \$50.593 million of the Army's fiscal year 1993 appropriation for ammunition for three items and \$30.181 million of the Army's fiscal year 1992 appropriation for two items are not needed because the Army has an adequate inventory of the items for which the funds were provided.

One Item Not Ready for Production

The Army requested \$77.661 million for low-rate initial production of 1,213 155-mm Sense and Destroy Armor (SADARM) projectiles in fiscal year 1994. However, performance and reliability problems have prevented the Army from obtaining approval for production. Because of this delay, it is premature to provide the \$77.661 million the Army is requesting in fiscal year 1994.

In July 1993, the Army suspended performance flight testing of SADARM because of concerns about the system's performance and reliability. The Army has developed a plan to extend the engineering and manufacturing development phase for approximately 2 years to address the projectile's performance problem. Therefore, the Army does not need the \$77.661 million it requested for SADARM production in fiscal year 1994.

Army officials agreed that the \$77.661 million fiscal year 1994 request for low-rate initial production of the SADARM projectile is not needed because the projectile is not ready for production. However, Army officials stated that \$98.6 million in research, development, test, and evaluation funds will be needed in fiscal year 1994 because of the extension of the research and development phase for SADARM. Because this decision was made after we completed our fieldwork, we did not evaluate the Army's revised plan.

Inventory Will Exceed Needs

Ammunition program quantities for which funds are being requested should be needed and delivered within the fiscal year's funded delivery period. The funded delivery period for an ammunition item begins the first day of the last month of the procurement lead time and ends 12 months later.¹ For example, if the procurement lead time for an ammunition item in the fiscal year 1994 budget is 15 months, the funded delivery period would start on December 1, 1994, and end on November 30, 1995. Since ammunition programs are funded each year, funding should not be provided for ammunition items that are not needed or will not be delivered until after the fiscal year 1994 funded delivery period.

The Army's fiscal year 1994 request could be reduced by \$37.003 million for seven items because projected inventories will exceed the Army's inventory objectives (see table 2.2).

¹Procurement lead time is the sum of administrative and production lead times. Administrative lead time begins at the start of the fiscal year and represents the time needed to award contracts for components. Production lead time begins when the component contracts have been awarded and ends when initial delivery is made for the assembled ammunition item.

**Chapter 2
Army Ammunition Program**

Table 2.2: Amount of Inventory Exceeding Needs for Seven Items in the Army's Fiscal Year 1994 Ammunition Budget

Quantity in millions

Description of Item	Beginning inventory ^a	Quantity requested	Inventory estimated usage ^b	Inventory objective	Quantity exceeding needs
7.62-mm M82 cartridge	155.903	40.633	144.366	26.457	25.713
7.62-mm 4-ball/1-tracer cartridge	11.980	3.024	6.920	1.005	7.079
7.62-mm M118 cartridge	8.285	2.866	3.636	0.011	7.504
.45 caliber M1911 cartridge	^c	2.284	^c	^c	8.064
.50 caliber 4-ball/1-tracer cartridge	37.372	13.970	42.528	7.555	1.259
25-mm M910 cartridge	7.098	2.007	6.245	1.031	1.829
.22 caliber match cartridge for rifle	10.853	3.791	8.960	0.967	4.717

^aFigures include items due in from prior-year programs.

^bFigures include estimated usage through the end of the fiscal year 1994 program period.

^cData omitted because inventory objective is classified.

7.62-mm M82 Cartridges

The Army's \$11.309 million request for 40,633,000 7.62-mm M82 cartridges could be reduced by \$7.156 million because projected inventories will exceed requirements by 25,713,000 cartridges. Army officials agreed that the request could be reduced by \$6.844 million. However, we believe that a reduction of \$7.156 million is more appropriate because it is based on the Army's projected consumption through the fiscal year 1994 program period, which reflects the Army's current training requirement for the cartridge.

7.62-mm 4-Ball/1-Tracer Cartridges

The Army's \$1.46 million request for 3,024,000 7.62-mm 4-ball/1-tracer cartridges for overhead fire could be denied because projected inventories will exceed requirements without the fiscal year 1994 program. Army officials agreed.

7.62-mm M118 Cartridges

The Army's \$1.028 million request for 2,866,000 7.62-mm M118 special ball cartridges could be denied because projected inventories will exceed requirements without the fiscal year 1994 program. Army officials agreed.

.45 Caliber M1911 Cartridges The Army's \$0.325 million request for 2,284,000 .45 caliber M1911 cartridges could be denied because projected inventories will exceed requirements without the fiscal year 1994 program. Army officials agreed.

.50 Caliber 4-Ball/1-Tracer Cartridges The Army's \$19.055 million request for 13,970,000 .50 caliber 4-ball/1-tracer cartridges could be reduced by \$1.717 million because projected inventories will exceed requirements by 1,259,000 cartridges. Army officials agreed.

25-mm M910 Cartridges The Army's \$27.451 million request for 2,007,000 25-mm M910 cartridges could be reduced by \$25 million because projected inventories will exceed requirements by 1,829,000 cartridges. Army officials agreed.

.22 Caliber Match Cartridges for Rifles The Army's \$1.11 million request for items less than \$2 million includes \$0.317 million for 3,791,000 .22 caliber match cartridges for rifles. The \$0.317 million request could be denied because projected inventories will exceed requirements without the fiscal year 1994 program. Army officials agreed.

Ammunition Production Base Support The Army requested \$207.209 million for ammunition production base support in fiscal year 1994, including \$51.532 million to lay away industrial facilities. We believe that the Army's \$3.524 million request to lay away industrial facilities at three ammunition plants is not needed because the facilities are scheduled to operate through the fiscal year 1994 program period (see table 2.3).

Table 2.3: Potential Reductions to the Army's Fiscal Year 1994 Ammunition Budget Request for Layaway Projects

Dollars in millions

Location	Amount requested	Item produced
Kansas Army Ammunition Plant	\$2.672	Combined effects munitions
Iowa Army Ammunition Plant	0.536	105-mm HERA cartridges
Milan Army Ammunition Plant	0.316	M936 fuze
Total	\$3.524	

Army officials agreed that fiscal year 1994 funds are not needed for the three layaway projects but did not agree with the reduction. They said the funds are needed to lay away production facilities at the Radford Army

Ammunition Plant. According to Army officials, over 30 percent of the facilities at the Radford plant have been designated as no longer required for active production and layaway of these facilities would reduce production overhead expenses. However, this was not the purpose for which the funding was requested. In addition, we could not evaluate the need for fiscal year 1994 layaway funding at the Radford plant because the Army did not provide project cost and schedule data.

Unobligated Prior-Year Appropriations

We have identified \$80.774 million in unobligated appropriations for fiscal years 1993 and 1992 that could be rescinded or used to reduce the Army's fiscal year 1994 request because the Army does not need to procure the items for which the funds were provided.

As of September 10, 1993, the Army had not obligated funds totaling \$50.593 million from its fiscal year 1993 ammunition appropriations for three items and \$30.181 million from its fiscal year 1992 appropriations for two items (see table 2.4).

Table 2.4: Unobligated Amounts From the Army's Fiscal Years 1993 and 1992 Appropriations

Item	Unobligated Amount		Total
	Fiscal year 1993	Fiscal year 1992	
155-mm M203 red bag propelling charge	\$21.493	\$0	\$21.493
105-mm M490A1 TP-T tank cartridge	19.000	0	19.000
105-mm M724A1 DS-TP tank cartridge	10.100	0	10.100
M762 electric time artillery fuze	0	22.000	22.000
8-inch M1 green bag propelling charge	0	8.181	8.181
Total	\$50.593	\$30.181	\$80.774

Army officials agreed that the Army does not need to procure the items for which the funds were provided because the Army has an adequate inventory of the items involved. However, they did not agree that the unobligated funds should be rescinded. They said that \$9.999 million of the \$19 million provided for 105-mm M490A1 TP-T tank cartridges was being reprogrammed to destroy excess and obsolete conventional ammunition and that the Army would like to reprogram the remaining \$70.775 million for other higher priority needs.

Army's Proposed Budget Increases

At the end of our review, Army officials provided us a list of eight items for which they believed additional funding of \$118.424 million was needed for

fiscal year 1994. Table 2.5 provides details on the Army's proposed budget increases.

We did not review the appropriateness of funding these items because the Army provided the list after we had completed our fieldwork and because the Army did not provide sufficient data to support or justify the need for more funding. The Army has proposed that \$25 million be provided for 25-mm M919 cartridges for fiscal year 1994; however, as of June 22, 1993, it had not obligated \$18.3 million of its fiscal year 1991 appropriation for this cartridge.

Table 2.5: Army's Proposed Budget Increases

Dollars in millions

Description of Item	Proposed increase
5.56-mm M200 blank cartridges	\$6.355
5.56-mm M855 ball cartridges linked for SAW	0.740
5.56-mm ball cartridges for M16A2	5.224
7.62-mm 4-ball/1-tracer cartridges for minigun	8.833
7.62-mm M852 cartridges	1.912
.50 caliber blank cartridges with M9 link	10.360
25-mm M919 cartridges	25.000
Volcano AT/AP M87 mine	60.000
Total	\$118.424

Conclusions

We believe that \$114.664 million of the Army's fiscal year 1994 request is not needed because one item will not be ready for production in fiscal year 1994 and requested program quantities for seven other items are greater than needed. We also believe that \$3.524 million of the Army's fiscal year 1994 request for production base support is not needed because funding requests for three layaway projects are premature.

In addition, \$50.593 million of the Army's fiscal year 1993 appropriation for three items and \$30.181 million of the Army's fiscal year 1992 appropriation for two items are not needed because the Army has an adequate inventory of the items for which the funds were provided. These unobligated appropriations from prior years could be rescinded or used to reduce the Army's fiscal year 1994 request.

Recommendations

We recommend that the Senate and House Committees on Appropriations reduce the Army's fiscal year 1994 budget request by \$114.664 million for eight ammunition items and by \$3.524 million for production base support. We also recommend that \$50.593 million from the Army's fiscal year 1993 appropriation and \$30.181 million from the Army's fiscal year 1992 appropriation be rescinded or used to reduce the Army's fiscal year 1994 request.

Navy Ammunition Program

The Navy requested \$277.1 million for ammunition items in its fiscal year 1994 budget. Our review indicates that the Navy does not need \$57.881 million in fiscal year 1994 because the Navy overestimated its training needs for 11 ammunition items (see table 3.1).

Table 3.1: Potential Reductions to the Navy's Fiscal Year 1994 Ammunition Budget Request

Dollars in millions

Description of Item	Amount requested	Potential reduction
5-inch/54 gun ammunition		
Full propelling charge	\$23.879	\$23.879
VTNF	5.858	5.858
BL&P	5.135	5.135
Practice bombs		
BDU-45 NTP	6.026	6.026
BDU-48/B	0.490	0.490
76-mm gun ammunition		
VTNF	4.257	4.257
BL&P	1.526	1.526
Air expendable countermeasures		
MJU-8A/B flare	4.113	4.113
Machine gun ammunition		
20-mm PGU-27 TP	2.790	2.790
20-mm PGU-27 w/14 link	1.712	1.712
Small arms and landing party ammunition		
9-mm M882 ball	3.407	2.095
Total	\$59.193	\$57.881

Overestimated Training Needs

The Navy's \$59.193 million fiscal year 1994 request for 11 ammunition items could be reduced by \$57.881 million because the Navy has overestimated its training needs. Table 3.2 shows actual training consumptions as a percent of the Navy's projections for fiscal years 1990 through 1992. (We are presenting the data as percentages because quantities are classified.)

Table 3.2: Actual Training Consumptions as a Percentage of Projections for Fiscal Years 1990 Through 1992

Item	Actual historical usage as a percentage of projected usage
5-inch/54 full propelling charge	39
5-inch/54 VTNF	33
5-inch/54 BL&P	50
BDU-45 NTP	57
BDU-48/B	32
76-mm VTNF	4
76-mm BL&P	52
MJU-8A/B flare	12
20-mm PGU-27 TP	42
20-mm PGU-27 w/14 link	75
9-mm M882 ball	13

Source: GAO analysis of Navy data.

Given the Navy's past consumption patterns, we believe that the Navy's fiscal year 1994 projected usage for the 11 items is overstated. On the basis of the highest or average annual usage during fiscal years 1990 through 1992, we believe that the Navy's \$59.193 million request for the 11 items could be reduced by \$57.881 million.

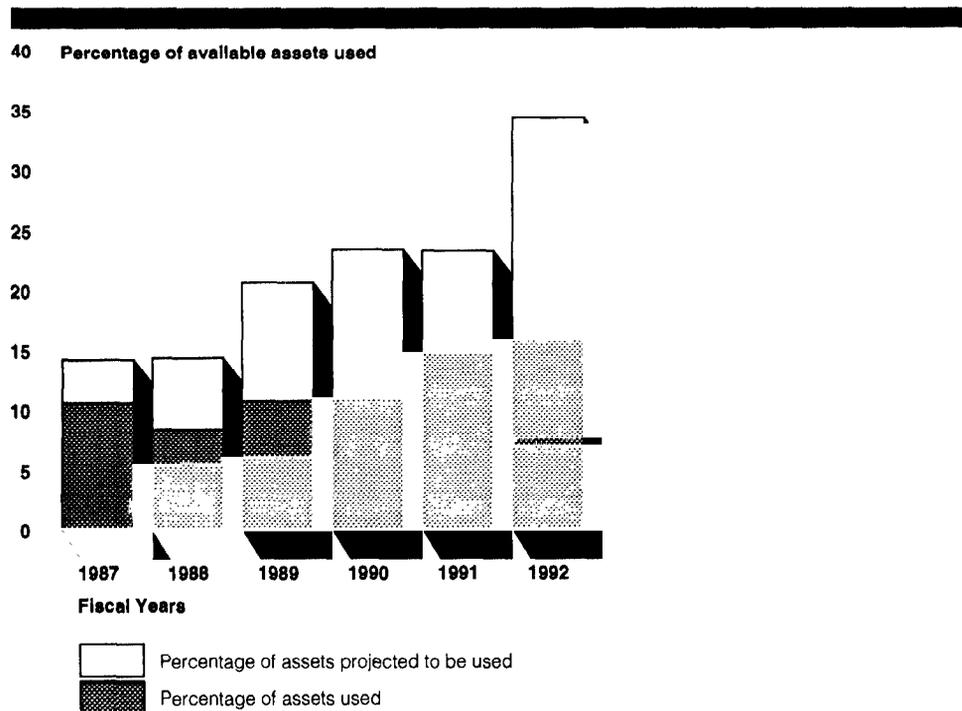
Navy officials agreed with reductions of \$16.442 million requested for five items: \$7.8 million of \$23.879 million requested for 5-inch/54 gun full propelling charges, the \$6.026 million requested for BDU-45 NTP practice bombs, the \$0.49 million for BDU-48/B practice bombs, the \$1.526 million requested for 76-mm blind, load and plug (BL&P) gun ammunition, and \$0.6 million of \$3.407 million requested for 9-mm M882 ball cartridges. However, they said that they disagreed with the other reductions for the following reasons:

- The Navy placed a moratorium on the use of 5-inch/54 gun ammunition for training because of inventory shortages. Fiscal year 1994 funds are needed to bring inventories to acceptable levels.
- Low usage of the 76-mm VTNF ammunition was due to low inventory levels and the fleet's unfamiliarity with the cartridge. Usage is expected to increase in the future.
- We should consider projections of expenditures for the improved MJU-8B flare in our calculations.

- Training expenditures for machine gun ammunition were constrained by the unavailability of assets in prior years and will increase in the future.
- The Navy projects high expenditure rates for the 9-mm ball cartridge because it replaces the .45 caliber cartridge. Also, the fleet must train to qualify for the 9-mm weapon.

We believe that the data the Navy provided to us does not support the Navy's position. Our analysis of assets and expenditures for fiscal years 1990 through 1992 shows that actual expenditures for most of the 11 items noted in table 3.2 were less than 15 percent of available assets. The Navy's projected and actual usage of 76-mm BL&P cartridges during fiscal years 1987 through 1992 illustrates the point. As shown in figure 3.1, the Navy projected that it would use substantially more of its inventory of 76-mm BL&P rounds than it actually used. For example, it projected that it would use 34 percent of available assets of the 76-mm BL&P cartridges in fiscal year 1992, whereas it actually used only 16 percent that year.

Figure 3.1: Projected and Actual Consumption for the 76-mm BL&P Cartridge, Fiscal Years 1987 to 1992



Navy's Proposed Budget Increases

Navy officials provided us a list of items for which they believed additional funding is needed in fiscal year 1994 but for which funds had not been requested (see table 3.3). We did not review the appropriateness of funding these items because the Navy did not provide sufficient data to support or justify the need for more funding. However, the list includes two items (76-mm BL&P cartridge and PGU-27 TP cartridge) for which we have recommended reductions in the fiscal year 1994 program.

Table 3.3: Navy's Proposed Budget Increases

Dollars in millions

Item	Proposed quantity	Increased amount
GBU-24	166	\$13.136
2.75-inch rocket illuminating warhead	45,543	39.437
25-mm PGU-25/32 HEI cartridge	74,887	0.142
RR-144 ABN chaff	140,300	0.498
20-mm PGU-27 TP cartridge	493,700	1.940
RR-184 BOL chaff	1,048	2.902
5-inch/54 HE CVT projectile	18,300	11.845
GEN X decoy	7,300	40.851
SM875	200,000	1.920
76-mm HE-IR cartridge	11,800	11.733
76-mm BL&P cartridge	4,100	1.227
CCU-41/B chaff	148,000	0.230
MJU-7 flare	4,366	0.114
.50 caliber MK211 cartridge	1,016,400	1.616
25-mm PGU-32 HEI-T cartridge	137,200	2.241
RR-188 chaff	5,527	0.003
JATO MK6	422	2.583
BBU-36 flare	6,400	0.008
Total		\$132.426

Conclusion

We believe that \$57.881 million of the Navy's fiscal year 1994 request is not needed because requested program quantities for 11 ammunition items are greater than needed.

Recommendation

We recommend that the Senate and House Committees on Appropriations reduce the Navy's fiscal year 1994 ammunition budget request by \$57.881 million.

Air Force Ammunition Program

The Air Force requested \$239.3 million for ammunition items in its fiscal year 1994 budget. Our review indicates that the Air Force does not need \$21.462 million in fiscal year 1994 for three items. Table 4.1 shows the items for which we have identified potential reductions and a summary of our basis for the reductions.

Table 4.1: Potential Reductions to the Air Force's Fiscal Year 1994 Ammunition Budget Request

Dollars in millions

Description of Item	Amount requested	Potential reduction	Basis for reduction
MK-82 inert/BDU-50 bomb	\$6.318	\$6.318	Overstated training consumption
25 pound practice bomb	7.405	1.821	Overstated training consumption
M-206 cartridge flare	13.323	13.323	Inventory will exceed needs
Total	\$27.046	\$21.462	

In addition, the Air Force might not need the \$26.464 million it requested for about 3.4 million 30-mm training cartridges in fiscal year 1994 because the Air Force might have an adequate supply of 30-mm training cartridges in its inventory without a fiscal year 1994 buy. Although we did not identify any specific budget reductions for this item, we have included information on it because the Committees on Appropriations should be aware of the issue when considering the Air Force's budget request.

Further, we believe that \$6.764 million of the Air Force's fiscal year 1993 appropriation for ammunition for three items and \$14.72 million of the Air Force's fiscal year 1992 appropriation for four items could be rescinded or used to reduce the fiscal year 1994 request because the Air Force did not indicate a specific need for these funds for the items for which the funds were provided.

Overestimated Training Needs

The Air Force's \$13.723 million request for two items could be reduced by \$8.139 million because the Air Force overestimated its training needs for these items.

MK-82 Inert/BDU-50 Bomb

The Air Force's \$6.318 million request for 24,936 MK-82 inert/BDU-50 bombs could be denied because the Air Force overestimated its training needs. The Air Force used a 32-month procurement lead time that it could not justify. The Army procures this item for the Air Force and, according to Army records, the correct procurement lead time is 24 months. Thus, in projecting its inventory position at the end of the fiscal year 1994 program

period, the Air Force included in its calculations 8 months of additional training expenditures totaling 29,331 bombs. Air Force officials said that the Army reduced the procurement lead time to 24 months after the Air Force had submitted its budget request and agreed with the \$6.318 million reduction.

25 Pound BDU-33 Bomb

The Air Force's \$7.405 million request for 715,704 25 pound practice bombs could be reduced by \$1.821 million for 176,087 bombs because the Air Force overestimated its training expenditures. The Air Force projected average annual usage of about 1.06 million rounds through the end of the fiscal year 1994 funded delivery period; whereas, actual usage for fiscal years 1990-92 averaged 969,991 annually. Based on actual usage, we estimate that the Air Force overestimated its training requirements for fiscal year 1994 by 176,087 rounds, or \$1.821 million. Air Force officials initially agreed but subsequently disagreed that their training requirements were overestimated. We believe, however, that based on past consumption patterns, the Air Force overestimated its training needs and that the Air Force's fiscal year 1994 request could be reduced by \$1.821 million.

Inventory Will Exceed Needs

The Air Force's \$13.323 million request for 659,370 M-206 cartridge flares could be denied because projected inventories will exceed the Air Force's inventory objectives without the fiscal year 1994 program.

Air Force officials disagreed, stating that this item has a 7-year shelf life, which has expired for all but 666,844 of the 4,628,138 million M-206 flares in inventory as of March 30, 1993. They said that the remaining inventory of 3,961,294 M-206 flares with an expired shelf life can be used only for training. Air Force officials also said that requirements for these flares are expected to increase significantly in the foreseeable future due to operations in Bosnia.

We continue to believe, however, that the request could be denied for several reasons: (1) according to Air Force records, the 3,961,294 flares in its inventory are serviceable; (2) the Air Force has not provided supporting documents to show the age of the inventory; and (3) according to an Air Force official, the Air Force has conducted tests of M-206 flares, which showed that the shelf life could be extended by 2 years.

One Item Might Not Be Needed

The \$26.464 million the Air Force is requesting for 3,373,413 30-mm training cartridges might not be needed. The Air Force's need for fiscal year 1994 funding for this item is contingent upon the results of ongoing and planned future tests. Although the Air Force has more than an adequate inventory of 30-mm training cartridges to meet its fiscal year 1994 training needs, about 9 million rounds in its inventory produced in prior years cannot be released for use until they have been tested to determine whether they meet the Air Force's specifications and are usable. According to an Air Force official, these tests are expected to continue into July 1994. If the tests should disclose that the rounds meet specifications and are usable, the Air Force will have an excess supply of 30-mm training cartridges in its inventory and will not need to procure additional cartridges in fiscal year 1994. However, if the test results should disclose that they do not meet specifications and are not usable, the Air Force will need to procure additional 30-mm cartridges in fiscal year 1994 to meet its projected training needs.

Unobligated Prior-Year Appropriations

We have identified \$21.484 million in unobligated appropriations from fiscal years 1993 and 1992 that could be rescinded or used to reduce the Air Force's fiscal year 1994 request because the Air Force did not identify a need to use the funds for the purposes for which the funds were provided.

As of September 10, 1993, the Air Force had not obligated funds totaling \$6.764 million from its fiscal year 1993 ammunition appropriations for three items and \$14.72 million from its fiscal year 1992 appropriations for four items (see table 4.2).

Table 4.2: Unobligated Amounts From the Air Force's Fiscal Years 1993 and 1992 Appropriations

Dollars in millions

Item	Unobligated amount		Total
	Fiscal year 1993	Fiscal year 1992	
Items less than \$2 million (other)	\$2.894	\$5.152	\$8.046
Spares and repair parts	2.800	3.900	6.700
Items less than \$2 million (cartridges)	0	3.768	3.768
FMU-139 fuze	0	1.900	1.900
Items less than \$2 million (bombs)	1.070	0	1.070
Total	\$6.764	\$14.720	\$21.484

Air Force officials agreed that the \$21.484 million is unobligated. Except for the \$1.9 million for the FMU-139 fuze, Air Force officials neither agreed nor disagreed that the funds could be rescinded or used to reduce the Air Force's fiscal year 1994 request. They said that they would like to reprogram the \$1.9 million in unobligated fiscal year 1992 appropriations for FMU-139 fuzes for the Sensor Fuzed Weapon. However, this was not the purpose for which the funds were provided. In addition, we requested but the Air Force did not provide justifications for these unobligated amounts.

Conclusions

We believe that \$21.462 million of the Air Force's fiscal year 1994 request for three ammunition items is not needed because requested program quantities are greater than needed. In addition, the Air Force might not need to procure 30-mm training cartridges in fiscal year 1994. Further, \$6.764 million of the Air Force's fiscal year 1993 appropriation for ammunition for three items and \$14.72 million of the Air Force's fiscal year 1992 appropriation for four items could be rescinded or used to reduce the fiscal year 1994 request because the Air Force did not indicate a need for these funds for the purposes for which the funds were provided.

Recommendations

We recommend that the Senate and House Committees on Appropriations reduce the Air Force's fiscal year 1994 ammunition budget request by \$21.462 million. We also recommend that \$6.764 million from the Air Force's fiscal year 1993 appropriation and \$14.72 million from the Air Force's fiscal year 1992 appropriation be rescinded or used to reduce the Air Force's fiscal year 1994 request.

Marine Corps Ammunition Program

The Marine Corps requested \$85.1 million for ammunition items in its fiscal year 1994 budget. Our review indicates that the Marine Corps does not need \$0.344 million because the projected inventory for two items will exceed requirements.

In addition, \$6.508 million of the Marine Corps' fiscal year 1993 appropriation for ammunition for four items and \$10.285 million of the Marine Corps' fiscal year 1992 appropriation for ammunition for three items are not needed because the Marine Corps has an adequate inventory of the items for which the funds were provided.

Inventory Will Exceed Needs

The Marine Corps' \$0.669 million fiscal year 1994 request for two items could be reduced by \$0.344 million because projected inventories will exceed the Marine Corps' inventory objectives (see table 5.1).

Table 5.1: Amount of Inventory Exceeding Needs for Two Items in the Marine Corps' Fiscal Year 1994 Ammunition Budget

Description of Item	Beginning Inventory ^a	Quantity requested	Inventory estimated usage ^b	Inventory objective	Quantity exceeding needs
M68A2 trailer mounted, practice line charges	1,660	25	1,134	306	245
9-mm practice cartridges	2,024,131	723,545	1,080,696	1,358,407	308,573

^aFigures include items due in from prior-year programs.

^bFigures include estimated usage through the end of the fiscal year 1994 program period.

M68A2 Practice Line Charge

The Marine Corps' \$0.229 million request for 25 M68A2 trailer mounted, practice line charges could be denied because projected inventories will exceed requirements without the fiscal year 1994 program. Marine Corps officials declined to challenge our excessive inventory projections and did not agree or disagree with the potential reduction.

9-mm Practice Cartridge

The Marine Corps' \$0.27 million request for 723,545 9-mm practice cartridges could be reduced by \$0.115 million because projected inventories will exceed requirements by 308,753 cartridges. Marine Corps officials agreed.

Unobligated Prior-Year Appropriations

We have identified \$16.793 million in unobligated appropriations for fiscal years 1993 and 1992 that could be rescinded or used to reduce the Marine Corps' fiscal year 1994 request because the Marine Corps has an adequate inventory of the items for which the funds were provided.

As of September 10, 1993, the Marine Corps had not obligated \$6.508 million from its fiscal year 1993 ammunition appropriations for four items and \$10.285 million from its fiscal year 1992 appropriations for three items (see table 5.2).

Table 5.2: Unobligated Amounts From the Marine Corps' Fiscal Years 1993 and 1992 Appropriations

Dollars in millions

Description of Item	Unobligated amounts		Total
	Fiscal year 1993	Fiscal year 1992	
AT-4 light anti-armor weapon	0	\$7.130	\$7.130
Items less than \$2 million	\$3.476	1.144	4.620
7.62-mm linked armor piercing cartridge	0	2.011	2.011
M58A4 trailer mounted line charge	1.231	0	1.231
M18 series green smoke hand grenade	0.910	0	0.910
M18 series yellow smoke hand grenade	0.891	0	0.891
Total	\$6.508	\$10.285	\$16.793

Marine Corps officials agreed that the Marine Corps does not need the funds for the items for which the funds were provided but did not agree that the funds should be rescinded. They said that the Marine Corps plans to use the \$4.62 million in unobligated appropriations for items less than \$2 million for ammunition modernization and the \$12.173 million in unobligated appropriations for the five other items for 81-mm high explosive mortar cartridges. However, this is not the purpose for which the funds were provided.

Conclusions

We believe that \$0.3 million of the Marine Corps' fiscal year 1994 request is not needed because requested program quantities for two items are greater than needed. In addition, \$6.5 million of funds provided to the Marine Corps in fiscal year 1993 for four items and \$10.3 million provided in fiscal year 1992 for three items are not needed because the Marine Corps has an adequate inventory of the items for which the funds were provided.

Recommendations

We recommend that the Senate and House Committees on Appropriations reduce the Marine Corps' fiscal year 1994 budget request by \$0.3 million for two ammunition items. We also recommend that \$6.5 million from the Marine Corps' fiscal year 1993 appropriation and \$10.3 million from its fiscal year 1992 appropriation be rescinded or used to reduce the Marine Corps' fiscal year 1994 request.

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