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DEPARTMENT OF THE ARMY JUSTIFICATION OF ESTIMATES FOR  
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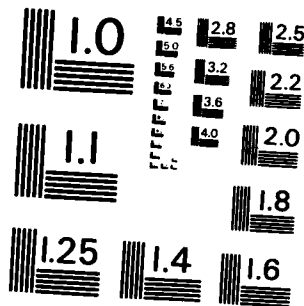
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**DEPARTMENT OF THE ARMY**  
**JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1985**  
**SUBMITTED TO CONGRESS**

FEBRUARY 1984



AMMUNITION

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PROCUREMENT

PROGRAMS

<p>AMMUNITION</p> <p>WEAPONS &amp; TRUCKS COMBAT VEHICLES</p>	<p>MISSILES</p> <p>OTHER</p>
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1. REPORT NUMBER	2. GOVT ACCESSION NO. <b>A198188</b>	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) (in 6 parts) Department of the Army Justification of Estimates for Fiscal Year 1985, Submitted to Congress February 1984, Procurement Programs, Aircraft, Missiles, Weapons & Tracked Cbt Veh., Ammunition, Other Procurement & Constr Programs		5. TYPE OF REPORT & PERIOD COVERED Army Procurement Budget Justification, FY 1985
7. AUTHOR(s) Department of the Army		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS HQDA, Office of the Deputy Chief of Staff for Research, Development, and Acquisition (DAMA-PPP-B) Washington, DC 20310		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS HQDA, Office of the Deputy Chief of Staff for Research, Development, and Acquisition (DAMA-AOA) Washington, DC 20310		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE February 1984
		13. NUMBER OF PAGES 258 (including all parts)
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Army Procurement Programs Budget Justification Books covering Aircraft, Missiles, Weapons and Tracked Combat Vehicles, Ammunition, Other Procurement, Army Appropriations programs and Construction programs submitted by the Army to Congress February 1984 for Fiscal Year 1985.		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) In justification of programs requested, this document, in separate volume for each of the five Procurement Appropriations, and one separate volume for Construction Programs, provides backup data for the Army Budget submission for FY 1985. Included are Summaries of Requirements, Program and Financing Statements and Selected Data Sheets. (These volumes are unclassified).		

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DEPARTMENT OF THE ARMY  
PROCUREMENT OF AMMUNITION, ARMY

JUSTIFICATION OF ESTIMATES FOR FISCAL YEARS 1985, 1986

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4-1 February 1984

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Procurement of Ammunition, Army

APPROPRIATION LANGUAGE

For construction, procurement, production, and modification of ammunition, and accessories therefor; specialized equipment and training devices; expansion of public and private plants, including ammunition facilities authorized in military construction authorization Acts or authorized by section 2673, title 10, United States Code, and the land necessary therefor, without regard to section 4774, title 10, United States Code, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title as required by section 355, Revised Statutes, as amended; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes; (\$1,980,100,000) \$2,494,000,000 to remain available for obligation until September 30, (1986) 1987. (1)  
(2)

(10 U.S.C. 2353, 2361, 3012, 4531, 4532; Department of Defense Appropriation Act, 1984; additional authorizing legislation to be proposed.)

EXPLANATION OF LANGUAGE CHANGES

- (1) To change the amount of the appropriation requested for FY 1985.
- (2) To change the obligation expiration date for the FY 1985 program.

4-2 February, 1984



2034a Procurement of Ammunition, Army  
Program and Financing (in Thousands of dollars)

FYP SUMMARY

Identification code	21-2034-----	Budget Plan (amounts for actions programmed)			Obligations		
		1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
Program by activities							
Direct Program:							
	1. Ammunition	1,734,033	1,775,100	2,191,800	1,729,241	1,824,345	2,159,422
	2. Ammunition production base support	389,494	184,800	302,200	357,355	207,355	298,636
Total direct program		2,123,527	1,959,900	2,494,000	2,086,596	2,031,700	2,458,058
Reimbursable program		222,187	296,600	317,700	158,139	284,570	307,378
10 0001	Total Obligations	2,345,714	2,256,500	2,811,700	2,244,735	2,316,270	2,765,436
Financing:							
Offsetting collections from:							
11 0001	Federal funds(-)	-104,064	-151,900	-169,800	-73,416	-151,900	-169,800
13 0001	Trust funds(-)	-125,101	-144,700	-147,900	-115,439	-144,700	-147,900
14 0001	Non-federal sources(-)	-1,155			-1,155		
17 0001	Recovery of prior year obligations(-):				-109,661		
	Unobligated balance available, SOY						
21 4002	For completion of prior year budget plan				-266,418	-390,633	-300,663
21 4003	Available to finance new budget plans	-10,000			-10,000		
21 4007	Reprogramming from or to prior year budget	-46,115					
22 4001	Not unobligated balance transferred	10,000			10,000		
	Unobligated balance available, EOY						
24 4002	For completion of prior year budget plan				390,633	300,663	347,127
25 0001	Unobligated balance lapsing	46,115			46,115		
39 0001	Budget authority	2,115,394	1,939,900	2,494,000	2,115,394	1,939,900	2,494,000
Budget authority:							
40 0001	Appropriation	2,122,394	1,980,100	2,494,000	2,122,394	1,980,100	2,494,000
40 0002	Reduction pursuant to P.L. 97-377	-7,000			-7,000		
41 0001	Transferred to other accounts(-)		-40,200			-40,200	
43 0001	Appropriation (adjusted)	2,115,394	1,939,900	2,494,000	2,115,394	1,939,900	2,494,000
Relation of obligations to outlays:							
71 0001	Obligations incurred, net				2,054,725	2,029,670	2,447,736
72 4001	Obligated balance, start of year				2,404,416	2,402,101	2,495,471
71 4001	Obligated balance, end of year				-2,402,101	-2,495,471	-2,914,907
77 0001	Adjustments in expired accounts				18,727		
78 0001	Adjustments in unexpired accounts				-109,661		
90 0001	Outlays				1,966,106	1,936,300	2,028,300

2034a Procurement of Ammunition, Army  
 Object Classification (in Thousands of dollars)

Identification code	21-2034-----	1983 actual	1984 est.	1985 est.
Direct obligations:				
12.5004	Other	417,319	413,777	490,476
12.6001	Supplies and materials	1,669,277	1,617,923	1,967,563
19.9001	Total direct obligations	2,086,596	2,031,700	2,458,039
Reimbursable Obligations:				
22.5004	Other	28,674	38,914	61,476
22.6001	Supplies and materials	129,468	235,656	246,903
29.9001	Total reimbursable obligations	158,142	274,570	307,379
49.9901	Total Obligations	2,244,738	2,326,270	2,765,418

2034a Procurement of Ammunition, Army  
 Program and Financing (in Thousands of dollars)

FISCAL YEAR 1981

Identification code	21-2034-----	Budget Plan (amounts for actions programmed)			Obligations		
		1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
Program by activities							
Direct Program:							
	1.				81,849		
	2.				16,090		
Total direct program					97,939		
Financing:							
Offsetting collections from:							
11	0001				29,000		
13	0001				13,093		
17	0001				-53,975		
21	4002				-132,173		
21	4007						
25	0001				46,115		
39	0001						

2034a Procurement of Ammunition, Army  
Program and Financing (in thousands of dollars)

FISCAL YEAR 1962

Identification code	21-2034-----	Budget Plan (amounts for actions programmed)			Obligations		
		1963 actual	1964 est.	1965 est.	1963 actual	1964 est.	1965 est.
Program by activities							
Direct Program:							
	1.				96,593	49,271	
	2.				11,688	6,663	
-----							
	Total direct program				110,281	56,934	
	Reimbursable program				14,306	11,174	
-----							
10.0001	Total Obligations				124,587	67,128	
-----							
Financing:							
Offsetting collections from:							
11.0001	Adjustment to prior year federal fund or				1,648		
13.0001	Adjustment to prior year trust fund order				-3,431		
17.0001	Recoveries of prior year obligations(-)				-55,686		
-----							
21.4002	Unobligated balance available, SOY						
21.4002	For completion of prior year budget plans				-134,245	-67,128	
21.4003	Available to finance new budget plans				-10,000		
22.4001	Net unobligated balance transferred	-10,000			10,000		
22.4001	Unobligated balance available, EOY	10,000					
24.4002	For completion of prior year budget plans				67,128		
-----							
39.0001	Budget authority						
-----							

2034a Procurement of Ammunition, Army  
Program and Financing (in Thousands of dollars)

FISCAL YEAR 1983

Identification code	21-2034-----	Budget Plan (amounts for actions programmed)			Obligations		
		1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
Program by activities							
Direct Program:							
1	Ammunition	1,734,033			1,548,799	133,106	52,128
2	Ammunition production base support	389,494			329,577	48,232	11,685
Total direct program		2,123,527			1,878,376	181,338	63,813
Reimbursable program		222,187			143,833	63,912	14,442
10 0001	Total Obligations	2,345,714			2,022,209	245,250	78,255
Financing:							
Offsetting collections from:							
11 0001	Federal funds(-)	-104,064			-104,064		
13 0001	Trust funds(-)	-125,101			-125,101		
14 0001	Non-federal sources(-)	-1,155			-1,155		
21 4002	Unobligated balance available, SOY For completion of prior year budget plans					-323,505	-78,255
24 4002	Unobligated balance available, EOY For completion of prior year budget plans				323,505	78,255	
19 0001	Budget authority	2,115,394			2,115,394		
Budget authority:							
10 0001	Appropriation	2,122,394			2,122,394		
10 0002	Reduction pursuant to P.L. 97-377	-7,000			-7,000		
43 0001	Appropriation (adjusted)	2,115,394			2,115,394		

2034a Procurement of Ammunition, Army  
Program and Financing (in Thousands of dollars)

FISCAL YEAR 1984

Identification code	21-2034-----	Budget Plan (amounts for actions programed)			Obligations		
		1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
Program by activities							
Direct Program:							
	1.		1,775,100		1,641,968	79,879	
	2.		164,900		152,440	7,418	
	Total direct program		1,939,900		1,794,408	87,296	
	Reimbursable program		298,800		219,484	57,638	
10 0001	Total Obligations		2,236,500		2,013,892	145,133	
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)		-181,900		-181,900		
13.0001	Trust funds(-)		-144,700		-144,700		
	Unobligated balance available, SOY						
21.4002	For completion of prior year budget plans						-222,608
	Unobligated balance available, EOY						
24.4002	For completion of prior year budget plans				222,608	77,475	
39.0001	Budget authority		1,939,900		1,939,900		
Budget authority:							
40.0001	Appropriation		1,990,100		1,990,100		
41.0001	Transferred to other accounts(-)		-40,200		-40,200		
43 0001	Appropriation (adjusted)		1,939,900		1,939,900		

4-8 February 1984

2034a Procurement of Ammunition, Army  
 Program and Financing (in Thousands of dollars)

FISCAL YEAR 1985

Identification code	21-2034-----	Budget Plan (amounts for actions programmed)			Obligations		
		1983 actual	1984 est	1985 est	1983 actual	1984 est	1985 est
Program by activities							
Direct Program							
	1			2,191,800			2,027,415
	2			302,200			279,535
Total direct program				2,494,000			2,306,950
Reimbursable program				317,700			235,099
10	0001	Total Obligations		2,811,700			2,542,048
Financing:							
Offsetting collections from:							
11	0001	Federal funds(-)		-169,800			-169,800
13	0001	Trust funds(-)		-147,900			-147,900
		Unobligated balance available, EOY					
24	4002	For completion of prior year budget plans					269,652
10	0001	Budget Authority (Appropriation)		2,494,000			2,494,000

4-9 February 1984

PROCUREMENT OF AMMUNITION, ARMY

Section 2

Budget Activity Justification

Activity 1 - Ammunition

Activity 2 - Ammunition Production Base Support

4-10 February 1984



Department of the Army Annual Budget Estimate Justification	Appropriation		FY 1985	
	PROCUREMENT OF AMMUNITION, ARMY		Budget	
Budget Program	(Thousands of Dollars)			
	Actual	Estimate	Estimate	Estimate
Activity 1 - Ammunition	FY 1983	FY 1984	FY 1985	FY 1986
Direct Budget Plan	\$1,734,033	\$1,775,100	\$2,191,800	\$2,731,400

#### SECTION 1 - PURPOSE AND SCOPE

The FY 1985 request provides for worldwide training consumption, improvements in near-term readiness and combat sustainability, and the acquisition of war reserve stocks for use during wartime. Families of ammunition include<sup>d</sup> in the request are artillery, mortar, tank, small arms ammunition, rockets, fuzes, demolitions, grenades, pyrotechnic signals, and other ammunition items. The major portion of the funds being requested are identified to recently developed tank rounds, artillery ammunition, and small arm ammunition.

#### SECTION 2 - JUSTIFICATION OF FUNDS REQUESTED

The fiscal year 1985 program provides for worldwide training consumption and losses to inventory through the FY 1985 funded delivery period, increases US Army readiness in support of the FY 1989 authorized acquisition objective and maintains an active ammunition-production base in FY 1985 for modernization and training-type ammunition. The FY 1985 program includes over 50 different types of ammunition including \$416.0 million for tank ammunition, \$92.9 million for fuzes, \$698.9 million for artillery ammunition, \$228.7 million for propelling charges, \$419.6 million for small arms ammunition, \$60.0 million for mortar ammunition, \$9.8 million for nuclear materiel, and \$265.9 million for other ammunition, spares and components for tests, renovation and prove-out. The fiscal year 1986 program includes \$372.8 million for tank ammunition, \$113.3 million for fuzes, \$909.8 million for artillery ammunition, \$325.9 million for propelling charges, \$491.8 million for small arms ammunition, \$120.4 million for mortar ammunition, \$15.5 million for nuclear materiel, and \$381.9 million for other ammunition, spares and components for tests, renovation and prove-out. A category breakout of the FY 1985 program is as follows:

4-11 February 1984

ITEM BREAKOUT, FY 1985

<u>TYPE</u>	<u>\$ (Millions)</u>	<u>REMARKS</u>
<u>Tank Ammunition (\$416.0 million)</u>		
105mm Tank Ammunition	\$280.0	The budget request includes the Armor-Piercing Fin-Stabilized Discarding Sabot-Tracer (APFSDS-T) round to support war reserve objectives, and Discarding Sabot-Target Practice (DS-TP), Target Practice-Tracer (TP-T), and Target Practice Cone Stabilized Discarding Sabot-Tracer (TPCSDS-T) rounds for training requirements. The FY 1985 request is for 422,000 105mm TP-T cartridges in the amount of \$72.5 million; 509,000 105mm DS-TP in the amount of \$100.6 million; 84,000 105mm APFSDS-T in the amount of \$58.9 million, which includes \$4.8 million to support Total Risk Assessment Cost Estimate - Production (TRACE-P); and 80,000 105mm TPCSDS-T in the amount of \$48.0 million. Failure to fund this requirement would terminate programs designed to build war reserves of modern ammunition to support the 105mm tank fleet and would degrade the capability to conduct tank gunnery training.
120mm Tank Ammunition	136.0	The APFSDS-T, TP-T, and TPCSDS-T began production in FY 1984. The APFSDS-T and HEAT buys are to support war reserve objectives. The TP-T and TPCSDS-T are for training requirements. The FY 1985 request is for 10,000 120mm APFSDS-T in the amount of \$20.9 million; 21,000 120mm TP-T in the amount of \$30.5 million; 54,000 120mm TPCSDS-T in the amount of \$52.7 million; and 13,000 120mm High Explosive Anti-Tank (HEAT) in the amount of \$31.9 million. The requested program is required to support the fielding of the M1E1 tank with ammunition capable of defeating threat armor and to provide tank gunnery training with M1E1 tank.

4-12 February 1984

<u>TYPE</u>	<u>\$ (Millions)</u>	<u>REMARKS</u>
<u>Fuzes (\$ 92.9 million)</u>		
Fuze, Mechanical Time,	40.4	The mechanical time fuzes are used in conjunction with 155mm and 8-Inch Improved Conventional Munition (ICM) rounds, and with 155mm illuminating and smoke projectiles. The internal timing device controls the expulsion of the projectile's cargo after the round is fired. The FY 1985 request is for 616,000 fuzes. The FY 1985 and FY 1986 programs are required to correct the existing fuse to projectile imbalance and to support war reserve objectives. If this program is not funded the inventory will continue to contain projectiles for which required actuating fuzes are not available.
Fuze, Mechanical Time, Super Quick	4.8	The mechanical time, super quick fuzes are used in the 155mm and 8-Inch high-explosive and rocket-assisted projectiles as well as the registration round for the 8-inch nuclear projectile. This fuse is used when a choice of timed or super-quick action is required. The internal mechanism controls the detonation of the round if the timing function is selected. If set for super-quick action, the projectile detonates upon impact. The FY 1985 and FY 1986 programs are required to correct the existing fuse to projectile imbalance and to support war reserve objectives. If this program is not funded the inventory will continue to contain projectiles for which required actuating fuzes are not available.

4-13 February 1984

<u>TYPE</u>	\$ (Millions)	<u>REMARKS</u>
Fuze, Proximity	47.7	The proximity fuze is used in artillery (105mm, 155mm, 8-Inch) and 4.2-Inch mortar high-explosive ammunition. The fuze contains a radio wave transmitter/receiver, which enhances indirect-fire lethality by providing a near-hit kill capability. The FY 1985 request is for 825,000 fuzes. The FY 1985 and FY 1986 programs are required to correct the existing fuze to projectile imbalance and to support war reserve objectives. If this program is not funded the inventory will continue to contain projectiles for which required actuating fuzes are not available.
<u>Artillery Ammunition (\$698.9 million)</u>		
155mm HE, ICM (DP)	252.0	This High Explosive (HE), Improved Conventional Munition (ICM) projectile is a dual-purpose (DP) anti-armor/anti-personnel round. Funding is required to meet war reserve sustainability objectives. The FY 1985 request is for 598,000 projectiles. The projectile, containing 88 dual-purpose submunitions, is fired over an enemy-target area. At the specified time a mechanical-time fuze initiates the expulsion charge and ejects the submunitions to descend on the target area, detonating on impact. The FY 1985 and FY 1986 buys are required to support war reserve sustainability objectives.

4-14 February 1984

<u>TYPE</u>	\$ (Millions)	<u>REMARKS</u>
155mm ADAM/RAAMS	161.5	<p>The Area Denial Artillery Munition (ADAM) and Remote Anti-Armor Mine Systems (RAAMS) projectiles are artillery delivered mines, which provide the field commander with a quick-reaction defensive or offensive mine system to attack dismounted enemy forces or mounted armor attacks. The ADAM contains 36 antipersonnel mines, while RAAMS contains nine antiarmor mines per projectile. After projectile firing, the mines are ejected over the target area. Upon reaching the ground, individual ADAM mines eject trip wires and function when disturbed. The RAAMS mines function when the presence of an armored vehicle is detected or when disturbed. Both mines incorporate a factory set-able self-destruct feature, which allows for movement of friendly troops through the mine area after a predetermined period. Both ADAM and RAAMS have two projectile model numbers to distinguish between available self-destruct time options. Funding is required to support war reserve objectives. The FY 1985 request is for 7,000 155mm HE ADAM M692 projectiles in the amount of \$32.3 million; 7,000 155 HE, ADAM M73 projectiles in the amount of \$32.5 million; 16,000 155mm HE, RAAMS M718 projectiles in the amount of \$30.2 million; and 37,000 155mm HE, RAAMS M741 projectiles in the amount of \$66.5 million. If not funded, achievement of sustainability objectives will be delayed.</p>

4-15 February 1984

<u>TYPE</u>	<u>\$ (Millions)</u>	<u>REMARKS</u>
155mm Copperhead	102.8	The FY 1985 budget request in support of war reserve requirements is for 2,253 155mm Copperhead projectiles. The continued procurement of Copperhead is critical to improving the artillery's primary role - delivery of timely, accurate, and lethal fire support for engaged maneuver units. Copperhead, the only precision guided projectile in production, provides the capability to destroy specific hard-point targets such as tanks, infantry fighting vehicles, and self-propelled artillery with a high probability of kill. There is no other artillery ammunition that can satisfy this requirement.
155mm Smoke	12.5	The 155mm smoke round provides a smoke screening capability with the 155mm Howitzer. The FY 1985 procurement of 15,000 projectiles is required to support war reserve objectives and training.
8-Inch, HE, ICM (DP)	\$146.5	The 8-inch High Explosive (HE), Improved Conventional Munitions (ICM) round is a dual-purpose (DP) anti-armor/anti-personnel projectile. The projectile, containing 180 dual-purpose submunitions, is fired over an enemy target. At the specified time a mechanical time fuse initiates the expulsion charge and ejects the grenades to descend on the target area, detonating on impact. The FY 1985 request for 170,000 8-inch, HE, ICM(DP) projectiles. The FY 1985 and FY 1986 buys are required to support war reserve sustainability objectives.
8-Inch, HE, RAP	22.6	The High Explosive, Rocket Assisted Projectile (RAP) provides extended range for the 8-inch Howitzer. The FY 1985 budget request is for 14,000 projectiles and supports war reserve requirements. If not funded, achievement of sustainability objectives will be delayed.

4-16 February 1984

<u>TYPE</u>	<u>\$ (Millions)</u>	<u>REMARKS</u>
14.5mm M181 and M183	1.0*	The 14.5mm round is utilized in a subcaliber trainer. The trainer provides subcaliber live-fire training for 105mm, 155mm, and 8-Inch howitzers. The FY 1985 request is for 394,000 rounds.
<u>Chemical Ammunition</u>		
155mm Chemical GB-2 Projectile, Advanced Procurement	-	The FY 1985 budget request includes advance procurement funding to support the initial 155mm binary chemical projectile procurement in FY 1986 and is required to maintain the production schedule, and will provide for the initial production capability without procuring full-up projectiles.
<u>Propelling Charges (\$228.7 Million)</u>		
155mm Propelling Charges	198.3	155mm propelling charges are procured to balance with the number of 155mm projectiles procured in support of war reserve and training requirements. The FY 1985 request is for 2,647,000 155mm propelling charges. Upon completion of the FY 1985 Funded Delivery Period (FDP) the Army stockpile will be approximately 970,000 propelling charges short of balancing with projectiles. By the end of the FY 1986 FDP the shortfall will be reduced to approximately 550,000. If not funded, achievement of a balanced projectile to propelling charge inventory will be delayed.
8-Inch Propelling Charges	30.4	8-Inch propelling charges are procured to balance with the number of 8-inch projectiles procured in support of war reserve and training requirements. The FY 1985 request is for 134,000 propelling charges. Upon completion of the FY 1985 funded delivery period (FDP), the Army stockpile will remain approximately 226,000 propelling charges short of balancing with projectiles. By the end of the FY 1986 FDP the shortfall will be reduced to 138,000. If not funded, achievement of a balanced projectile to propelling charge inventory will be delayed.

\* Funding is included in the items under \$900,000 line.

4-17 February 1984

<u>TYPE</u>	<u>\$ (Millions)</u>	<u>REMARKS</u>
<u>Small Arms Ammunition (\$419.6 Million)</u>		
5.56mm Cartridge	79.2	The FY 1985 budget request includes funding for 5.56mm Ball, Tracer, and Blank ammunition for the M-16 rifle and Squad Automatic Weapon (SAW) in support of both war reserve and training requirements. The FY 1985 request is for 534,430,000 rounds of various types of 5.56mm cartridges.
7.62mm Cartridge	36.2	The FY 1985 budget request includes Ball, Tracer and Match ammunition for war reserves and training requirements. The FY 1985 request is for 131,569,000 rounds of various types of 7.62mm cartridges.
Cal .22 Cartridge	1.5*	The requested procurement supports training requirements. The FY 1985 request is for 59,789,000 caliber .22 ball, match, and tracer cartridges.
Cal .45 Cartridge	2.2**	This FY 1985 request supports war reserve and training requirements with 11,672,000 cartridges.
9mm Ball Cartridge	1.7***	The FY 1985 request for 6,502,000 cartridges supports both war reserve and training requirements associated with the 9mm handgun.
Limited Range Plastic Ammunition	8.0	This request supports training requirements. This item is required where range facilities will not accommodate standard ammunition. Plastic ammunition includes 4,410,000 5.56mm and 3,643,000 Cal .50 rounds.
Cal .50 Cartridge	34.8	This FY 1985 request supports both war reserve and training requirements with a procurement of 32,860,000 rounds.

\* Includes \$0.1 million from items under \$900,000.

\*\* Includes \$0.8 million from items under \$900,000.

\*\*\* Includes \$0.3 million from items under \$900,000.

4-18 February 1984



<u>TYPE</u>	<u>\$ (Millions)</u>	<u>REMARKS</u>
30mm Cartridge	25.4	The FY 1985 budget request includes the High-Explosive (HE) Dual-Purpose (DP) and Target-Practice (TP) rounds in support of war reserve and training requirements. The FY 1985 request is for 541,000 30mm HB-DP cartridges in the amount of \$17.7 million and 570,000 30mm TP cartridges in the amount of \$7.7 million.
25mm Cartridge	116.7	The FY 1985 request includes the Target-Practice, High-Explosive-Incendiary (HEI) and the Armor-Piercing-Discarding-Sabot (APDS) rounds in support of war reserve and training requirements. The FY 1985 request is for 1,527,000 25mm HEI-T cartridges in the amount of \$55.0 million and 1,659,000 25mm APDS-T cartridges in the amount of \$61.7 million. This request for procurement of service rounds is to support annual training requirements and to increase war reserve assets, which are significantly below established sustainability levels. The current FY 1984 program will support three commercial producers and provides a mobilization base of qualified producers. Failure to support the FY 1985 request would preclude maintenance of this active-production base and may impact competitive procurement of these rounds.
40mm Cartridge	113.9	The FY 1985 budget request is primarily for Sergeant York (DIVAD) ammunition (\$92.1 million) including High-Explosive-Incendiary, Target-Practice, and High-Explosive with Proximity Fuze rounds. The remainder is for the 40mm High-Explosive Dual-Purpose (HEDP) High-Velocity ammunition and the 40mm practice round used in the M781 and M203 grenade launchers attached to the M16/M16A rifle. The FY 1985 request is for 121,000 40mm HEIT cartridges in the amount of \$14.8 million; 381,000 40mm TP-T cartridges in the amount of \$29.3 million; 220,000 40mm HE with proximity fuze cartridges in the amount of \$48.0 million; 878,000 40mm HEHP high velocity cartridges in the amount of \$15.1 million; and 3,210,000 40mm low velocity cartridges in the amount of \$6.7 million.

4-19 February 1984

<u>TYPE</u>	<u>\$ (Millions)</u>	<u>REMARKS</u>
<u>Mortar Ammunition (\$60.0 Million)</u>		
81mm (Improved) Cartridge	49.8*	This FY 1985 buy supports training and war reserve objectives. The FY 1985 request is for 267,000 cartridges including High-Explosive, Illuminating, Smoke, Full-Range-Training, and Inert-Practice rounds. The FY1985 request also provides funding for 661,000 subcaliber (Cal .22) practice rounds for training.
4.2-Inch Cartridge	10.2	The budget request is for the 4.2-inch Smoke round to support training and war reserve requirements. The FY 1985 request is for 79,000 cartridges.
<u>Nuclear Materiel (\$9.8 Million)</u>		
Nuclear Materiel	9.8	The FY 1985 budget request includes funding for support materiel only.
<u>Other Ammunition (\$265.9 Million)</u>		
Hand Grenades, All Types	14.1	The FY 1985 request includes practice, smoke, and fragmentation grenades. The FY 1985 request is for 3,381,000 hand grenades.
Signals	26.7	The FY 1985 budget request includes colored smoke signals and smoke pots for both war reserves and training.
Simulators	14.1	Several types of simulators are included in this request in support of training. These devices lend battlefield realism to training exercises without the associated cost, safety, and environmental impacts of live-fire training.

\* Includes \$0.7 million from items under \$900,000.

4-20 February 1984

<u>TYPE</u>	<u>\$ (Millions)</u>	<u>REMARKS</u>
Rockets	62.9	This request includes funds for 22,000 Hydra 70 rockets and 29,000 Light Anti-Tank Weapon (LAW) plus trainers for both weapons. The Hydra 70 provides multipurpose lethality against personnel, materiel, and armored targets. The LAW is a shoulder-fired, tactical rocket designed for multiple roles such as use against bunkers, lightly armored vehicles, and side/rear shots against tanks. This is the first request for procurement of the Improved LAW, following the Congressionally directed evaluation. (Procurement is anticipated to be the Swedish AT-4 rocket.)
Demolition Munitions	10.8	The FY 1985 request includes demolition charges, cratering kits, firing devices, igniters, and riot control items.
Mines	30.7	The FY 1985 request includes both anti-personnel and anti-tank Ground Emplaced Mine Scattering System (GEMSS) mines to support war reserve objectives. Also included are GEMSS drill mines to support training requirements.
Nitroguanidine	23.2	Nitroguanidine is a colorless, crystalline compound required in production of the triple-base propellant used in extended-range propelling charges for artillery and tank ammunition. The FY 1985 request is for an economical buy of this compound.
9th ID High Tech Test Bed	5.0	This FY 1985 request supports the ammunition peculiar requirements of the 9th Infantry Division High Technology Test Bed, Fort Lewis, Washington. This activity is a focal point in the development of new concepts in infantry warfare.
Ammunition Components/Support	26.0	The FY 1985 budget request includes funding for components for special tests, prove-out, and renovation of field stock, weapons components in support of proof and acceptance testing, and malfunction investigations.

4-21 February 1984

<u>TYPE</u>	<u>\$ (Millions)</u>	<u>REMARKS</u>
War Reserve Stockpile (Explosives and Propellants)	33.9	The FY 1985 funding is requested to procure explosives and propellants in support of the Department's sustainability objectives. This war reserve stockpile would be used primarily to meet mobilization requirements until production could be expanded to meet wartime requirements, but in the event of a catastrophic explosives/propellants plant failure, it could be used until production could be resumed.
Other	18.5*	Funding for marksmanship training, spares and repair parts, and other small ammunition programs are included in the FY 1985 budget request.

\* Includes \$2.6 million from items under \$900,000.

4-22 February 1984

WAR RESERVE AMMUNITION, TRAINING AMMUNITION AND NON-HARDWARE PROGRAMS, FY 1985 AND FY 1986  
(\$ MILLIONS)

	<u>FY 1985</u>	<u>FY 1986</u>
War Reserve Ammunition:	\$1,464.5	\$1,889.3
Training Ammunition:	694.5	817.2
Non-Hardware Programs:	32.8	24.9
	<u>\$2,191.8</u>	<u>\$2,731.4</u>

In order to support worldwide training consumption, the following ammunition is being procured to increase U.S. Army readiness.

<u>TRAINING ITEMS</u>	<u>FY 1985</u>		<u>FY 1986</u>	
	<u>QUANTITY (THOUSANDS)</u>	<u>DOLLARS (MILLIONS)</u>	<u>QUANTITY (THOUSANDS)</u>	<u>QUANTITY (MILLIONS)</u>
Cartridge, 5.56mm Ball	287375	42.0	253434	43.3
Cartridge, 5.56mm Blank	118375	13.3	54298	7.5
Cartridge, 5.56mm Blank for Squad Automatic Weapon	4133	1.1	7842	2.1
Cartridge, 5.56mm Linked for Squad Automatic Weapon	19568	7.0	26104	9.7
Cartridge, 5.56mm Plastic	4410	1.3	3200	0.7
Cartridge, 7.62mm Linked 4 Ball/ Tracer	78957	21.6	64440	19.9
Cartridge, 7.62mm Ball Linked	35993	9.9	39292	12.2
Cartridge, 7.62mm Match	6740	2.0	6532	2.2
Cartridge, 7.62mm NATO Blank	-	-	534	0.2
Cartridge, 7.62mm Special Match	-	-	810	0.3
Cartridge, Caliber .22 Ball	54081	1.0	34375	0.7
Cartridge, Caliber .22 Tracer	1279	0.1	6138	0.4
Cartridge, Caliber .22 Match	4429	0.4	11048	1.1
Cartridge, Caliber .38 Special Ball Wadcutter	2007	0.2	937	0.1
Cartridge, 9mm Ball	3900	0.8	4400	1.0
Cartridge, Caliber .45 Ball	6752	1.4	6130	1.4
Cartridge, Caliber .45 Match	4920	0.8	-	-
Cartridge, Caliber .50 4 Ball/ Tracer with/ML5 Link	11849	15.1	5948	9.1
Cartridge, Caliber .50 Linked 4 Ball/Tracer	-	-	9843	13.2

4-23 February 1984

<u>TRAINING ITEMS</u>	<u>FY 1985</u>		<u>FY 1986</u>	
	<u>QUANTITY (THOUSANDS)</u>	<u>DOLLARS (MILLIONS)</u>	<u>QUANTITY (THOUSANDS)</u>	<u>QUANTITY (MILLIONS)</u>
Cartridge, Caliber .50 Armor- Piercing-Incendiary-Tracer M20	569	1.0	826	1.6
Cartridge, Caliber .50. Plastic Tracer	3643	6.7	4080	7.6
Cartridge, Caliber .50 Ball Linked	2198	3.1	4242	5.2
Cartridge, Caliber .50 Blank	17453	13.9	2655	2.4
Cartridge, Caliber .50 Tracer	791	1.7	690	1.2
Cartridge, 14.5mm with/Fuze, 3 Sec Delay	149	0.4	178	0.5
Cartridge, 14.5mm with/Fuze, Point Detonating	245	0.6	186	0.5
Cartridge, 20mm 4 High-Explosive Incendiary/1 Target-Practice- Tracer	-	-	3909	6.8
Cartridge, 20mm 4 Target-Practice Tracer M55/1 Target-Practice- Tracer Vulcan	-	-	3426	12.1
Cartridge, 20mm Target-Practice Vulcan	-	-	4729	18.9
Cartridge, 25mm High-Explosive Incendiary-Tracer	3	0.1	3	0.1
Cartridge, 25mm Armor-Piercing Discarding-Sabot-Tracer	1493	55.5	1469	56.7
Cartridge, 25mm Dummy	-	-	87	1.7
Cartridge, 25mm Target Practice- Tracer	-	-	1190	26.7
Cartridge, 30mm High-Explosive- Dual-Purpose	13	0.4	26	0.8
Cartridge, 30mm Target Practice	570	7.7	602	8.3
Cartridge, Sub Caliber 22 Practice Change	661	6.3	714	7.5
Cartridge, 40mm, High-Explosive Dual-Purpose High Velocity	253	4.4	253	4.2

4-24 February 1984

TRAINING ITEMS	FY 1985		FY 1986	
	QUANTITY (THOUSANDS)	DOLLARS (MILLIONS)	QUANTITY (THOUSANDS)	QUANTITY (MILLIONS)
Cartridge, 40mm, Practice Low Velocity	3210	6.7	3025	6.8
Cartridge, 40mm, High-Explosive-Incendiary-Tracer for Division Air Defense System	13	1.6	13	1.5
Cartridge, 40mm, Target Practice with/Proximity Fuze	381	29.3	311	23.6
Cartridge, 40mm, High-Explosive with/Proximity Fuze	8	1.7	21	4.2
Cartridge, 40mm Target Practice for/MK19	-	-	899	8.9
Cartridge, 4.2-Inch Smoke	33	4.3	38	5.6
Cartridge, 4.2-Inch Illuminating	-	-	136	28.5
Projectile, 64mm Riot Control	22	0.7	22	0.8
Charge, Propelling, 155mm White Bag M119	1	0.1	1	0.1
Charge, Propelling, 155mm Green Bag M3	290	15.9	299	18.7
Charge, Propelling, 155mm White Bag M4	61	2.8	95	4.8
Fuze, Hand Grenade, Practice	2849	2.5	3104	3.0
Light Anti-Tank, Trainer	882	3.4	950	3.1
Light Anti-Tank, Tactical	4	4.7	4	4.0
Hydra 70 Rocket	8	5.9	26	17.9
Hydra 70 Rocket Illuminating	-	-	22	13.3
Grenade, Hand, Smoke	291	3.9	310	4.3
Grenade, Hand, Green Smoke	76	1.2	225	3.9
Grenade, Hand, Violet Smoke	34	0.5	117	1.9
Grenade, Hand, Yellow Smoke	-	-	125	2.1
Grenade, Hand, Yellow Smoke	-	-	39	0.7
Smoke Pot, Hydrochlorothare M5	62	9.5	72	12.2
Smoke Pot, Smoke Generating	14	2.6	14	2.6

4-25 February 1984

<u>TRAINING ITEMS</u>	<u>FY 1985</u>		<u>FY 1986</u>	
	<u>QUANTITY</u> <u>(THOUSANDS)</u>	<u>DOLLARS</u> <u>(MILLIONS)</u>	<u>QUANTITY</u> <u>(THOUSANDS)</u>	<u>QUANTITY</u> <u>(MILLIONS)</u>
Signal Illuminating, Ground, Red Star	58	1.4	87	2.4
Signal Illuminating, Ground, White Star	17	0.4	69	1.9
Signal Illuminating, Ground, Red Star	13	0.4	15	0.5
Signal, Illuminating, Ground, Green Star	-	-	22	0.5
Signal Illuminating, Ground, White Star	120	2.7	120	3.1
Parachute				
Signal Smoke, Green Parachute	8	0.2	10	0.3
M128				
Signal, Illuminating, Green Parachute	12	0.3	11	0.4
M195				
Flare, Surface Trip	-	-	85	1.7
Simulator, Projectile, Air Burst	65	1.0	74	1.3
Simulator, Projectile, Ground Burst	612	4.6	591	4.9
Simulator, Artillery, Gun Flash	48	0.8	33	0.6
Simulator, Hand Grenade	93	0.5	203	1.2
Simulator, Flash Main Tank Gun; Weapons	244	1.8	239	2.0
Effect Simulator System				
Simulator, Anti-Tank Guided Missile	890	4.6	753	4.8
Rocket M22				
Simulator, Booby Trap, Flare	-	-	38	0.1
Simulator, Booby Trap, Whistling	-	-	96	0.2
Simulator, Projectile, Air Burst, Liquid	30	0.8	18	0.5
Charge, Demolition, 1/4lb	369	0.7	369	0.8
Charge, Demolition, 1lb TNT	52	0.2	88	0.5
Charge, Demolition, Shaped 15lb	11	2.3	14	3.3
Cap Blasting M6 Special Electric	70	0.2	191	0.6
Cap Blasting, Special Non-Electric	-	-	142	0.1
Demolition Kit, Cratering	400	1.3	400	1.4
Firing Device, Multi-Purpose	99	0.7	191	1.5
Igniter, Fuse, Blasting	109	0.3	232	0.7
Parachute Reeding Line Cutter with	7	0.2	7	0.2
2 Second Delay				

4-26 February 1984



TRAINING ITEMS	FY 1985		FY 1986	
	QUANTITY (THOUSANDS)	DOLLARS (MILLIONS)	QUANTITY (THOUSANDS)	QUANTITY (MILLIONS)
Fuze, Mechanical, Time	18	1.2	20	1.4
Fuze, Mechanical, Time, Super Quick	20	1.4	21	1.6
Fuze, Blasting, Time	-	-	1922	0.2
Projectile, 155mm, Smoke	11	9.2	12	7.7
Cartridge, 105mm, Discarding Sabot-Target Practice	509	100.6	269	59.2
Cartridge, 105mm, Target Practice -Tracer	422	72.5	319	61.2
Cartridge, 105mm, Target-Practice Cone-Stabilized Discarding- Sabot-Tracer	80	48.0	107	69.2
Cartridge, 105mm, Blank M395	-	-	28	0.7
Cartridge, 120mm, High Explosive Anti-Tank, Multi-Purpose, Tracer	2	4.9	3	6.4
Cartridge, 120mm Target Practice -Tracer	21	30.5	27	36.3
Cartridge, 120mm Target Practice Cone-Stabilized-Discarding- Sabot-Tracer	54	52.7	35	35.5
Cartridge, 81mm Improved Illuminating	9	2.2	8	1.5
Cartridge, 81mm, Improved Smoke	4	3.3	19	4.5
Cartridge, 81mm, Improved 1/10 Range Training	-	-	37	2.3
Cartridge, 81mm, Improved Training	94	7.9	100	7.7
Cartridge, 81mm, Improved High- Explosive	90	16.5	88	16.5
Ground Emplaced Mine Scattering System Drill Mines	23	0.4	16	0.3
Practice, Modular- Packed-Mine System	-	-	600	1.5
Canister Mine, Practice	-	-	14	3.5
Line Charge, Inert M68	-	-	140	1.7
Rocket Motor, Mine- Clearing-Line-Change	-	-	605	2.4
Sabot, 81mm, Practice	4	0.7	-	-
Total		694.5		817.2

4-27 February 1984

Department of the Army Annual Budget Estimates JUSTIFICATION	Appropriation				FY 1985
Program or Budget Project Account	Procurement of Ammunition, Army				Budget
Activity 2 - Ammunition Production	(Thousands of Dollars)				
Base Support	Actual	Estimate	Estimate	Estimate	
Direct Obligation or Direct Budget Plan	FY 1983	FY 1984	FY 1985	FY 1986	
	\$389,494	\$164,800	\$302,200	\$325,500	

Section 1 - PURPOSE AND SCOPE

The FY 1985 program provides for the support of plants in active production, the establishment of initial-production facilities, modernization, and expansion of production capability for ammunition, and layaway of industrial plants and equipment.

Section 2 - JUSTIFICATION OF FUNDS REQUESTED

Provision of Industrial Facilities

(\$ Thousands)

FY 1985	FY 1986
282,200	302,600

Funds requested for Provision of Industrial Facilities in FY 1985 and FY 1986 provide industrial capabilities for manufacturing new or existing ammunition. The major efforts are divided among initial-production capability for new items entering the inventory, expansion of existing capacity to meet either peacetime or mobilization requirements, and finally modernization of existing facilities to adjust to new technology and changing ammunition requirements. The majority of funds requested are concentrated in modernization and expansion efforts. In FY 1985 and FY 1986, \$250.2 and \$267.4 million (including construction), respectively, are requested for modernization and expansion. In addition, \$32.0 million in FY 1985 and \$35.2 million in FY 1986 are requested for production support and equipment replacement at active facilities.

FY 1985 projects requested are for the following efforts:

\$64.4 million is for a classified program.

\$55.0 million is to modernize and expand the Research Department Explosive (RDX) and the High Melt Explosive (HMX) based explosive and propellant manufacturing capabilities. RDX and HMX based projects offer significant improvements in safety. Current production is limited to a single producer and is substantially below mobilization needs. Expansion and modernization of the base will provide greater availability of explosives and propellants to meet mobilization requirements. In addition modern explosives and propellants will increase munitions effectiveness and lethality. \$44.0 million is requested to modernize and to improve the existing sole RDX and HMX facility, Holston Army Ammunition Plant at Kingsport, Tennessee. Improvements to be undertaken at Holston in FY 1985 include modernization of explosive Composition C4 production, conversion of RDX production capacity to HMX to meet peacetime procurement demands, productivity enhancement efforts, and modernization of coal-handling capabilities. \$11.0 million is requested for initial-design efforts for a new HMX facility pursuing the new HMX chemistry or MISALL process technology. The site selection recommendation for the new HMX facility will be forwarded in the RDX and HMX master plan.

\$42.0 million is for projects in support of the first increment of the chemical munitions production program, which is required in order to reestablish a credible chemical-weapon retaliatory capability. The FY 1985 budget request is needed to prepare for production but does not provide all production facilities needed to manufacture chemical munitions.

\$10.0 million is to expand facilities to support full-scale load, assemble and pack (LAP) of the combined effects munitions at Kansas Army Ammunition Plant. \$17.2 million is to expand production capacity of the Tactical Munitions Dispenser (TMD) facility at a commercial source which is to be determined. Both projects are required to meet Air Force requirements in FY 1986.

\$3.7 million is for 5.56mm small arms ammunition projects at Lake City Army Ammunition Plant, Independence, Missouri. Both projects modify existing automated Small Caliber Ammunition Modernization Program (SCAMP) lines. One allows the 5.56mm Squad Automatic Weapon System (SAWS) tracer charging equipment to produce M196 and M856 tracer ammunition. The second project modifies a SCAMP line to load, assemble and pack 5.56mm blank ammunition. The projects provide efficient automated methods of production.

\$8.0 million is for two projects in support of 81mm mortar ammunition. One project is to establish an initial-production facility for 81mm XM819 red phosphorous mortar ammunition at Pine Bluff Arsenal, Arkansas. Currently there is no existing production facility to produce the round. Without this project the FY 1985 buy cannot be loaded, assembled and packed. The other project provides for the automated manufacture of 81mm, M205 mortar increment containers at a contractor, which is to be determined. This project will reduce the cost of the charge and provide an additional source needed to meet Five Year Defense Program buys.

\$5.9 million is for the Family of Scatterable Mine (FASCAM) projects to meet Five Year Defense Program buys. One project provides additional load, assemble, and pack capability and associated presses at Iowa Army Ammunition Plant (AAP) in Middletown, Iowa. This project is necessary to meet Air Force and Navy Gator procurements. A second project provides equipment and tooling to a commercial source, which is to be determined and will supplement the metal parts production of Gator mines. Existing metal parts production of 45,000 per month is insufficient to meet projected procurement needs.

Two projects totalling \$3.1 million are in support of 155mm and 8-inch propelling charges at Indiana Army Ammunition Plant. These projects provide for can cradles for storage and movement of propelling charge containers by mechanical means and facilities to qualify trial-bond propelling charges. These projects will improve safety by eliminating personnel exposure to unsafe conditions and improve the quality of containers.

\$3.0 million is requested for an interim Nitramine Gun Propellant facility to be located at Indian Head, Maryland. This project is essential to fielding the Air Force GAU-8, Army 105mm tank ammunition, and Navy 76mm ammunition with this propellant beginning in FY 1986. Without this interim production base, the propellant could not be fielded until the full-scale facility is established in the early 1990's.

\$2.5 million is required to establish and to upgrade facilities in support of the Navy battleship program and associated 16-inch projectile procurement. This program is to be located at Crane Army Ammunition Plant, Crane, Indiana, and is required to meet the Navy buys in FY 1986.

\$2.2 million is for modern, high-speed, automatic-assembly equipment for the fuze, M223. Equipment will be at a commercial facility, which is to be determined. This project will expand assembly capacity to meet high-volume requirements and meet Five Year Defense program requirements. This modern equipment will improve the productivity and will reduce production costs.

\$2.0 million is for a water-distribution system at Scranton AAP, Scranton, Pennsylvania, that will assure continuous-operating capability by replacing the present, deteriorated system, which was installed in 1910 and modified in 1953.

\$1.9 million is to provide machines used to produce components and assemblies used in the XM763 and XM764 electronic time fuze at Bulova Corporation, Valley Stream, New York. This project will provide for increased capacity and decreased cost. In addition, it will improve the productivity and quality of the machining and assembly operations.

\$1.8 million is to modify Jefferson Proving Ground test capability, located at Madison, Indiana. The project will reduce leadtime for production testing and provide more accurate and complete test data.

\$1.6 million is for a new chemical laboratory at Louisiana Army Ammunition Plant (AAP), which is required to replace an unsafe and inadequate facility. The current facility was constructed in 1941 and does not provide an acceptable area to safely handle explosive materials.

The final projects, which make up the FY 1985 modernization and expansion program, include \$1.8 million for projects under \$900,000 and \$24.1 million in design effort for future (outyear) projects.

Also included in the FY 1985 request are funds for production support and equipment replacement at plants in current production in the amount of \$32.0 million. It is expected that the sixteen active ammunition facilities will require production support and equipment replacement funds in FY 1985. These funds are essential to facilitate the timely replacement of obsolete or worn-out equipment to ensure that current and projected production schedules can be achieved. In addition energy conservation measures and improved Occupational Safety and Health (OSHA) compliance will result.

A detailed breakout of the projects with associated construction costs begin on page 4-34. Included in this year's ammunition procurement request is \$30.1 million for construction that requires authorization in the FY 1985 Military Construction Authorization Bill.

FY 1986 projects are as follows:

\$78.5 million is included for the second increment of the chemical munitions initial-production facilities and provides for a competitive second source for Bigeye metal parts.

\$37.4 million is included for the continuation of the RDX and HMX modernization effort.

\$23.5 million is for the establishment of initial-production facilities in support of the 105mm High Explosive Anti-Tank (HEAT) XM815 cartridge. The metal parts (MPTS) facility will be at a commercial facility which is to be established, and the load, assemble and pack (LAP) will be at Milan Army Ammunition Plant, Milan, Tennessee. Both projects are required to support initial procurement of the XM815 round in FY 1987.

\$27.4 million is for establishment of 105mm XM901 Kinetic-Energy (KE) training projectile metal parts facility to meet planned procurement in FY 1987. The FY 1985 and 1986 buys will be offshore. This project will establish a competitive United States production base at Flinchbaugh, Red Lion, Pennsylvania and Chamberlain, New Bedford, Massachusetts.

\$19.8 million is to establish initial-production facilities at a commercial plant, which is to be selected, for the 105mm XM900 cartridge. These facilities are required to produce the Five Year Defense Program buys.

\$16.9 million is required to expand existing combined effects munitions BLU-97B metal parts base at a commercial facility, which is to be determined. This project is required to assure sufficient capacity exists to meet Air Force procurements.

\$7.2 million is for two 5.56mm projects at Lake City Army Ammunition Plant, Independence, Missouri. One project is for conversion of two Small Caliber Ammunition Modernization Program (SCAMP) lines to produce 5.56mm Squad Automatic Weapon System (SAWS) ball ammunition. The other project provides packaging capability utilizing the M8 bandoleer required to meet Five Year Defense Program buys.

\$7.1 million is to establish initial-production facility for Plastic Bonded Explosive (PBX) production at a facility to be determined. This project supports Navy requirements.

\$6.2 million is to establish 155mm XM203E2 combustible cartridge case facility at a commercial facility, which is to be determined, to meet Five Year Defense Program buys.

\$5.7 million is to establish the initial-production facility at Volunteer Army Ammunition Plant, Tennessee. It will produce ethylenediamine dinitrate/ammonium nitrate (EAK) explosive for use in Air Force bombs. This requirement is based on the Air Force development of an insensitive explosive for use in the Air Force MK80 series bombs. Upon facility acceptance, the Air Force plans to procure bombs loaded with this explosive.

\$5.3 million is for upgrade of obsolete and inadequate equipment for ammunition testing at Jefferson Proving Ground, Madison, Indiana. If this equipment is not replaced, it will result in shortcomings and deficiencies in testing methods.

\$3.6 million is to provide an initial-production facility at Honeywell, Joliet, Illinois, for the 25mm XM881 Armor Piercing Fin Stabilized Discarding Sabot-Tracer (APFSDS-T) Bushmaster cartridge. There is currently no production capability for this round.

\$1.2 million is to establish a facility to produce XM139 Volcano mine to meet Five Year Defense Program buys. The location for this facility has not been determined.

\$27.6 million is for engineering design effort for future (outyear) projects.

Also included in the FY 1986 request are funds for the necessary production support and equipment replacement for plants in active production in the amount of \$35.2 million.

It is estimated that approximately \$27.0 million of associated construction effort will require authorization in the FY 1986 Military Construction Authorization Bill.

Layaway of Industrial Facilities

(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
<u>20,000</u>	<u>22,900</u>

The \$20.0 million requested for layaway in FY 1985 is for the protection and preservation of equipment and facilities no longer required for active production, which must be retained for future peacetime or mobilization production. In FY 1986 funds in the amount of \$22.9 million are included for a similar purpose.

Department of the Army  
Annual Budget Estimate

FY 1985

JUSTIFICATION

Budget

Appropriation Budget Program or Budget Project Account  
Procurement of Ammunition, Army Activity 2 - Production Base Support

The authorization of associated construction effort required to support the ammunition production-base projects in the FY 1985 program is valued at \$30.1 million. The military construction effort is authorized in the Military Construction Authorization Bill, and authorized and appropriated in the Procurement of Ammunition, Army appropriation. The Congress authorized construction in the amount of \$25.1 million in FY 1983 and \$10.2 million in FY 1984 for this program. The Military Construction Project Data (DD Form 1391), which provide detailed project information, is published under separate cover. A listing of FY 1985 construction projects is as follows:

Army Ammunition Plants (AAP)	Project No.	Project Title	PIF* Construction Cost Estimate Estimate (Millions)		PIF Equipment Cost (Millions)	Total Project Cost (Millions)
			PS&ER**	MOD/EXP***		
Holston AAP	5855328-15	Access Platform for Precipitators	.2		-	.2
	5852199	Coal Handling Improvements		7.0	2.0	9.0
	5852447	Modify RDX and HMX Lines		7.8	12.2	20.0
	5852439	Productivity Improvements		.9	2.1	3.0
	5852054	Modify Composition C-4 Facility		3.9	8.1	12.0
Indiana AAP	5852159	Propelling Charge Building		1.9	.3	2.2
Iowa AAP	5855333-13	Blow-out Roofs	.7		-	.7
	5855333-16	Environment Control System	1.1		-	1.1
Louisiana AAP	5852507	Chemical Laboratory		1.6		1.6
Radford AAP	5852229	120mm Propellant Blend		.5	.1	.6
	5855326-13	Replace Barricades	2.2		-	2.2
	5855326-21	Replace Barricades Building 1878	.3		-	.3
Scranton AAP	5852359	Water-Distribution System		2.0		2.0
TOTAL			4.5	25.6	24.8	54.9
CONSTRUCTION GRAND TOTAL			\$30.1 Million			

- \* Provision of Industrial Facilities
- \*\* Production Support & Equipment Replacement
- \*\*\* Modernization/Expansion



Department of the Army

FY 1985

Annual Budget Estimate  
JUSTIFICATION

Appropriation	Budget Program or Budget Project Account			
<u>Procurement of Ammunition, Army</u>	<u>Activity 2 - Production Base Support</u>			
	FY 83 (Millions)	FY 84 (Millions)	FY 85 (Millions)	FY 86 (Millions)
<u>Provision of Industrial Facilities (PIF)</u>	372.3	146.1	282.2	302.6
Production Support and Equipment				
Replacement (PS&ER)	(32.0)	(29.3)	(32.0)	(35.2)
Productivity Investments		(.1)		
Initial Production Facilities (IPF)	(139.3)	(34.3)	(48.1)	(169.8)
Modernization (MOD)	(84.4)	(12.7)	(61.9)	(31.9)
Expansion (EXP)	(116.6)	(69.7)	(140.2)	(65.7)
<u>Layaway of Industrial Facilities</u>	17.2	17.0	20.0	22.9
<u>Manufacturing Technology Program</u>	-0-	1.7	-0-	-0-
<b>TOTAL PRODUCTION BASE SUPPORT AMMUNITION</b>	<u>389.5</u>	<u>164.8</u>	<u>302.2</u>	<u>325.5</u>

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PROCUREMENT OF AMMUNITION, ARMY

Section 3

Comparison of Program Requirements and Financing

Comparison of FY 1984 program requirements as reflected in FY 1984 budget with FY 1984 program requirements as shown in FY 1985 budget.

Comparison of FY 1984 financing as reflected in FY 1984 budget with FY 1984 financing as shown in FY 1984 budget.

Comparison of FY 1983 program requirements as reflected in FY 1984 budget with FY 1983 program requirements as shown in FY 1985 budget.

Comparison of FY 1983 financing as reflected in FY 1984 budget with FY 1983 financing as shown in FY 1985 budget.

COMPARISON OF FY 1984 PROGRAM REQUIREMENTS  
AS REFLECTED IN FY 1984 BUDGET WITH  
FY 1984 PROGRAM REQUIREMENTS AS SHOWN IN FY 1985 BUDGET

<u>SUMMARY OF REQUIREMENTS (In Thousands of Dollars)</u>			
<u>Appropriation:</u>	<u>Program Requirements In FY 1984 Budget</u>	<u>Program Requirements In FY 1985 Budget</u>	<u>Increase (+) or Decrease (-)</u>
<u>Procurement of Ammunition, Army</u>			
Activity 1 - Ammunition	2,022,850	1,775,100	-247,750
Activity 2 - Ammunition Production Base Support	<u>288,339</u>	<u>164,800</u>	<u>-123,539</u>
	2,311,189	1,939,900	-371,289

EXPLANATION BY ACTIVITY

Activity 1 - Ammunition. The \$247,750 thousand decrease is the net result of Congressional action on the FY 1984 Appropriation (-192,850 thousand); proposed FY 1984 transfer to other accounts (-40,200 thousand); and a proposed reprogramming (-14,700 thousand) to Activity 2 for RDX and HMX production facilities.

Activity 2 - Ammunition Production Base Support. The \$123,539 thousand decrease is the net result of Congressional action in the FY 1984 Appropriation (-138,239 thousand); and a proposed reprogramming (+14,700 thousand) from Activity 1 for RDX and HMX production facilities.

COMPARISON OF FY 1984 FINANCING AS REFLECTED  
IN THE FY 1984 BUDGET WITH FY 1984 FINANCING  
AS SHOWN IN FY 1985 BUDGET

Appropriation:	(In Thousands of Dollars)		
	Financing In FY 1984 Budget	Financing In FY 1985 Budget	Increase (+) or Decrease (-)
Procurement of Ammunition, Army			
Program Requirements, (Total)	2,482,289	2,236,500	-245,789
Program Requirements (Service Account)	(2,311,189)	(1,939,900)	(-371,289)
Program Requirements (Reimbursable)	( 171,100)	( 296,600)	(+125,500)
Less:			
Anticipated Reimbursements	171,100	296,600	+125,500
Reprogramming from prior year budget plans	-0-	-0-	-0-
Unobligated balance available from prior year to finance new budget plans	-0-	-0-	-0-
Unobligated balance transferred from other accounts	-0-	-0-	-0-
Add: Unobligated balance transferred to other accounts	-0-	-0-	-0-
Unobligated balance available to finance subsequent year budget plans	-0-	-0-	-0-
<b>BUDGET AUTHORITY</b>	<b>2,311,189</b>	<b>1,939,900</b>	<b>-371,289</b>
<b>BUDGET AUTHORITY</b>			
Appropriation	2,311,189	1,980,100	-331,089
Transferred to other accounts		-40,200	-40,200
Appropriation (Adjusted)	2,311,189	1,939,900	-371,289

EXPLANATION OF CHANGES IN FINANCING

The total program for fiscal year 1984 has decreased by \$245,789 thousand since the FY 1984 budget request was presented to the Congress. This decrease is attributed to the following:

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Anticipated reimbursements: Estimates of sales of ammunition to customers, including foreign countries, are increased by \$125,500 thousand to reflect current program execution plans.

Budget Authority: The decrease of \$371,089 is the result of congressional action in the FY 1984 Appropriation reprogramming, and proposed transfers to other accounts previously described in the FY 1984 program comparison. The adjusted appropriation figure also reflects these changes.

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COMPARISON OF FY 1983 PROGRAM REQUIREMENTS  
AS REFLECTED IN FY 1984 BUDGET WITH  
FY 1983 PROGRAM REQUIREMENTS AS SHOWN IN FY 1985 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)			
Appropriation:	Total Program Requirements In FY 1984 Budget	Program Requirements In FY 1985 Budget	Increase (+) or Decrease (-)
Procurement of Ammunition, Army			
Activity 1 - Ammunition	1,717,500	1,734,033	+ 16,533
Activity 2 - Ammunition Production	404,494	389,494	- 15,000
Base Support	2,121,994	2,123,527	+ 1,533

Explanation by Activity

Activity 1 - Ammunition. The \$16,533 thousand increase is the net result of anticipated reprogramming from Activity 1 to Activity 2 (+21,000 thousand); reprogramming accomplished between Activity 1 and Activity 2 (-6,000 thousand); and conversion of free assets (+1,533 thousand).

Activity 2 - Ammunition Production Base Support. The \$15,000 thousand decrease is the net result of inter-activity reprogramming described above.

COMPARISON OF FY 1983 FINANCING AS REFLECTED  
IN THE FY 1984 BUDGET WITH FY 1983 FINANCING  
AS SHOWN IN FY 1985 BUDGET

(In Thousands of Dollars)

Appropriation:	Financing In FY 1984 Budget	Financing In FY 1985 Budget	Increase (+) or Decrease (-)
Procurement of Ammunition, Army			
Program Requirements, (Total)	2,241,494	2,345,714	+104,220
Program Requirements (Service Account)	(2,121,994)	(2,123,527)	( +1,533)
Program Requirements (Reimbursable)	( 119,500)	( 222,187)	(+102,687)
Less:			
Anticipated Reimbursements	125,100	230,320	(+105,220)
Reprogramming from prior year budget plans	-0-	-0-	-0-
Unobligated balance available from prior year to finance new budget plans	-0-	-0-	-0-
Unobligated balance transferred from other accounts	-0-	-0-	-0-
Add: Unobligated balance transferred to other accounts	-0-	-0-	-0-
Unobligated balance available to finance subsequent year budget plans	-0-	-0-	-0-
<b>BUDGET AUTHORITY</b>	<b>2,116,394</b>	<b>2,115,394</b>	<b>+1,000</b>
<b>BUDGET AUTHORITY</b>			
Appropriation	2,122,394	2,122,394	-0-
Reduction (See 790, P.L. 97-377)	-7,000	-7,000	-0-
Transferred from other accounts	1,000	-0-	+1,000
Appropriation (Adjusted)	2,116,394	2,115,394	-1,000

EXPLANATION OF CHANGES IN FINANCING

The total fiscal year 1983 program has increased by \$104,220 thousand since the FY 1984 budget request was presented to the Congress. This increase is due to the following:

Anticipated Reimbursements: The \$105,220 thousand increase reflects actual sales of ammunition to foreign countries and other customers. The anticipated reimbursements include \$8,133 thousand that was generated by non-FMS sales of items from stock, which do not require replacement, and is available to finance direct Army programs.

Budget Authority: The decrease of \$1,000 is the result of a reversal of a previous decision to transfer this amount to another account.

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PROCUREMENT OF AMMUNITION, ARMY

Section 4

Selected Data Sheets

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PROCUREMENT OF AMMUNITION, ARMY  
PRODUCTION BASE SUPPORT  
(\$ in Millions)

Service: Army

P-1 Line Item: Provision of Industrial Facilities

Projects:

	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>
<u>Annual Support</u>				
5855060 - Jefferson Proving Ground: Support (Spt) Production Support and Equipment Replacement (PS&ER)	1.5	1.0	.5	1.5
5855314 - Louisiana Army Ammunition Plant (AAP): - Spt - PS&ER	1.1	1.2	1.1	2.1
5855316 - Lone Star AAP: Spt - PS&ER	1.8	2.7	2.9	2.8
5855317 - Milan AAP: Spt - PS&ER	1.4	2.4	1.4	2.1
5855326 - Radford AAP: Spt - PS&ER	5.2	5.4	5.6	4.6
5855327 - Longhorn AAP: Spt - PS&ER	3.7	2.1	2.3	2.1
5855328 - Holston AAP: Spt - PS&ER	1.5	2.9	2.6	2.6
5855329 - Kansas AAP: Spt - PS&ER	2.4	2.6	1.9	2.1
5855330 - Indiana AAP: Spt - PS&ER	3.3	.0	3.2	3.6
5855332 - Lake City AAP: Spt - PS&ER	3.0	2.3	2.3	3.1
5855333 - Iowa AAP: Spt - PS&ER	2.3	3.0	2.9	3.1
5855342 - Scranton AAP: Spt - PS&ER	3.7	2.5	2.5	2.1
5855662 - All Plants: Omnibus Project for Purchase of Self-Amortizing Equipment	1.0	1.0	1.0	1.0
5855711 - Environmental Restoration			.5	1.0
Projects under \$900,000 each	<u>.1</u>	<u>.2</u>	<u>1.3</u>	<u>1.4</u>
Subtotal Production Support & Equipment Replacement	32.0	29.3	32.0	35.2

PROCUREMENT OF AMMUNITION, ARMY  
PRODUCTION BASE SUPPORT  
(\$ in Millions)

	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>
<u>Productivity Investments</u>				
Projects under \$900,000 each		.1		
Subtotal Productivity Investments		.1		
<u>Projects</u>				
<u>Initial Production Facilities (IPF)</u>				
5830020 - Commercial: IPF - Family of Scatterable Mines (FASCAM) Metal Parts	6.8			
5830025 - Commercial: IPF - 105/120mm XM833/XM829 Kinetic Energy Penetrators	15.3			
5830026 - Iowa AAP: IPF - 120mm Projectile Load, Assemble & Pack (LAP)	11.9			
5830027 - Commercial: IPF - 120mm Combustible Cartridge Case	5.0			
5830037 - Pine Bluff Arsenal: IPF - L8A1 Red Phosphorous Grenade LAP	2.4			
5830039 - Commercial: IPF - 105/120mm High Explosive Anti-Tank Projectile Metal Parts	21.4			
5830061 - Commercial: IPF - 120mm Stub Base	16.8			
5830094 - Commercial: IPF - FMU-139/B Electronic Bomb Fuze	10.4			
5830117 - Commercial: IPF - Musall Facility (RDX and HMX)	3.0	21.0		
5832200 - Radford AAP: IPF - 2.75-Inch MK66 Rocket Grains	1.8			
5832206 - Commercial: IPF - 105/120mm Kinetic-Energy Metal Parts	40.1			
5834871 - Iowa AAP: IPF - Family of Scatterable Mines (FASCAM) Load, Assemble & Pack (LAP) (Gator)	3.8			
5850051 - Commercial: IPF - Combined Effects Munitions Metal Parts		13.3		

PROCUREMENT OF AMMUNITION, ARMY  
PRODUCTION BASE SUPPORT  
(\$ in Millions)

Projects

Initial Production Facilities (IPF), Continued

	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>
5850063 - Pine Bluff Arsenal: IPF - Bigeye Bomb Load, Assemble and Pack (LAP)			11.8	17.1
5850064 - Pine Bluff Arsenal: IPF - XM819 Red Phosphorous Mortar Load, Assemble & Pack (LAP)			3.1	
5850070 - Commercial: IPF - Nitramine Gun Propellant			3.0	
5850074 - Commercial: IPF - Bigeye Bomb Metal Parts			16.7	
5850079 - X-Facility: IPF - O-(2-dissopropylaminoethyl) O'-ethylmethylphosphonite (QL) Production Facility for Bigeye Bomb			13.5	31.0
5860081 - X-Facility: IPF - Plastic Bonded Explosive (PBX)				7.1
5860085 - Commercial: IPF - 105mm HEAT XM815 - Metal Parts (MPTS)				18.6
5860099 - Milan AAP: IPF - 105mm HEAT XM815 - LAP				4.9
5860103 - Commercial: IPF - Binary - Methylphosphonic dichloride (DC)				20.0
5860107 - Commercial: IPF - 25mm XM881 Armor Piercing Fin Stabilized Discarding Sabot-Tracer (APFSDS-T) Bushmaster				3.6
5860108 - Volunteer AAP - Intermolecular - Ethylenediamine dinitrate/ammonium nitrate (EAK)				5.7
5860122 - X-Facility: IPF - Mine XM139 Volcano				1.2
5860127 - Commercial: IPF - 105mm XM900 MPTS				9.9
5860128 - Commercial: IPF - 105mm XM900 Core				9.9
5862195 - Lake City AAP: IPF - 5.56mm Bandoleer M8 Pack Equipment				3.4
5862207 - Commercial: IPF - 105mm XM901 Kinetic-Energy Training Projectiles MPTS				27.4
5862208 - Lake City AAP: IPF - 5.56mm Squad Automatic Weapon System (SAWS) Ball Lines 4, 5 Conversion				3.8
5863259 - Commercial: IPF - 155mm XM203E2 Combustible Cartridge Case				6.2
Projects under \$900,000 each	.6			
<b>Subtotal, Initial Production Facilities (IPF)</b>	<b>139.3</b>	<b>34.3</b>	<b>48.1</b>	<b>169.8</b>

PROCUREMENT OF AMMUNITION, ARMY  
PRODUCTION BASE SUPPORT  
(\$ in Millions)

Projects

Modernization (MOD)

	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>
5832066 - Indiana AAP: MOD - Power Tie Line	2.6			
5832109 - Milan AAP: MOD - Rehabilitation of K-10 Boiler Facility	3.7			
5832127 - Volunteer Army Ammunition Plant (AAP): MOD - Modifications to Continuous TNT Area	4.7			
5832201 - Lake City AAP: MOD - Small Caliber Ammunition Modernization Program (SCAMP) Line 3 Completion	4.4			
5832202 - Lake City AAP: MOD - SCAMP Lines 4, 5 Completion	13.2			
5832250 - Multiple Sites: MOD - Pyrotechnic Temperature and Humidity Controls	4.1			
5832260 - Multiple Sites: MOD - Pyrotechnic Safety Enhancement	1.4			
5832290 - Radford AAP: MOD - Propellant Continuous Nitroglycerin (NG) Area 2 Restoration	0			
5832369 - Radford AAP: MOD - Correct Continuous Automated Multi-Base Line (CAMBL) Thermal Delay	3.0			
5832380 - Sunflower AAP: MOD - Restore 300 Ton Per Day Ammonia Oxidation Plant	4.2			
5833107 - Louisiana AAP: MOD - Container Distribution Facility	2.5			
5833176 - Commercial: MOD - Fuze Production Equipment	3.4			
5833178 - Commercial: MOD - Fuze Production Equipment Modernization	1.9			
5833190 - Commercial: MOD - Improved Metal Parts Productivity	12.5			
5833215 - Commercial: MOD - 8-inch M509 Threaded Base	8.8			
5833605 - Kansas AAP: MOD - Consolidated Plant Operations Center	7.4			
5843906 - Holston AAP: MOD - Nitric Acid Support for Explosives Production (RDX and HMX)	2.9	1.7		
5850086 - Lake City AAP: MOD - 5.56mm Tracer Charging Equipment			2.3	

PROCUREMENT OF AMMUNITION, ARMY  
PRODUCTION BASE SUPPORT

(\$ in Millions)

Projects

Modernization (MOD), Continued

	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>
5852054 - Holston AAP: MOD - Improve Composition C-4 Line (RDX and HMX)			12.0	
5852159 - Indiana AAP: MOD - Propelling Charge Qualification Building (155mm/8-Inch Propelling Charges)			2.2	
5852199 - Holston AAP: MOD - Coal Handling Equipment (RDX and HMX)			9.0	
5852232 - Lake City AAP: MOD - 5.56mm Blank Squad Automatic Weapon System (SAWS) Conversion			1.4	
5852359 - Scranton AAP: MOD - Water-Distribution Replacement System			2.0	
5852371 - 155mm/8-Inch Propelling Charge			.9	
5852507 - Louisiana AAP: MOD - Support Chemical Laboratory			1.6	
5853230 - X - Facility: MOD - 16-inch Projectile Metal Parts/Load, Assemble and Pack (LAP)			2.5	
5853233 - Commercial: MOD - XM763/XM764 Fuze Production Equipment			1.9	
5855160 - Jefferson Proving Ground: MOD - Jefferson Test Capability			1.8	
5862055 - Holston AAP: MOD Explosive Loading Dock (RDX and HMX)				3.3
5862439 - Holston AAP: MOD - Productivity Improvements (RDX and HMX)		3.0	3.0	2.1
5862447 - Holston AAP: MOD Conversion RDX to HMX		8.0	20.0	1.0
5863000 - Holston AAP: MOD - Modernize Composition A Lines (RDX and HMX)				20.2
5865160 - Jefferson Proving Ground: MOD - Test Capability Modernization				5.3
Projects under \$900,000 each	<u>3.7</u>		<u>1.3</u>	
Subtotal Modernization	84.4	12.7	61.9	31.9

PROCUREMENT OF AMMUNITION, ARMY  
PRODUCTION BASE SUPPORT  
(\$ in Millions)

Projects

Expansion (EXP)

	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>
5832229 - Radford AAP: EXP - 120mm Propellant	1.1			
5832388 - Iowa AAP - Exp - Family of Scatterable Mines (FASCAM) Gator	1.0			
5832632 - Sunflower AAP: EXP - Nitroguanidine Support	9.3			
5833142 - Mississippi Army Ammunition Plant (AAP): EXP - Sixth Phase of Construction of 155mm Complex	17.6			
5833225 - Commercial: EXP - Cartridge 30mm Production Equipment	2.8			
5835709 - Title 3, Defense Production Guarantee	3.0			
5840084 - Radford AAP: EXP - 155mm Stick Propellant		2.9		
5842041 - Lone Star AAP: EXP - Family of Scatterable Mines (Gator/Modular Pack Mine System) Load, Assemble and Pack (LAP)		10.9		
5842632 - Sunflower AAP: EXP - Nitroguanidine Prove-Out		8.0		
5842855 - X - Facility: EXP - 25mm GAU - 12/U Ammunition		10.9		
XXXXXXX - X - Facility: EXP - Classified Program	43.9	7.1	64.4	
5850050 - Commercial: EXP - Tactical Munitions Dispenser Metal Parts			17.2	
5852386 - Kansas AAP: EXP - Combined Effects Munitions Load Assemble & Pack			10.0	
5852391 - Iowa AAP: EXP - Mine - FASCAM - Gator - Load, Assemble and Pack (LAP)			4.0	
5853195 - Commercial: EXP - Mortar - 81mm Increment Container			4.9	
5853199 - Commercial: EXP - FASCAM - Remote Anti-Armor Mine Metal Parts			1.9	
5853551 - Commercial: EXP - Fuze M223 Hi-Speed Automatic Assembly			2.2	
5860074 - Commercial: EXP - Bigeye Bomb Metal Parts (Second Source)				10.4
5862430 - X - Facility: EXP - Musall HMX Design (RDX and HMX)			11.0	10.8
5863257 - Commercial: EXP - Bomb - CEM/BLU 97B Metal Parts				16.9
58X3046 - Omnibus Engineering Design	35.5	29.9	24.1	27.6

PROCUREMENT OF AMMUNITION, ARMY  
PRODUCTION BASE SUPPORT  
(\$ in Millions)

Projects

Expansion (EXP), Continued

	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>
Projects Under \$900,000 Each	2.4	-	.5	-
Subtotal Expansion	<u>116.6</u>	<u>69.7</u>	<u>140.2</u>	<u>65.7</u>
Subtotal Provision of Industrial Facilities	372.3	146.1	282.2	302.6

P-1 Line Item: Layaway of Industrial Facilities

Projects

5858450 - Armament Munitions and Chemical Command (AMCCOM) Layaway and/or Redistribution of Government- Owned Equipment in Government-Owned Plants	11.5	12.0	15.9	18.2
5859589 - Armament Munitions and Chemical Command (AMCCOM) Layaway and/or Redistribution of Govern- ment-Owned Equipment	5.7	5.0	3.5	4.0
5855260 - Jefferson Proving Ground: Layaway Test Facility			.6	.7
Subtotal Layaway of Industrial Facilities	<u>17.2</u>	<u>17.0</u>	<u>20.0</u>	<u>22.9</u>

Manufacturing Technology

5844563 - Manufacturing Methods and Technology: Process Improvement for Depleted Uranium Penetrators		1.7		
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PROCUREMENT OF AMMUNITION, ARMY  
PRODUCTION BASE SUPPORT  
(\$ in Millions)

	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>
Projects Under \$900,000	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>
Subtotal Manufacturing Technology	-0-	1.7	-0-	-0-
Total Ammunition Production Base Support	<u>389.5</u>	<u>164.8</u>	<u>302.2</u>	<u>325.5</u>

END

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