Ext	nibit P-40	0, Budg	get Item	Justif	ication	Sheet	Da	ate:	F	ebruary 200	5	
Appropriation/Budget A Procurement of Ammunition						P-1 Item Nor Ctg,		nm Tactical, A	l Types (E78	012)		
Program Elements for (Code B Items:			Code:	Other Rela	ted Program	Elements:					
	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Prog
Proc Qty												
Gross Cost	2054.7	40.8	42.1	49.7	52.7	47.7	46.9	47.0				2381.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	2054.7	40.8	42.1	49.7	52.7	47.7	46.9	47.0				2381.5
Initial Spares												
Total Proc Cost	2054.7	40.8	42.1	49.7	52.7	47.7	46.9	47.0				2381.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description: This budget line item includes Cartridge, Tank, 120mm Tactical, All Types.

Exhibit P-5, Weapon AMMO Cost Analysis		Appropriation/B		rity/Serial No. , Army / 1 / Ammun	ition	P-1 Line I Ctg, Tank,	tem Nomenclature 120mm Tactical, All	e: Types (E78012)		Weapon System	Гуре:	Date: Februa	ary 2005
АММО	ID		FY 04			FY 05			FY 06			FY 07	
Cost Elements	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	x1000	\$	\$000	x1000	\$	\$000	x1000	\$	\$000	x1000	\$
Ctg, 120mm APFSDS M829E3 Cartridge, 120mm Canister, XM1028		36249 5844	8 2	4531 2338	42335 7317	8 5	5501 1434	44399 8325	8 6				5512
Total		42093			49652			52724			47658		

Exi	hibit P-40	0, Budç	get Item	Justif	ication	Sheet	[)ate:	F	ebruary 200	5	
Appropriation/Budget A Procurement of Ammunition						P-1 Item Nor Car		nm, Canister, I	M1028 (E780	11)		
Program Elements for (Code B Items:			Code: A	Other Rela	ted Program	Elements:					
	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Prog
Proc Qty			2	5	6							13
Gross Cost			5.8	7.3	8.3	0.9						22.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)			5.8	7.3	8.3	0.9						22.3
Initial Spares												
Total Proc Cost			5.8	7.3	8.3	0.9						22.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The M1028 Canister is a muzzle action anti-personnel tank cartridge. This cartridge is fired from the 120mm main gun of the M1A1/M1A2 Abrams tank and is effective at ranges less than 700 meters. The baseline design utilizes a payload of approximately 1100 tungsten balls that are expelled from the projectile casing upon muzzle exit, similar to a shotgun shell. Unlike previous anti-personnel cartridges, the M1028 does not have a fuze; it is intended to be a low-cost, low-technology cartridge. The M1028 uses a combustible cartridge case and propulsion-ignition system common to the current 120mm tank ammunition. This item is Code A, approved for service use.

Justification:

This is a war reserve item used in combat. FY 2006 procurement builds a war reserve inventory in accordance with the Army's procurement goals. FY 2007 supports the prior year production quantities. Procurement of the M1028 supports the Abrams Main Battle tank as the Army's premier lethal battlefield direct-fire assault vehicle. This cartridge meets an urgent requirement from the Commander-in-Chief, United States Forces Korea (USFK), to effectively provide rapid, lethal fire against massed assaulting infantry armed with hand-held anti-tank and automatic weapons at close range (500 meters or less). This cartridge will significantly increase the Abram's lethality and enhance the tank crew's survivability, especially in close-compartmented terrain, and provide necessary support to friendly assaulting infantry.

TYPE CLASSIFICATION: December 2004

Exhibit P-5, Weapon AMMO Cost Analysis		Appropriation/B Procurement of		ity/Serial No. , Army / 1 / Ammuni	ition		tem Nomenclature 20mm, Canister, M1			Weapon System	Гуре:	Date: Februa	ary 2005
АММО	ID		FY 04			FY 05			FY 06			FY 07	
Cost Elements	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	x1000	\$000	\$000	x1000	\$000	\$000	x1000	\$000	\$000	x1000	\$000
AMMUNITION HARDWARE Complete Round		4031	2	1612	5919	5	1162	6631	6	1162			
SubTotal AMMO Hardware		4031			5919			6631					
PRODUCTION SUPPORT COSTS Production Engineering Acceptance Testing		956 382			1048 350			1044 650			858		
SubTotal Production Support		1338			1398			1694			858		
COST NON - RECURRING First Article Testing		475											
SubTotal COST Non-Recurring		475											
Total		5844		2338	7317		1434	8325		1460	858		

Exhibit P-5a, Budget Procurement His	tory and Planning							Date: F	ebruary 20	05
Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition		Weapon System	т Туре:			em Nomenc 120mm, Cani	lature: ster, M1028 (E7	78011)		
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Complete Round										
FY 2004	General Dynamics Ord & Tac St Petersburg, Fl	SS/FP	Picatinny, NJ	Dec-04	Jun-05	2	1612	Yes	Dec-04	
FY 2005	General Dynamics Ord & Tac St Petersburg, FI	SS/FP	Picatinny, NJ	Jun-05	Jan-06	5	1162	Yes	Dec-04	
FY 2006	General Dynamics Ord & Tac St Petersburg, FI	SS/FP	Picatinny, NJ	Jan-06	Aug-06	6	1162	Yes	Dec-04	
REMARKS:										

	FY 05 / 06 BUDGET I	PRO	DUCTION	I SCI	HEDUL	.E			Item N ridge,				r, M10	028 (E7801	1)								Date:			Feb	ruary	2005	į		
												Fi	scal Y	ear (05									I	iscal	Year	06					
				S	PROC	ACCEP	BAL				Ц,				Cale	ndar	Yea	r 05								Calen	_	Year	06			L A
	COST ELEMENTS	M F R	FY	Ē R V	QTY Units	PRIOR TO 1 OCT	DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
Co	mplete Round																															
		1	FY 04	Α	2	0	2			Α						2																0
		1	FY 05	Α	5	0	5									A							2	2			1	3				0
		1	FY 06	Α	6	0	6																Α	١							3	3
															П																	
															П														Г			
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															П																	
															П																	
									П						П																	
То	tal				13		13								П	2							2	2			:	3	Т		3	3
								O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	Α	P	M A Y		J U L	A U G	Е	
M			PR	ODLICTI	ON RATES			М	IFR						ADM	IINLE	AD T	IMF			MFR			TOTA	ΛĪ	R	EMAI	2KS				
M F			FR	SDUCII	ON KATES		REACHED		mber					Dr.	rior 1 O	_		ter 1 C	Oct	Δ+	fter 1 (fter 1					flect	conti	ทนดเม	s
r R	NAME/LOCATION		MIN.		1-8-5	MAX.	D+	ivul		INIT	IAI.			. 1	3	-ι	Al	15	,	A	6	JUL	А	21		pro	oduc	tion b	ut ar	e cor	nbine	d into
1	General Dynamics Ord & Tac , St Petersburg, Fl		.50		1.75	4.00	0		1		RDER				3			4			7			11						antiti		d ted into
H	Constant Dynamics of a Cartac , Strictersoung, 11		.50		1.10	7.00	J			INIT														•••		the	Arn	ลบเนล ny's fi	eld s	ervic	e acc	ea into ount.
Н											RDER															1		•				
Н										INIT																1						
Н											RDER															1						
П										INIT																1						
П										REO	RDER																					
										INIT	ΊAL																					
										REO	RDER																					

	FY 07 / 08 BUDGET F	PRO	DUCTION	N SCI	HEDUL	.E			Item N tridge,				r, M10	028 (E7801	11)								Date:			Feb	ruary	2005			
												Fis	scal Y	ear (07									F	iscal	Year	08					
				S	PROC	ACCEP	BAL				Ц,				Cale	endar	· Yea	r 07								Calen	_	Year ()8			L A
	COST ELEMENTS	M F R	FY	E R V	QTY Units	PRIOR TO 1 OCT	DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
Co	mplete Round												\exists																			
		1	FY 04	Α	2	2	0																									0
		1	FY 05	Α	5	5	0																									0
		1	FY 06	Α	6	3	3			3																						0
									\Box																				Г			
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То	tal				13	10	3		\Box	3																						
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								O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	
								T	v	C	N	В	R	R	Y	N	L	G	P	T	V	C	N	В	R	R	Y	N	L	G	P	
M			PR	ODUCT	ON RATES			М	IFR						ADN	/INLE	AD T	IME			MFR			ТОТА	L	RI	EMAR	KS				
F							REACHED	Nu	mber					Pr	ior 1 O	ct	Ai	fter 1 C)ct	A	fter 1 (Oct	Α	fter 1	Oct					contir		
R	NAME/LOCATION		MIN.		1-8-5	MAX.	D+		1	INIT	ΊAL				3			15			6			21						e com antitie		d into d
1	General Dynamics Ord & Tac , St Petersburg, Fl		.50		1.75	4.00	0		•		RDER				3			4			7			11		ref	ect a	actual	rour	nds ad	cept	ed into
Ш										INIT										_						the	Arm	ıy's fi	eld s	ervice	acco	ount.
Ш											RDER															4						
Ш										INIT																4						
Ш											RDER															4						
Ш										INIT			_										_			4						
Ш											RDER															4						
Ш										INIT			_													-						
										REO	RDER																					

Ext	nibit P-4	0, Budç	jet Item	Justif	ication	Sheet	Da	ate:	F	ebruary 200	5	
Appropriation/Budget A Procurement of Ammunitio						P-1 Item Nor Ctg		FSDS M829A	3 (E78013)			
Program Elements for (Code B Items:			Code: A	Other Rela	ted Program	Elements:					
	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Prog
Proc Qty	5	8	8	8	8	8	8	8				61
Gross Cost	35.1	40.8	36.2	42.3	44.4	46.8	46.9	47.0				339.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	35.1	40.8	36.2	42.3	44.4	46.8	46.9	47.0				339.5
Initial Spares												
Total Proc Cost	35.1	40.8	36.2	42.3	44.4	46.8	46.9	47.0				339.5
Flyaway U/C												
Wpn Sys Proc U/C		5.1	4.5	5.5	5.6	5.5	5.5	5.5				

Description:

The 120mm M829A3 Armor Piercing, Fin Stabilized, Discarding Sabot with Tracer (APFSDS-T) cartridge is the follow-on to the M829A2 APFSDS-T cartridge. The M829A3 is designed to be the most effective anti-armor kinetic energy round fired from the M256 120mm smoothbore cannon mounted on the Abrams Main Battle Tank. This cartridge has been specifically developed to counter advances in armor protection technologies, to include explosive reactive armor. The propulsion system consists of a high-energy propellant and a combustible cartridge case with an electric primer. The projectile system consists of a Depleted Uranium (DU) penetrator mated to a drag reducing windshield and flight stabilizing multi-bladed tail fin, all secured for launch by a composite sabot. The M829A3 utilizes similar components to the M829A1 and M829A2 series of APFSDS-T cartridges, but incorporates technological advancements to provide significantly more effective anti-armor capability than the predecessor designs. This item is Code A, approved for service use.

Justification:

This is a war reserve item used in combat. FY 2006/2007 procurements build a war reserve inventory in accordance with the Army's procurement goals. Procurement of the M829A3 supports the Abrams Main Battle Tank as the Army's premier lethal battlefield direct fire assault fighting vehicle. The Abrams' 120mm gun will remain in the bulk of the tank inventory for at least the next 25 years. The M829A3 ammunition is essential in maintaining the battlefield overmatch capabilities of the Abrams Tank. Production and fielding of the M829A3 will maintain the ability of the Abrams Main Battle Tank to defeat current and postulated armor threats. This round incorporates revolutionary advances in technology and will represent the most lethal anti-armor tank cartridge in production.

TYPE CLASSIFICATION: March 2003

Exhibit P-5, Weapon AMMO Cost Analysis		Appropriation/B Procurement of		ity/Serial No. , Army / 1 / Ammuni	ition		tem Nomenclature a APFSDS M829A3			Weapon System	Гуре:	Date: Febru	ary 2005
АММО	ID		FY 04			FY 05			FY 06			FY 07	
Cost Elements	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	x1000	\$	\$000	x1000	\$	\$000	x1000	\$	\$000	x1000	\$
AMMUNITION HARDWARE Complete Round		31182	8	3898	38474	8	5001	40089	8	4999	42444	8	4999
SubTotal AMMO Hardware		31182			38474			40089			42444		
PRODUCTION SUPPORT COSTS Production Engineering Acceptance Testing		3112 1955			2914 947			3330 980			3326 1030		
SubTotal Production Support		5067			3861			4310			4356		
Total		36249		4531	42335		5501	44399		5550	46800		5512

Exhibit P-5a, Budget Procurement Hi	story and Planning							Date:	ebruary 20	05
Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition		Weapon Syste	т Туре:			em Nomencl	lature: PA3 (E78013)			
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Complete Round										
FY 2004	Alliant Techsystems Minneapolis, MN	SS/FP	Picatinny, NJ	Mar-04	Oct-05	8	3898	Y		
FY 2005	Alliant Techsystems Minneapolis, MN	SS/FP	Picatinny, NJ	Feb-05	Aug-06	8	5001	Y		
FY 2006 FY 2007	TBS TBS	C/FP C/FP	Picatinny, NJ Picatinny, NJ	Feb-06 Feb-07	Mar-07 Mar-08	8 8	4999 4999	Y Y		
REMARKS:										

	FY 05 / 06 BUDGET PI	ROI	DUCTION	I SCI	HEDUL	.E			Item N , 120m				9A3 (E780)13)]	Date:			Feb	ruary :	2005			
												Fis	scal Y	'ear (05									F	iscal	Year	06					
				S	PROC	ACCEP	BAL								Cale	endar	· Yea	r 05								Calen	dar Y	Zear 0	6			L A
	COST FLEMENTS	M F R	FY	Ë R V	QTY Units	PRIOR TO 1 OCT	DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
Co	omplete Round																															
			FY 04 P	Α	21	10	11			2										5					4							0
		1	FY 05	Α	8	0	8					A																		4		4
			FY 06	Α	8	0	8						_											Α	١							8
L		2	FY 07	Α	8	0	8						_																			8
L		2	FY 08	Α	8	0	8																									8
		2	FY 09	Α	8	0	8						_																			8
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To	otal				61	10	51			2										5					۷					4		36
								O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M			PR	ODUCT	ON RATES			М	1FR						ADN	4INLE	AD T	IME			MFR			TOTA	L	R	EMAR	KS				
F							REACHED	Nui	mber					Pri	ior 1 O	ct	Aí	fter 1 C	Oct	Ai	fter 1 (Oct	A	fter 1	Oct			es re				
R	NAME/LOCATION		MIN.		1-8-5	MAX.	D+			INIT	TAL				3			6			14			20				ion bu				d into
1	Alliant Techsystems , Minneapolis, MN		.64		1.00	1.60	0		I	REO	RDER				3			5			13			18		ref	lect a	ctual	roun	ds a	cept	ed into
2	TBS,		.64		1.00	1.60	0		2	INIT	TAL				3			5			13			18		the	Arm	ıy's fie	eld se	ervice	acco	ount.
									-	REO	RDER				3			5			13			18		1						
										INIT	TAL															1						
L											RDER															1						
_										INIT			_													1						
<u> </u>											RDER		_													1						
										INIT			_													-						
										REO	RDER																					

	FY 07 / 08 BUDGET PF	ROI	DUCTION	I SCI	HEDUL	.E			Item N 120m				29A3 ((E780	013)									Date:			Feb	ruary	2005	5		
												Fi	scal Y	(ear	07									F	iscal	Year	08					
				S	PROC	ACCEP	BAL								Cale	endar	r Yea	r 07								Caler	dar '	Year	08		_	L A
	COST FLEMENTS	M F R	FY	Ë R V	QTY Units	PRIOR TO 1 OCT	DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
Co	mplete Round																												t			
			FY 04 P	Α	21	21	0																									0
		1	FY 05	Α	8	4	4				4																					0
			FY 06	Α	8	0	8						4					4											L			0
		2	FY 07	Α	8	0	8					Α													4	1			┸		4	0
			FY 08	Α	8	0	8		Ш															Α	١			╙	┺	\perp	\bot	8
		2	FY 09	Α	8	0	8																					╙	┺		┺	8
\vdash									\sqcup		Щ				Ш			_					_		_	_	_	╙	┺	_	_	
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То	tal				61	25	36				4		4					4							4	1					4	16
								O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	Е	
M			PR	ODUCT	ON RATES			M	IFR						ADM	ИINLE	EAD T	IME			MFR			ТОТА	L	R	EMAI	RKS				
F							REACHED	Nu	mber					Pr	ior 1 O	ct	A	fter 1 (Oct	Ai	fter 1 (Oct	Α	fter 1	Oct						inuou	
R	NAME/LOCATION		MIN.		1-8-5	MAX.	D+			INIT	ΊAL				3			6			14			20								ed into
1	Alliant Techsystems, Minneapolis, MN		.64		1.00	1.60	0		1	REO	RDER				3			5			13			18		re	flect	actua	al rou	nds a	es ar	ted into
2	TBS,		.64		1.00	1.60	0		2	INIT	ΊAL				3			5			13			18		the	e Arn	ny's f	ield s	servic	e acc	ount.
									۷	REO	RDER				3			5			13			18								
										INIT	ΊAL																					
Ш										REO	RDER															1						
Щ										INIT										_						1						
Ш											RDER															4						
Ш										INIT																4						
										REO	RDER																					

FY 09 / 10 BUDGET PRODUCTION SCHEDULE											P-1 Item Nomenclature: Ctg, 120mm APFSDS M829A3 (E78013)														Date: February 2005							
				S E R V	PROC QTY Units	ACCEP		Fiscal Year 09											Fiscal Yea							ar 10						
			FY				BAL				Ц,				Cal	endaı	r Yea	r 09						(Calendar Year 10				L A	
	COST ELEMENTS	M F R				PRIOR TO 1 OCT	DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
Co	mplete Round																															
		1	FY 04 P	Α	21	21	0																									0
		1	FY 05	Α	8	8	0																						L			0
		2	FY 06	Α	8	8	0																						L			0
L		2	FY 07	Α	8	8	0																						L			0
		2	FY 08	Α	8	0	8						4					4														0
L		2	FY 09	Α	8	0	8					Α													4	1				4		0
L																																
To	tal				61	45	16						4					4							4	1				4		
								O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	P	M A Y	J U N	J U L	A U G	S E P	
M			PRODUCTION RATES					MFR						ADMINLEAD TIME				MFR			TOTAL			-	REMARKS							
F			PRODUCTION RATES				REACHED		Number					Prior 1 Oct			After 1 Oct			After 1 Oct			After 1 Oct			Deliveries reflect continuous						
R	NAME/LOCATION	NAME/LOCATION			1-8-5	MAX.	D+	. 140	rumoer		INITIAL					6			14			20			pr	production but are combi				bine	d into	
1	Alliant Techsystems , Minneapolis, MN		MIN. .64		1.00	1.60	0		1		RDER				3			5			13			18						antitie		
2	TBS,		.64		1.00	1.60	0			INIT				3 3 3			5		13			18		reflect actual rounds accepted into the Army's field service account.						ount.		
Ē	y		.01			1.00	,		2		REORDER			3		5		13			18											
Г										INIT																1						
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