Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604802A: Weapons and Munitions - Eng Dev

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	101.823	87.022	24.345	0.000	24.345	24.108	14.467	19.263	14.415	Continuing	Continuing
613: MORTAR SYSTEMS	41.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
AS5: Artillery Munitions Engineering Development	3.986	1.591	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
S23: SURF LNCH ADV MED RNG AIR-TO-AIR MSL (SLAMRAAM)	31.306	56.441	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
S36: PRECISION GUIDANCE KIT	24.731	28.990	24.345	0.000	24.345	24.108	14.467	19.263	14.415	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element funds multiple efforts for engineering development of weapons and munitions systems. Project 613, FY09 funds Accelerated Precision Munitions Initiative (APMI) XM395, a GPS guided 120mm mortar cartridge that is compatible with all Army 120mm mortar systems. APMI is in response to an urgent operation need for highly transportable, all weather, rapidly responsive, precise, indirect fires to support widely dispersed Combat Outposts and operations at the lowest tactical echelons to meet Operational Needs Statement (ONS) in Afghanistan. APMI will provide a precision 120mm mortar capability, within 10 meter Circular Error Probable (CEP) at all ranges. Project AS5, FY10 funds Lightweight Multi-Functional Material Technology (LMFMT), a materials development program for Ammunition containers. It includes the use of advanced composite and non-composite materials in developing the design of mortar containers and barrier applications. FY09 funds LMFMT and the Hybrid Propellant program. Hybrid Propellant is a unique propellant under development for future application in small, medium, and large calibur munitions. Hybrid Propellant releases energy more efficiently than conventional propellants and provides munitions with the highest possible muzzle velocities for greater lethality. Project S23, the Surface Launched Advanced Medium Range Air-To-Air Missile (SLAMRAAM), is the initial kinetic energy component of Integrated Air & Missile Defense (IAMD), an Air and Missile Defense (AMD) Future Force system. SLAMRAAM's force protection mission is to engage the low-altitude aerial threats out to 18km. Project S36 funds engineering development of precision guidance systems applicable to Indirect Fire weapon systems (artillery and mortars). This includes the Precision Guidance Kit (PGK) which is a Global Positioning guidance kit with fuzing functions. PGK will improve the accuracy of existing artillery ammunition by correcting the trajectory of projectiles to their designated target location. Precision guidance sy

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0604802A: Weapons and Munitions - Eng Dev

BA 5: Development & Demonstration (SDD)

B. Program Change Summary (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	57.948	34.878	60.143	0.000	60.143
Current President's Budget	101.823	87.022	24.345	0.000	24.345
Total Adjustments	43.875	52.144	-35.798	0.000	-35.798
 Congressional General Reductions 		-0.456			
 Congressional Directed Reductions 		0.000			
 Congressional Rescissions 	0.000	0.000			
 Congressional Adds 		52.600			
 Congressional Directed Transfers 		0.000			
 Reprogrammings 	45.498	0.000			
• SBIR/STTR Transfer	-1.623	0.000			
 Adjustments to Budget Years 	0.000	0.000	-35.798	0.000	-35.798

Change Summary Explanation

Change Summary Explanation:FY 2009: Increase (Reprogramming) of \$41.2 million for initiation of the XM395 120mm Acclerated Precision Mortar Intiative (APMI) and \$5.0 million for Precision Guidance Kit (PGK).FY 2010: Congressional adds of \$52.6 million for the following efforts: +\$45.0 million for SLAMRAAM (Project S23); +\$6.0 million for PGK (Project S36); \$1.6 million for Lightweight Packaging System for Enhancing Combat Munitions Logistics (Project AS5).FY 2011: Funding transferred (\$23.7 million) to new PE for SLAMRAAM. Funding realigned (\$11.9 million) to higher priority Army requirements.

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM N PE 0604802	NOMENCLA A: Weapons a		- Eng Dev	PROJECT 613: MORTAR SYSTEMS				
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost	
613: MORTAR SYSTEMS	41.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
Quantity of RDT&E Articles												

A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army

Accelerated Precision Mortar Initiative (APMI, XM395) is a GPS guided 120mm mortar cartridge that is compatible with all Army 120mm mortar systems. APMI is in response to an urgent operational need for highly transportable, all weather, rapidly responsive, precise, indirect fires to support widely dispersed Combat Outposts and operations at the lowest tactical echelons to meet Operational Needs Statement (ONS) in Afghanistan. APMI will provide a precision 120mm mortar capability, within 10 meter Circular Error Probable (CEP) at all ranges.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	2.000	0.000	0.000	0.000	0.000
Demo Guide to Hit Phase					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army	R-2A, RDT&E Project Justification: PB 2011 Army							
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604802A: Weapons and Munitions - En		PROJECT 613: <i>MORTA</i>	AR SYSTEMS				
B. Accomplishments/Planned Program (\$ in Millions)								
	F	Y 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
Program #2		16.120	0.000	0.000	0.000	0.000		
APMI: Phase I, Design Maturation and Demonstration								
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #3		11.900	0.000	0.000	0.000	0.000		
APMI: Phase II, Prototype Evaluation and Complete Qaulification	to Urgent Material Release (UMR)							
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans:								

UNCLASSIFIED

R-1 Line Item #105 Page 4 of 33 1310 of 1922

FY 2011 OCO

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army	DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT		
2040: Research, Development, Test & Evaluation, Army	PE 0604802A: Weapons and Munitions - Eng Dev	613: MORTAR SYSTEMS		
BA 5: Development & Demonstration (SDD)				

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #4	4.925	0.000	0.000		0.000
APMI: Phase I (Down select) and II (Government Safety Qualification testing) testing					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #5	4.705	0.000	0.000	0.000	0.000
APMI: Fire Control software modification support					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					

UNCLASSIFIED

R-1 Line Item #105 Page 5 of 33 1311 of 1922

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0604802A: Weapons and Munitions - Eng Dev	613: <i>MORTA</i>	AR SYSTEMS
BA 5: Development & Demonstration (SDD)			

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #6	2.150	0.000	0.000	0.000	0.000
APMI: Continue Engineering support					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Accomplishments/Planned Programs Subtotals	41.800	0.000	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	<u>OCO</u>	Total	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #1: SSN: E25511 CTG,	15.000	0.000	28.623	70.000	98.623	85.774	99.927	99.770	85.349	0	484.443
MORTAR, 120MM, HE GUIDED,											

XM395

D. Acquisition Strategy

The acquisition strategy for Accelerated Precision Mortar Initiative (APMI) includes meeting the Operational Needs Statement (ONS) for a 120mm precision guided mortar round. APMI Cartridges will be developed and produced by an industry partner. A DoD Ordnance Technology Consortium (DOTC) competitive phase is being conducted in order to down select to a single producer. A follow-on DOTC phase will be conducted to qualify the XM 395 Cartridge. Contracts selected for DOTC Phase I (competitive down select) are Firm

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army	DATE: February 2010											
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT										
2040: Research, Development, Test & Evaluation, Army	PE 0604802A: Weapons and Munitions - Eng Dev	613: MORTAR SYSTEMS										
BA 5: Development & Demonstration (SDD)												
Fixed Price (FFP) and Phase II (Government safety qualification) will be Cost												
(SS)/ Fixed Price Incentive (FPI) contract. The first delivery to theatre will be	in 1QFY11 to respond to Operational Needs Statemer	nt (ONS) in Afghanistan.										
Performance Metrics												
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.												
To from the first asset in the proparation of this justification material may	to round in the FF 2010 7thing Ferrormance Budget se	astirication Book, dated 17th 2010.										

Exhibit R-2A, RDT&E Project Justif	ication: PB 2	011 Army							DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)									PROJECT AS5: Artillery Munitions Engineering Development			
COST (\$ in Millions) FY 2009 FY 2010 Base Actual Estimate Estimate			FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost		
AS5: Artillery Munitions Engineering Development	3.986	1.591	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
Quantity of RDT&E Articles												

A. Mission Description and Budget Item Justification

FY10 funds Lightweight Multi-Functional Material Technology (LMFMT), a materials development program for Ammunition containers. It includes the use of advanced composite and non-composite materials in developing the design of mortar containers and barrier applications. FY09 funds LMFMT and the Hybrid Propellant program. Hybrid Propellant is a unique propellant under development for future application in small, medium, and large calibur munitions. Hybrid Propellant releases energy more efficiently than conventional propellants and provides munitions with the highest possible muzzle velocity for extended ranges/lethality, the prospect of lighter barrels with less recoil, extended wear characteristics and the ability to use heavier projectiles at standard muzzle velocities for greater lethality.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	0.055	0.160	0.000	0.000	0.000
Lightweight Multi-Functional Material Technology (LMFMT) Engineering Support					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	40: Research, Development, Test & Evaluation, Army PE 0604802A: Weapons and Munitions						
B. Accomplishments/Planned Program (\$ in Millions)	'						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2011 OCO Plans: FY 2011 OCO							
Program #2 LMFMT Development Materials, Industrial Equipment and Supplies FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO		0.025	0.000	0.000	0.000	0.000	
Program #3 LMFMT Material Development, Design and Testing FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010		0.695	1.431	0.000	0.000	0.000	

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: Febr	ruary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604802A: Weapons and Munitions - Eng Dev	PROJECT AS5: Artille	ry Munitions Engineering Developm			
B. Accomplishments/Planned Program (\$ in Millions)						
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4	1.80	0.000	0.000	0.000	0.000	
Hybrid Propellant Engineering Support, Testing and Fabrication						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #5	1.40	0.000	0.000	0.000	0.000	
Hybrid Propellant Primer						
FY 2009 Accomplishments: FY 2009						

DATE: February 2010

0.000

0.000

0.000

1.591

3.986

Lambit K 211, Kb Teta Troject dustrication: The 2011 filmy			Dillin. I col	duly 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	esearch, Development, Test & Evaluation, Army PE 0604802A: Weapons and Munitions - Eng Dev					
B. Accomplishments/Planned Program (\$ in Millions)						
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						

Accomplishments/Planned Programs Subtotals

C. Other Program Funding Summary (\$ in Millions)

Exhibit R-2A. RDT&E Project Justification: PB 2011 Army

N/A

D. Acquisition Strategy

The Lightweight Multi-Functional Material Technology (LMFMT) Engineering and Manufacturing Demonstration (EMD) contract was awarded as a sole source to Frontier Performance Polymers in FY09. The Hybrid Propellant was added to the existing Defense Ordnance & Warheads Technology Consortium (DOTC) contract through a contract modification.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-2A, RDT&E Project Justit	fication: PB 2	011 Army							DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTI 2040: Research, Development, Test & Development & Demonstration		NOMENCLA A: Weapons a	TURE and Munitions		ROJECT 3: SURF LNCH ADV MED RNG AIR-TO-AIR SL (SLAMRAAM)						
COST (\$ in Millions)	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost			
S23: SURF LNCH ADV MED RNG AIR-TO-AIR MSL (SLAMRAAM)	31.306	56.441	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Surface Launched Advanced Medium Range Air-To-Air Missile (SLAMRAAM) is a critical component of the Army's future Integrated Air & Missile Defense (IAMD) system. SLAMRAAM consists of launcher platforms employing the proven AIM-120-C7 Advanced Medium Range Air-to-Air Missile; Integrated Fire Control Station (IFCS) command, control, and communications platforms; and Improved Sentinel Radars. SLAMRAAM is a day or night, adverse weather, non-line-of-sight system that counters cruise missiles (CM), unmanned aerial vehicle (UAV), fixed wing, and rotary wing threats. SLAMRAAM is mobile and able to operate in a variety of combat situations to protect maneuver forces and strategic-level critical assets. SLAMRAAM represents a substantial increase in performance over current short range air defense systems. SLAMRAAM was directed by the Department of the Army in August 2009 to restructure and move to a more survivable platform for crew protection. The Department of the Army is considering moving the SLAMRAAM to either the High Mobility Artillery Rocket System (HIMARS) Carrier or the Family of Medium Tactical Vehicles (FMTV) platform. A HIMARS platform decision will require the schedule and funding profile to be revisited in the POM.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	12.532	40.421	0.000	0.000	0.000
Product Development					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	ent, Test & Evaluation, Army PE 0604802A: Weapons and Munitions - Eng Dev S23: SURF						
B. Accomplishments/Planned Program (\$ in Millions)							
•		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #2		7.712	0.000	0.000	0.000	0.00	
Test and Evaluation							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #3		11.062	15.700	0.000	0.000	0.00	
System Engineering/ Program Management (SE/PM)							
FY 2009 Accomplishments: FY 2009							

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	- Eng Dev	PROJECT S23: SURF L MSL (SLAM)	NCH ADV M RAAM)	ED RNG AIR	?-TO-AIR	
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4		0.000	0.320	0.000	0.000	0.000
Small Business Innovative Research/Small Business Technology Transfer	Program					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Accor	mplishments/Planned Programs Subtotals	31.306	56.441	0.000	0.000	0.000

Exhibit R-2A , RDT&E Project Justification: PB 2011 Army												
APPROPRIATION/BUDGET ACTIV 2040: Research, Development, Test & Ev BA 5: Development & Demonstration (S.	aluation, Arm	y		R-1 ITEM NO PE 0604802A			- Eng Dev	PROJECT S23: SURF LNCH ADV MED RNG AIR-TO-AIR MSL (SLAMRAAM)				
C. Other Program Funding Summary	(\$ in Millions	<u>s)</u>										
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 <u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete		
• Ord. #1: PE 0604869A, Proj M06, Patriot/MEADS Combined Aggregate Program (CAP)	454.565	566.215	467.139	0.000	467.139	408.012	325.184	240.018	75.585	Continuing	Continuing	
• Ord. #2: SSN C53101, MSE Missile	0.000	0.000	0.000	0.000	0.000	607.796	534.022	516.479	503.786	Continuing	Continuing	
• Ord. #3: SSN C53201, PATRIOT/ MEADS GSE	0.000	0.000	0.000	0.000	0.000	0.000	126.589	217.639	528.435	Continuing	Continuing	
• Ord. #4: <i>PE 0102419A</i> , <i>Proj E55</i> , <i>JLENS</i>	344.850	328.356	372.493	0.000	372.493	176.198	118.448	0.000	0.000	Continuing	Continuing	
• Ord. #5: SSN BZ0525, JLENS Production	0.000	0.000	0.000	0.000	0.000	470.661	419.801	427.731	394.325	Continuing	Continuing	
• Ord. #6: SSN C81002, SLAMRAAM Launcher	40.349	0.000	116.792	0.000	116.792	83.302	233.762	241.691	248.895	Continuing	Continuing	
• Ord. #7: SSN C81004, Surfaced- Launched AMRAAM Missile	0.000	0.000	0.000	0.000	0.000	0.000	39.542	39.426	15.416	Continuing	Continuing	
• Ord. #8: SSN WK5053, FAAD GBS	0.000	0.000	91.467	169.260	260.727	7.948	7.935	0.000		Continuing		
• Ord. #9: PE 0303327A, Proj S34, AMD System of System Engineering and Integration	111.496	166.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
• Ord. #10: SSN BZ5075000, ARMY IAMD BATTLE COMMAND SYSTEM (IBCS)	0.000	0.000	251.124	0.000	251.124	271.543	251.646	228.639	129.043	Continuing	Continuing	
• Ord. #11: PE 0605456A, Project PA3, PAC-3/MSE Missile	0.000	0.000	62.500	0.000	62.500	62.100	3.500	62.000	64.500	Continuing	Continuing	
• Ord. #12: PE 0603305A, Proj TR7, Protection Capability II-Intercept	0.000	0.000	4.296	0.000	4.296	21.303	74.197	93.679	94.006	Continuing	Continuing	
• Ord. #13: PE 0605457A, Project S40, Army Integrated Air and Missile Defense (AIAMD)	0.000	0.000	251.124	0.000	251.124	271.543	251.646	228.639	129.043	Continuing	Continuing	

UNCLASSIFIED

R-1 Line Item #105 Page 15 of 33 1321 of 1922

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0604802A: Weapons and Munitions - Eng Dev	S23: SURF 1	LNCH ADV MED RNG AIR-TO-AIR
BA 5: Development & Demonstration (SDD)		MSL (SLAM	RAAM)
C. Other Program Funding Summary (\$ in Millions)			

		-	FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	OCO	Total	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #14: PE 0208053, Proj 635	1.949	36.005	12.403	0.000	12.403	12.630	13.038	7.982	7.947	Continuing	Continuing
JOINT TACT GRD STATIONO-P3I											
(MIP)											
• Ord. #15: SSN BZ8401, Joint	0.000	6.682	9.279	0.000	9.279	0.000	0.000	9.415	4.658	Continuing	Continuing
Tactical Ground Station (JTAGS)											_

D. Acquisition Strategy

System Development and Demonstration (SDD) contract award in 2nd Quarter FY04 and completed in Oct 09. The program will be restructured pending decision on a platform. Milestone C is scheduled for FY11.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)

PE 0604802A: Weapons and Munitions - Eng Dev

S23: SURF LNCH ADV MED RNG AIR-TO-AIR MSL (SLAMRAAM)

Product Development (\$ in Millions)

				FY	2010		2011 ase		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Hardware/ Software Development	SS	Raytheon Tewksbury, MA	165.680	40.716		0.000		0.000		0.000	Continuing	Continuing	107.053
Government Prototype Manufacturing (Government Furnished Equipment)	С	Multiple Location could not be determined.	3.625	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Training Aids Devices Simulators and Simulation	С	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
	,	Subtotal	169.305	40.716		0.000		0.000		0.000			107.053

Remarks

*SS/CPIF/CPFF - Sole Source/Cost Plus Incentive Fee/Cost Plus Fixed Fee

Test and Evaluation (\$ in Millions)

				FY	2010	FY 2 Ba	-	FY 2	-	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government System Test and Evaluation	С	Multiple Location could not be determined.	11.736	0.000		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	11.736	0.000		0.000		0.000		0.000			0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

PE 0604802A: Weapons and Munitions - Eng Dev

S23: SURF LNCH ADV MED RNG AIR-TO-AIR

MSL (SLAMRAAM)

Test and Evaluation (\$ in Millions)

	,	-,				FY	2011	FY	2011	FY 2011			
				FY	2010	В	ase	O	CO	Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract

Remarks

*SS/CPIF/CPFF - Sole Source/Cost Plus Incentive Fee/Cost Plus Fixed Fee

Management Services (\$ in Millions)

				FY :	FY 2010		2011 ase		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government SE/PM	С	Multiple Location could not be determined.	16.438	15.700		0.000		0.000		0.000	Continuing	Continuing	0
SBIR/STTR**	С	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.320		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	16.438	16.020		0.000		0.000		0.000			0.000

Remarks

*SS/CPIF/CPFF - Sole Source/Cost Plus Incentive Fee/Cost Plus Fixed Fee**Small Business Innovative Research/Small Business Technology Transfer Program

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army			DATE: February 2010
	PE 0604802A: Weapons and Munitions - Eng Dev	PROJECT S23: SURF I MSL (SLAM)	NCH ADV MED RNG AIR-TO-AIR RAAM)

	Total Prior Years Cost	FY 2010	FY:	2011 ase		2011 CO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	197.479	56.736	0.000		0.000		0.000			107.053

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0604802A: Weapons and Munitions - Eng Dev	S23: SURF LNCH ADV MED RNG AIR-TO-AIR
BA 5: Development & Demonstration (SDD)		MSL (SLAMRAAM)

]	FY 2009 FY			FY 2010 FY 2011		FY 2012		FY 2013		3	FY 2014			1	FY 2015		;										
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Platform Redesign				#	#	#																						
PIF Prototype Demonstration							#	#																				

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0604802A: Weapons and Munitions - Eng Dev	S23: SURF I	LNCH ADV MED RNG AIR-TO-AIR
BA 5: Development & Demonstration (SDD)		MSL (SLAM	RAAM)

Schedule Details

	Sta	art	E	nd
Event	Quarter	Year	Quarter	Year
Platform Redesign	4	2009	2	2010
PIF Prototype Demonstration	3	2010	4	2010

DATE: February 2010

Exhibit K-2/1, KD TCE TTOJECT Sustin	cation. 1 D 2	Jii Milliy							Dixie. i coi	uary 2010	
APPROPRIATION/BUDGET ACTIVE 2040: Research, Development, Test & E. BA 5: Development & Demonstration (A. B.	Evaluation, Ar	my		R-1 ITEM N PE 0604802	NOMENCLA A: Weapons a		- Eng Dev	PROJECT S36: PRECIS	SION GUIDA	NCE KIT	
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
S36: PRECISION GUIDANCE KIT	24.731	28.990	24.345	0.000	24.345	24.108	14.467	19.263	14.415	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army

This program funds engineering development of precision guidance systems applicable to Indirect Fire weapon systems (artillery and mortars). This includes the Precision Guidance Kit (PGK) which is a Global Positioning Guidance Kit with fuzing functions. PGK will improve the accuracy of existing artillery ammunition by correcting the trajectory of projectiles to their designated target location. Precision guidance systems will effectively reduce target delivery error reducing the number of rounds required to conduct a fire mission. This capability will benefit existing indirect fire systems. The increase in effectiveness gives commanders the operational capability to defeat more targets with the same basic load.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	17.322	8.920	0.000	0.000	0.000
Engineering and Manufacturing Development (EMD)- Increment 1					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604802A: Weapons and Munitions -	- Eng Dev	PROJECT S36: PRECI	T CISION GUIDANCE KIT			
B. Accomplishments/Planned Program (\$ in Millions)			1				
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #2		0.000	11.405	15.954	0.000	15.954	
Engineering and Manufacturing Development (EMD)/Technology Develop	pment (TD)- Increment 2						
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #3		4.432	5.362	3.941	0.000	3.941	
Continue Engineering Support and Platform Integration							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							

UNCLASSIFIED

FY 2011 OCO Plans: FY 2011 OCO

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604802A: Weapons and Munitions	- Eng Dev	PROJECT S36: PRECIS	SION GUIDA	NCE KIT	
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #4		2.977	2.675	4.450	0.000	4.450
Continue Developmental/Operational Testing						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #5		0.000	0.628	0.000	0.000	0.000
Small Business Innovative Research/Small Business Technology Transfer	Programs					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0604802A: Weapons and Munitions - Eng Dev	S36: PRECI	SION GUIDANCE KIT
BA 5: Development & Demonstration (SDD)			

B. Accomplishments/Planned Program (\$ in Millions)

			FY 2011	FY 2011	FY 2011
	FY 2009	FY 2010	Base	OCO	Total
Accomplishments/Planned Programs Subtotals	24.731	28.990	24.345	0.000	24.345

C. Other Program Funding Summary (\$ in Millions)

			<u>FY 2011</u>	<u>FY 2011</u>	<u>FY 2011</u>					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	OCO	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #1: E99250 Precision Guidance	18.426	27.609	25.047	0.000	25.047	36.107	37.512	51.000	53.304	0	249.005
Kit (PGK)											

D. Acquisition Strategy

The PGK program is using an incremental development approach to provide a combat capability to the Soldier as quickly as possible, and to deliver advanced capabilities at lower costs as technology matures. The Acquisition Strategy/Acquisition Plan for the PGK Increment 1 program was approved by the Milestone Decision Authority (MDA) on 20 October 2005. Alliant Techsystems (ATK) was awarded the Engineering and Manufacturing Development (EMD) program following a Technology Development Demonstration. Approval to initiate the procurement of First Article/Production Verification Test hardware occurred at an In-Process Review (IPR) 3QFY09, and Milestone C/Type Classification Limited Procurement is scheduled for 4QFY10. The Materiel Release of Increment 1 is scheduled for 4QFY11. An IPR for Increment 2 was conducted with the MDA for Increment 2 on 22 December 2009. The Milestone A for Increment 2 is scheduled for 3OFY10 and the Milestone B for Increment 2 is scheduled for 2OFY11.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)

PE 0604802A: Weapons and Munitions - Eng Dev

S36: PRECISION GUIDANCE KIT

Product Development (\$ in Millions)

				FY	2010		2011 ase	FY:	2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PGK TD Contract	C/CPIF	ATK Plymouth, MN	7.956	0.000		0.000		0.000		0.000	Continuing	Continuing	0
PGK TD Contract - 2	C/CPIF	BAE Minneapolis, MN	5.956	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Soft Recovery Modules	С	SubSystems Technology Rosslyn, VA	0.116	0.000		0.000		0.000		0.000	Continuing	Continuing	0
PGK EMD Contract - Increment 1	C/CPAF	ATK Plymouth, MN	7.544	8.700		0.000		0.000		0.000	Continuing	Continuing	0
PGK EMD Contract Award Fee Increment 1	C/CPAF	ATK Plymouth, MN	0.000	0.220		0.000		0.000		0.000	Continuing	Continuing	0
PGK Contracts - Increment 2	C/Various	TBS Location could not be determined.	0.000	5.249		15.954		0.000		15.954	Continuing	Continuing	0
M107 Metal Parts	С	US ARMY Field Support Command RIA, IL	0.079	0.000		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	21.651	14.169		15.954		0.000		15.954			0.000

Remarks

6952

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604802A: Weapons and Munitions - Eng Dev

PROJECT

S36: PRECISION GUIDANCE KIT

Support (\$ in Millions)

				FY	2010	FY 2011 Base		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Manager's Office	С	PM CAS Picatinny NJ	0.889	0.900		0.716	0.000		0.716	Continuing	Continuing	0
Government Engineering Support	С	ARDEC Picatinny NJ	11.430	3.485		2.400	0.000		2.400	Continuing	Continuing	0
Risk Mitigation - Increment 2	С	ARDEC Picatinny NJ	0.000	6.156		0.000	0.000		0.000	Continuing	Continuing	0
Platform Integration	С	Various Location could not be determined.	0.000	0.397		0.500	0.000		0.500	Continuing	Continuing	0
Miscellaneous Support	C/Various	Various Location could not be determined.	5.008	0.000		0.000	0.000		0.000	Continuing	Continuing	0
		Subtotal	17.327	10.938		3.616	0.000		3.616			0.000

Remarks

Test and Evaluation (\$ in Millions)

Test and E (maniform)	,	~,		FY	2010		2011 ase		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Component Air Gun/ Railgun Testing	С	ARDEC Picatinny, NJ	0.317	0.000		0.000		0.000		0.000	Continuing	Continuing	0
	С		2.340	1.925		0.000		0.000		0.000	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)

PE 0604802A: Weapons and Munitions - Eng Dev

S36: PRECISION GUIDANCE KIT

Test and Evaluation (\$ in Millions)

				FY :	2010	FY 2 Ba	-	FY 2	2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Development Testing Increment 1		Yuma Proving Ground Yuma, AZ											
System Development Competitive Prototype Testing Increment 2	С	Yuma Proving Ground Yuma, AZ	0.000	0.750		0.500		0.000		0.500	Continuing	Continuing	0
Other Development Testing	С	Various Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Initial Operational Test & Evaluation - Increment 1	С	Yuma Proving Ground Yuma, AZ	0.000	0.000		3.500		0.000		3.500	Continuing	Continuing	0
Cold Region Testing - Increment 1	С	Cold Region Test Center Ft. Greely, Alaska	0.000	0.000		0.450		0.000		0.450	Continuing	Continuing	0
		Subtotal	2.657	2.675		4.450		0.000		4.450			0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)

PE 0604802A: Weapons and Munitions - Eng Dev

S36: PRECISION GUIDANCE KIT

Management Services (\$ in Millions)

				FY	2010		2011 ase	FY 2011 OCO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Support	C/FFP	Camber Mt. Arlington, NJ	0.150	0.355		0.100		0.000	0.100	Continuing	Continuing	0
Analysis Support	С	Command and Control Directorate Ft. Monmouth, NJ	0.000	0.075		0.075		0.000	0.075	Continuing	Continuing	0
Miscellaneous Support Contract	C/FFP	MITRE Corporation Bedford, MA	0.000	0.150		0.150		0.000	0.150	Continuing	Continuing	0
SBIR/STTR	С	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.628		0.000		0.000	0.000	Continuing	Continuing	0
		Subtotal	0.150	1.208		0.325		0.000	0.325			0.000

Remarks

	Total Prior Years Cost		2010	FY 2	2011 ase	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	41.785	28.990		24.345		0.000	24.345			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604802A: Weapons and Munitions - Eng Dev

PROJECT

S36: PRECISION GUIDANCE KIT

	J	FY:	2009	9	I	Y 2	201	0]	Y 2	201	1	I	Y	201	2	F	Y 2	201	3	I	Y 2	201	4	I	Y 2	201	5
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Increment 1 Production and Deployment							#	#	#	#	#	#	#	#	#	#	#											Г
IPR- Approve First Article Test(FAT)/Production Verification Test(PVT) Material			#																									
Milestone C-Type Classification Limited Procurement							#																					
FAT/PVT								#	#																			Г
Inital Operational Test and Evaluation (IOTE)									#	#																		Г
Type Classification Standard/Full Materiel Release										#																		Г
IOC											#																	Г
PGK Increment 2				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#									Г
Program Initiation IPR				#																								Г
Milestone A						#																						Г
Milestone B									#																			Г
Contract award										#																		Г
Competitive Down Select													#															Г
Milestone C																				#								Г
FAT																					#							Г
IOTE																						#						
Material Release/ IOC																							#					
EMD Phase Increment 3																				#	#	#	#	#	#	#	#	#
Milestone A - 2																				#								

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army
BA 5: Development & Demonstration (SDD)

PE 0604802A: Weapons and Munitions - Eng Dev

S36: PRECISION GUIDANCE KIT

	F	Y 2	2009	9	I	Y i	201	0]	Y 2	201	1	I	F Y 2	201	2	I	FY 2	201	3]	FY	201	4	F	Y 2	201	5
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Milestone B - 2																								#				

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army
BA 5: Development & Demonstration (SDD)

PE 0604802A: Weapons and Munitions - Eng Dev
S36: PRECISION GUIDANCE KIT

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Increment 1 Production and Deployment	3	2010	1	2013
IPR- Approve First Article Test(FAT)/Production Verification Test(PVT) Material	3	2009	3	2009
Milestone C-Type Classification Limited Procurement	3	2010	3	2010
FAT/PVT	4	2010	1	2011
Inital Operational Test and Evaluation (IOTE)	1	2011	2	2011
Type Classification Standard/Full Materiel Release	2	2011	2	2011
IOC	3	2011	3	2011
PGK Increment 2	4	2009	3	2013
Program Initiation IPR	4	2009	4	2009
Milestone A	2	2010	2	2010
Milestone B	1	2011	1	2011
Contract award	2	2011	2	2011
Competitive Down Select	1	2012	1	2012
Milestone C	4	2013	4	2013
FAT	1	2014	1	2014
IOTE	2	2014	2	2014
Material Release/ IOC	3	2014	3	2014
EMD Phase Increment 3	4	2013	4	2015

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604802A: Weapons and Munitions - Eng Dev

PROJECT

S36: PRECISION GUIDANCE KIT

	Start		End	
Event	Quarter	Year	Quarter	Year
Milestone A - 2	4	2013	4	2013
Milestone B - 2	4	2014	4	2014