Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0203801A: Missile/Air Defense Product Improvement Program

BA 7: Operational Systems Development

,	•											
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	52.811	20.733	1.578	-	1.578	0.000	0.000	0.000	0.000	Continuing	Continuing
036: PATRIOT PROD IMP PGM	-	42.938	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
DF8: <i>DF8</i>	-	0.194	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
DT5: Stinger Product Improvement	-	9.679	20.733	1.578	-	1.578	0.000	0.000	0.000	0.000	Continuing	Continuing

<sup>&</sup>lt;sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

#### Note

PATRIOT Product Improvement Program is now reported under Program Element 077865, DV8.

DF8 Funding was realigned to Program Element 0203808, DS1.

DF9 Funding was realigned to Program Element 0203808, DS2.

# A. Mission Description and Budget Item Justification

Project 036 PATRIOT Product Improvement Program (PIP): PATRIOT is an advanced Surface-to-Air guided missile system with a high probability of kill capable of operation in the presence of Electronic Countermeasures (ECM) and able to conduct multiple simulataneous engagements against high performance air breathing targets and ballistic missiles likely to be encountered by US Forces. The PATRIOT Product Improvement Program provides for the upgrade of the PATRIOT System through individual material changes. The PATRIOT Product Improvement Program upgrades the PATRIOT system to address operational lessons learned, enhancements to joint force interoperability, and other system performance improvements to provide overmatch capability with the emerging threat. Efforts will be made to expedite PATRIOT material solutions (e.g. Radar Digital Processor, Communications Upgrades, Radars on the Net) to both enhance capability and facilitate integration into the Integrated Air Missile Defense (IAMD) architecture.

Project 038 Avenger PIP: The Avenger Air Defense System is a lightweight, highly mobile surface-to-air missile and gun weapon system mounted on a High Mobility Multi-purpose Wheeled Vehicle (HMMWV). The system employs a canopied turret consisting of a gunner position, two gyro-stabilized missile launcher pods containing four STINGER missiles each, a Forward Looking Infrared Receiver (FLIR), a Laser Range Finder (LRF), an Identification Friend or Foe (IFF) system, and a very high rate of fire .50 caliber machine gun. The gun system is used against ground targets and to cover the Stinger missile dead-zone. Avenger is capable of day, night and adverse weather operations, can be transported by Utility Helicopter-60L Blackhawk or C-130 aircraft, is air-droppable and can shoot on the move. The system can also be operated by remote control from a protected position up to 50 meters away from the fire unit. The Avenger system is operated by a crew of two to counter hostile low flying unmanned aerial vehicles (UAVs), cruise missiles, attack helicopters, and high performance fixed winged aircraft. The system fills the line-of-sight rear component of the Forward Area Air Defense (FAAD) system.

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0203801A: Missile/Air Defense Product Improvement Program

BA 7: Operational Systems Development

The Avenger PIP provides for the design, development, integration and testing associated with modernization and added capability to the Avenger Weapon System.

Project DT5 Stinger Product Improvement: The Stinger Block I missile is an advanced, fire-and-forget, short-range, man-portable, air defense weapon system. It provides low-altitude defense for ground forces against attack or aerial observation by low-flying Unmanned Aerial System (UAS), Cruise Missile (CM), Rotary Wing (RW), and Fixed Winged (FW) threats. Stinger employs an infrared (heat seeking)/ultraviolet seeker to guide to the target. Stinger Block I missiles have extensive infrared counter-countermeasure capabilities and can engage targets from any aspect to include head-on. The missile utilizes a high-explosive, hit-to-kill warhead. Stinger can be fired from the shoulder or from a variety of platforms to include ground vehicles and helicopters. The missile is delivered as a certified wooden round and requires no field testing or maintenance.

The Stinger Product Improvement provides design, development, test and integration of a Proximity Fuze into the existing Stinger Block I missiles. The Proximity Fuze will improve system effectiveness against the evolving UAS threat. Unmanned Aerial System Defense (UAS-D) is a requirement of the Operational Requirements Document (ORD) for the Stinger Guided Missile System.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	<b>FY 2014 Base</b>	FY 2014 OCO	FY 2014 Total
Previous President's Budget	53.015	20.733	7.646	-	7.646
Current President's Budget	52.811	20.733	1.578	-	1.578
Total Adjustments	-0.204	0.000	-6.068	-	-6.068
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Adjustments to Budget Years</li> </ul>	0.101	-	-6.068	-	-6.068

Exhibit R-2A, RDT&E Project Ju	Exhibit R-2A, RDT&E Project Justification: PB 2014 Army									DATE: Apr	il 2013	
APPROPRIATION/BUDGET ACT 2040: Research, Development, Te BA 7: Operational Systems Devel	est & Evalua	ation, Army			PE 020380	NOMENCL 01A: Missile ent Program	/Air Defens		PROJECT 036: PATR	IOT PROD	IMP PGM	
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
036: PATRIOT PROD IMP PGM	-	42.938	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing (	Continuing
Quantity of RDT&E Articles												

<sup>\*</sup>FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

### Note

PATRIOT Product Improvement Program is now reported under Program Element 677865, DV8.

# A. Mission Description and Budget Item Justification

Project 036: PATRIOT is an advanced Surface-to-Air guided missile system with a high probability of kill capable of operation in the presence of Electronic Countermeasures (ECM) and able to conduct multiple simultaneous engagements against high performance air breathing targets and ballistic missiles likely to be encountered by US Forces. The PATRIOT Product Improvement Program provides for the upgrade of the PATRIOT System through individual materiel changes. These improvements focus on the evolving threat and will provide a more robust capability and the foundation upon which future improvements can more readily be incorporated with minimal hardware changes. Efforts will be made to expedite Patriot materiel solutions (e.g. Radar Digital Processor, Communications Upgrades, Radars on the Net) to both enhance capability and facilitate integration into the IAMD architecture.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: PATRIOT Product Improvement	42.938	0.000	0.000
Articles:	0		
Description: Software Improvement for Threat Evolution			
FY 2012 Accomplishments: FY2012 PATRIOT Product Improvement (PIP) funds continued Software Improvement for Threat Evolution and Radar Digital Processor (RDP) development efforts.			
Accomplishments/Planned Programs Subtotals	42.938	0.000	0.000

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

N/A

Remarks

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	<b>PROJECT</b>	
2040: Research, Development, Test & Evaluation, Army	PE 0203801A: Missile/Air Defense Product	036: <i>PATR</i>	IOT PROD IMP PGM
BA 7: Operational Systems Development	Improvement Program		

# D. Acquisition Strategy

The design objective of the PATRIOT system was to provide a baseline system capable of modification to cope with continuing threat evolution. This program minimizes technological risks and provides a means of enhancing system capability through planned upgrades of deployed systems. The PATRIOT Product Improvement program upgrades the PATRIOT system to address operational lessons learned, enhancements to joint force interoperability and communications, and other system performance improvements to provide overmatch capability against the emerging threat. Upgrades are implemented through individual hardware and software material changes and fielded incrementally. This program encompasses several changes which will require the use of a variety of acquisition methods to develop, test, procure and field. **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 2014 Army

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

**PROJECT** 

2040: Research, Development, Test & Evaluation, Army

PE 0203801A: Missile/Air Defense Product

036: PATRIOT PROD IMP PGM

BA 7: Operational Systems Development

Improvement Program

Management Service	es (\$ in M	illions)		FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Government Program Management	Various	RSA:various	25.955	0.535	Feb 2012	-		-		-		-	0.000	26.490	Continuing
U.S. Contracts	C/FFP	Intuitive Research and Technology Corp. (IRTC):Huntsville, AL	1.028	0.377	Feb 2012	-		-		-		-	0.000	1.405	Continuing
		Subtotal	26.983	0.912		0.000		0.000		0.000		0.000	0.000	27.895	

#### Remarks

Non-Applicable (N/A); Redstone Arsenal (RSA)

Product Developme	Product Development (\$ in Millions)			FY 2	2012 FY		2013	1	2014 ase	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Improvement for Threat Evolution	Various	Multiple:Multiple	68.997	5.773	Feb 2012	-		-		-		-	0.000	74.770	0.000
Radar Digital Processor (RDP)	Various	Raytheon:Massachus	etts 0.000	35.400	Feb 2012	-		-		-		-	0.000	35.400	0.000
		Subtotal	68.997	41.173		0.000		0.000		0.000		0.000	0.000	110.170	0.000

### Remarks

Sole Source-Firm Fixed Price (SS-FFP)

Test and Evaluation	Test and Evaluation (\$ in Millions)			FY 2	2012	FY 2	013	FY 2 Ba	-	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
RDEC and Other Govt Agencies	Various	RSA:Various	103.891	0.853	Feb 2012	-		-		-		-	0.000	104.744	Continuing
		Subtotal	103.891	0.853		0.000		0.000		0.000		0.000	0.000	104.744	

**UNCLASSIFIED** Page 5 of 14

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

**PROJECT** 

2040: Research, Development, Test & Evaluation, Army

PE 0203801A: Missile/Air Defense Product

036: PATRIOT PROD IMP PGM

BA 7: Operational Systems Development

Improvement Program

Test and Evaluation (\$ in N	illions)		FY:	2012	FY :	2013		2014 ase		2014 CO	FY 2014 Total			
Contr.  Methor  Cost Category Item & Tyl	d Performing	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract

### Remarks

Aviation and Missile Command (AMCOM), Research and Development and Engineering Center (RDEC)

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Proje	ect Cost Totals 199.871	42.938	0.000	0.000	0.000	0.000	0.000	242.809	

Remarks

Exhibit R-2A, RDT&E Project Ju	stification	: PB 2014 A	Army							DATE: Apr	il 2013	
APPROPRIATION/BUDGET ACT 2040: Research, Development, Te BA 7: Operational Systems Development	est & Evalua	ation, Army			PE 020380	<b>NOMENCL<i>i</i></b> )1A: <i>Missile</i> ent Program	/Air Defense	e Product	PROJECT DF8: <i>DF8</i>			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
DE0 DE0		0.404	0.000	0 000		0.000	0.000	0 000	0 000	0.000		<b>~</b>

DF8: *DF8* 0.000 0.000 0.000 0.000 0.000 0.000 Continuing Continuing 0.194 0.000 Quantity of RDT&E Articles

### **Note**

DF8 Funding was realigned to Program Element 0203808, DS1.

# A. Mission Description and Budget Item Justification

This program is reported in accordance with Title 10, United States Code, Section 119(a)(1) in the Special Access Program Annual Report to Congress.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: DF8	0.194	0.000	0.000
Articles:	0		
Description: Funding is provided for the following effort			
FY 2012 Accomplishments: Program will be reported in accordance with Title 10, United States Code, Section 119(a)(1) in the Special Access Program Annual Report to Congress.			
Accomplishments/Planned Programs Subtotals	0.194	0.000	0.000

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

N/A

### Remarks

# **D. Acquisition Strategy**

N/A

### **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.

<sup>\*</sup>FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army

DATE: April 2013

0.000

0.000

0.194

0.000

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

**Project Cost Totals** 

0.000

0.194

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0203801A: Missile/Air Defense Product

0.000

Improvement Program

**PROJECT** DF8: *DF8* 

Product Developme	Development (\$ in Millions)			FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DF8	TBD	TBD:TBD	0.000	0.194		-		-		-		-	0.000	0.194	0.000
		Subtotal	0.000	0.194		0.000		0.000		0.000		0.000	0.000	0.194	0.000
			All Prior Years	FY	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total	Cost To	Total Cost	Target Value of Contract

0.000

Remarks

**UNCLASSIFIED** Page 8 of 14

0.000

Exhibit R-2A, RDT&E Project Ju	Exhibit R-2A, RDT&E Project Justification: PB 2014 Army													
APPROPRIATION/BUDGET AC 2040: Research, Development, To BA 7: Operational Systems Development	PE 020380	NOMENCL 01A: Missile ent Program	/Air Defens	PROJECT DT5: Sting	T ger Product Improvement									
COST (\$ in Millions)	All Prior Years		FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost		
DT5: Stinger Product Improvement	-	9.679	20.733	1.578	-	1.578	0.000	0.000	0.000	0.000	Continuing	Continuing		
Quantity of RDT&E Articles														

<sup>\*</sup>FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

#### Note

This effort funds the design, development and testing of the Stinger Proximity Fuze (Prox Fuze) and integrates the Proximity Fuze into the Stinger Block I missile.

# A. Mission Description and Budget Item Justification

The Stinger Block I missile is an advanced, fire-and-forget, short-range, man-portable, air defense weapon system. It provides low-altitude defense for ground forces against attack or aerial observation by low-flying Unmanned Aerial System (UAS), Cruise Missile (CM), Rotary Wing (RW), and Fixed-Wing (FW) threats. Stinger employs an infrared (heat seeking)/ultraviolet seeker to guide to the target. Stinger Block I has extensive infrared counter-countermeasure capabilities and can engage targets from any aspect to include head-on. The missile utilizes a high-explosive, hit-to-kill warhead. Stinger can be fired from the shoulder or from a variety of platforms to include ground vehicles and helicopters. The missile is delivered as a certified wooden round and requires no field testing or maintenance.

The Stinger Product Improvement provides design, development, test and integration of a Proximity Fuze into the existing Stinger Block I missiles. The Proximity Fuze will improve system effectiveness against the evolving UAS threat. Unmanned Aerial System Defense (UAS-D) is a requirement of the Operational Requirements Document (ORD) for the Stinger Guided Missile System.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Proximity Fuze (Prox Fuze) Development and Integration	9.454	15.383	1.010
Articles:	0	0	
<b>Description:</b> This effort funds the design and development of a Prox Fuze and integrates it into existing STINGER Block I missiles.			
FY 2012 Accomplishments:  Developed requirements, defined functionality, established allocated and product baselines, and performed preliminary detail design and development of a Prox Fuze and integration methods and processes. Performed producibility engineering, build brass boards and conduct component and subsystem test. Performed technical assessments, concept studies, cost reduction, risk reduction, threat analysis, and required documentation.			
FY 2013 Plans:			

UNCLASSIFIED
Page 9 of 14

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203801A: Missile/Air Defense Product Improvement Program	PROJECT DT5: Stinger Produ	uct Improvem	ent
B. Accomplishments/Planned Programs (\$ in Millions, Article Qua	antities in Each)	FY 2012	FY 2013	FY 2014
Complete design and development of Prox Fuze and Block I missile in Prox Fuze and integrate warhead/Prox Fuze assembly into existing S Up-Rounds for testing. Perform technical assessments, concept stud documentation.	tinger Block I missiles for Guided Test Vehicles and All-			
FY 2014 Plans: Complete integration efforts allowing for final revisions and developing	g the required documentation to support.			
Title: Test and Evaluation	Art	0.000 icles:	4.650 0	0.511
<b>Description:</b> This effort funds Government and contractor Development	ental and Operational tests.			
FY 2013 Plans: Perform government and contractor Developmental and Operational f board.	light test, test for hazard classification, lethality, and fuz	e		
FY 2014 Plans: Complete Developmental and Operational flight testing as well as req	uired safety and lethality testing.			
Title: Management Support	Art	0.225 icles: 0	0.700 0	0.057
Description: This effort funds government management and technical	al support.			
FY 2012 Accomplishments:  Provide government management, technical and administrative support	ort for the program in FY 2012.			
FY 2013 Plans: Provide government management, technical and administrative support	ort for the program in FY 2013.			
FY 2014 Plans: Provide government management, technical and administrative support	ort for the program in FY 2014.			
	Accomplishments/Planned Programs Sub	totals 9.679	20.733	1.578

Exhibit R-2A, RDT&E Project Justi	fication: PB	2014 Army							DATE: A	oril 2013	
APPROPRIATION/BUDGET ACTIVI 2040: Research, Development, Test BA 7: Operational Systems Development	PE 020	<b>EM NOMEN</b> 03801A: <i>Mis</i> vement Prog	sile/Air Defe	PROJEC DT5: Stin	JECT : Stinger Product Improvement						
C. Other Program Funding Summa	ıry (\$ in Milli	ons)									
			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	<u>000</u>	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018		Total Cost
• PE0604869A: <i>Proj M06,</i>	389.630	400.861								0.000	790.491
Patriot.MEADS Compined											
Aggregate Program (CAP)											_
• PE0605456A: <i>Proj PA3, Pac-3/</i>	88.909	69.029	69.175		69.175	130.348	63.975	65.771	66.638	Continuing	Continuing
MSE Missile	74050	40.050	<b>540040</b>		<b>540040</b>		500 007		074 004		
• SSN C53101: MSE Missile	74.953	12.850	546.210		546.210	541.584	560.687	566.757	671.624	_	Continuing
• PE0102419A: <i>Proj E55, JLENS</i>	327.338	190.422	64.450		64.450	32.100	23.850	24.330		0.000	662.490
• PE0605455A: <i>Proj S35</i> ,	1.529									0.000	1.529
SLAMRAAM	0.000	70.000	70.000		70.000	407.507	4.40, 400	454 700	450 700	0 - 1: - 1 - 1	
• PE 0604319A: <i>Proj DU3, IFPC2</i>	9.269	76.039	79.232		79.232	107.587	146.463	151.769	159.700	Continuing	Continuing
(FY 2011/2012 PE0603305A IFPC											
II- Intercept) • PE0605457A: Proj S40, Army	270.180	262.211	345.410		345.410	372.000	222.940	143.196	90 102	Continuing	Continuing
Integrated Air and Missile Defense	270.100	202.211	343.410		343.410	372.000	222.940	143.190	60.103	Continuing	Continuing
(AIAMD)											
• SSN BZ5075: Army IAMD Battle			20.980		20.980	101.830	327.100	492.820	455 390	Continuing	Continuing
Command system (IBCS)			20.000		20.000	101.000	027.100	102.020	100.000	Continuing	Continuing
• PE 0208053: <i>Proj</i> 635, <i>Joint Tact</i>	27.586	31.738	14.109		14.109	2.903	8.134	7.642	8.957	Continuing	Continuina
Grd Station - PI (MIP)		· · · · · · ·					0		0.00.		0011
• PE 0604820A: <i>Proj E10</i> , Sentinel	2.885	3.486	1.944		1.944	1.927	2.953	3.007	3.053	Continuing	Continuina
• PE 0604741A: <i>Proj 126, 146,</i>	82.932	73.333	37.409		37.409	14.670	15.171	14.409			Continuing
149; Air Defense C2I Eng Dev										3	
Remarks											
_											

This program is a supporting system of the Army Integrated Air and Missile Defense (IAMD) architecture.

### D. Acquisition Strategy

In FY 2012 the Stinger Based Systems (SBS) Product Office awarded a Proximity Fuze (Prox Fuze) development contract for the design, development, test and integration of a Proximity Fuze into existing Stinger Block I missiles. The Proximity Fuze will improve system effectiveness against the evolving UAS threat. Unmanned Aerial System Defense (UAS-D) is a requirement of the Operational Requirements Document (ORD) for the Stinger Guided Missile System.

### 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.

UNCLASSIFIED
Page 11 of 14

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army **R-1 ITEM NOMENCLATURE** APPROPRIATION/BUDGET ACTIVITY **PROJECT** 2040: Research, Development, Test & Evaluation, Army PE 0203801A: Missile/Air Defense Product DT5: Stinger Product Improvement BA 7: Operational Systems Development Improvement Program FY 2014 FY 2014 FY 2014 Management Services (\$ in Millions) FY 2012 oco FY 2013 Base Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Complete Cost Contract Cost **CMDS** Program Mgt/Admin Various 0.000 0.225 0.700 0.057 0.057 0.000 0.982 0.000 PO:Huntsville, AL Subtotal 0.000 0.225 0.700 0.057 0.000 0.057 0.000 0.982 0.000 FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Picatinny Proximity Fuze **MIPR** Arsenal:Picatinny 0.000 9.454 May 2012 15.383 1.010 1.010 0.000 25.847 0.000 Development Arsenal, NJ Subtotal 0.000 9.454 15.383 1.010 0.000 1.010 0.000 25.847 0.000 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Award Award Cost To Total Value of **Activity & Location** Cost Cost Complete Contract **Cost Category Item** & Type Years Date Cost Date Date Cost Date Cost Cost **CMDS Project** Office:Redstone Government Test & Various Arsenal AL: White 0.000 4.650 0.511 0.511 0.000 5.161 0.000 Evaluation Sands Missile Range, NM Subtotal 0.000 0.000 4.650 0.511 0.000 0.511 0.000 5.161 0.000 Target All Prior FY 2014 FY 2014 FY 2014 Cost To Total Value of Years FY 2012 FY 2013 Base oco Total Complete Cost Contract **Project Cost Totals** 0.000 9.679 20.733 1.578 0.000 1.578 31.990 0.000 0.000 Remarks

	FY 2012		FY 2013			FY 2014			FY 2015			,	FY 2016				FY 2017				FY 2018			8				
	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
Technology Demonstrations				·			·					·							,							,		
Proximity Fuze Development																												
Critical Design Review																												
Operational Test Readiness Reviews																												
Developmental Testing/Operational Testing																												

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

2040: Research, Development, Test & Evaluation, Army
BA 7: Operational Systems Development

PE 0203801A: Missile/Air Defense Product
Improvement Program

DT5: Stinger Product Improvement

# Schedule Details

	St	End				
Events	Quarter	Year	Quarter	Year		
Technology Demonstrations	2	2012	2	2012		
Proximity Fuze Development	3	2012	2	2014		
Critical Design Review	4	2013	4	2013		
Operational Test Readiness Reviews	1	2014	2	2014		
Developmental Testing/Operational Testing	3	2014	3	2014		