Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army											Date: March 2014	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*							
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
Total Program Element	-	29.352	43.382	65.333	-	65.333	66.635	54.586	44.762	54.199	Continuing	Continuing
L67: *Soldier Night Vision Devices*	-	-	11.265	15.256	-	15.256	12.422	12.710	19.654	24.722	Continuing	Continuing
L70: *Night Vision Dev Ed*	-	9.904	6.666	21.544	-	21.544	37.377	28.465	12.201	4.454	Continuing	Continuing
L75: *Profiler*	-	-	2.757	3.048	-	3.048	0.591	-	-	-	-	6.396
L76: *Dismounted Fire Support Laser Targeting Systems*	-	-	1.100	4.915	-	4.915	4.824	6.015	6.317	14.759	Continuing	Continuing
L79: *Joint Effects Targeting Systems (JETS)*	-	19.448	21.594	20.570	-	20.570	11.421	7.396	6.590	10.264	-	97.283

The FY 2015 OCO Request will be submitted at a later date.

Note

Program Change Summary Explanation:

Fiscal Year 2013: Program decreases of $1.212 million to Project L70 and $2.057 million to Project L79 which were Congressional and SBIR/STTR reductions.

Fiscal Year 2015: Program increases of $15.725 million to Project L70 for 3rd GEN (IFLIR) B Kit development, $10.519 million to Project L79 for JETS development, and $3.796 million to Project L76 for Dismounted Fire Support Targeting System development efforts. Program decreases of -$1.731 million to Project L67 and -$0.557 million to Project L75 realigned to higher priority Army efforts.

A. Mission Description and Budget Item Justification

This program element provides night vision/reconnaissance, surveillance and target acquisition technologies required for U. S. defense forces to engage enemy forces twenty-four hours a day under conditions of degraded visibility due to darkness, adverse weather, battlefield obscurants, foliage and man-made structures. These developments and improvements to high performance night vision electro-optics, radar, laser, and thermal systems and integration of related multi-sensor suites will enable near to long range target acquisition, identification and engagement to include significant fratricide reduction, which will improve battlefield command and control in "around-the-clock" combat operations.

Project L67 develops, improves and miniaturizes high performance night vision electro-optics, thermal and laser systems. It also provides for systems integration of related multi-sensor suites to enable near to long-range target acquisition and engagement as well as improved battlefield command and control in around-the-clock combat operations. Further, this funding supports, near term, the development, test, and evaluation of the Family of Weapon Sights (FWS). In FY 2017 through FY 2019, this funding supports Pre-shot Threat Detection (PTD) through Engineering and Manufacturing Development (EMD). It focuses on adapting demonstrated technologies

that bring improvements to the dismounted Soldiers' equipment. This project develops or enhances equipment that provides the individual Soldier's day/night situational awareness and individual targeting capability, sniper fire detection and location capability, and integrates improved target location and self-location capability to eliminate friendly fire incidents.

Project L70 focuses on night vision, reconnaissance, surveillance and target acquisition (RSTA) sensor and suites of sensors to provide well-defined surveillance and targeting capabilities for a variety of Current, Modular, and Future Force platforms. This project includes: 3rd Generation Improved Forward Looking Infra-Red (3rd GEN (IFLIR)), formerly called Improved Forward Looking Infra-Red (IFLIR) B-Kit development activities, and the Assistant Secretary of the Army for Acquisition, Logistics, and Technology ASA(ALT) Common Operating Environment (COE) effort to meet network interoperability requirements and improve the soldier-machine interface of the POR.

Project L75 focuses on development of Profiler Block enhanced capabilities for meteorological(MET) measurement sensors and data. Improvements have reduced the footprint (less soldiers/vehicles) and complexity of the system, improved performance (accuracy), improved survivability, connectivity, no balloon sensor, multiple initialization data, and terrain visualization. The improved MET message data will increase lethality by enabling artillery a greater probability of first round hit with indirect fire systems. Profiler Block III provides a networked laptop configuration while further reducing the system's logistics footprint with the elimination of the High Mobility Multi-purpose Wheeled Vehicle (HMMWV) mounted shelter and trailer located in the Tactical Operations Center (TOC). The Profiler Virtual Module (PVM), a product improvement to the Block III, concept includes the following updates: update of weather model; update of software architecture removing legacy Block I code and creating a modular framework; development in conjunction with the Advanced Field Artillery Tactical Data System (AFATDS) program including AFATDS version II, to provide increased interoperability and usability; and to enable operation of the Profiler system in a virtual machine for use in the Common Operating Environment (COE) versions 2,3,4,and 5. This concept is a flexible approach that supports use of existing Block III hardware, increased accuracy during technical refresh of hardware with higher performance computers, and virtualization on the Command Post Computing Environment (CP CE) server.

Project L76 matures technologies and capabilities which benefit the Lightweight Laser Designator Rangefinder (LLDR, AN/PED-1, AN/PED-1A, and AN/PED-1B), Joint Effects Targeting System (JETS), and other precisioning targeting systems. These precision targeting systems are used by dismounted Soldiers to locate, identify, and target enemy assets. This project focuses on reducing weight, improving imaging performance, and increasing targeting accuracy. Targeting accuracy improvements will focus on affordable, non-magnetic, high accuracy, full-time (24/7), and all weather Azimuth and Vertical Angle Measurement (AVAM) devices, with reduced size, weight and power characteristics.

Project L79 focuses on the Joint Effects Targeting System (JETS) which is an Army program with joint interest (Air Force and Marine Corps). Joint Effects Targeting System (JETS) will meet the one-man, hand-held precision targeting gap identified by the Fire Center of Excellence (FCOE). JETS is a light-weight, handheld system that will provide the single dismounted observer and Joint Terminal Attack Controller (JTAC) with a common, enhanced capability to rapidly acquire, accurately locate, positively identify, and precisely designate targets. JETS Target Location and Designation System (TLDS) will be able to interface with existing and future Service Forward Entry Systems (FESs)

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army					Date: March 2014
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 5: *System Development & Demonstration (SDD)*			R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*		
B. Program Change Summary ($ in Millions)	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO**	**FY 2015 Total**
Previous President's Budget	32.621	43.405	37.581	-	37.581
Current President's Budget	29.352	43.382	65.333	-	65.333
Total Adjustments	-3.269	-0.023	27.752	-	27.752
• Congressional General Reductions	-2.347	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.922	-			
• Adjustments to Budget Years	-	-0.023	27.752	-	27.752

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*	Project (Number/Name) L67 / *Soldier Night Vision Devices*	

COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
L67: *Soldier Night Vision Devices*	-	-	11.265	15.256	-	15.256	12.422	12.710	19.654	24.722	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This project develops, improves and miniaturizes high performance night vision electro-optics, thermal and laser systems. It also provides for systems integration of related multi-sensor suites to enable near to long-range target acquisition and engagement as well as improved battlefield command and control in around-the-clock combat operations. Further, this funding supports, near term, the development, test, and evaluation of the Family of Weapon Sights (FWS). In FY17 through FY19, this funding supports Pre-shot Threat Detection (PTD) through Engineering and Manufacturing Development (EMD). It focuses on adapting demonstrated technologies that bring improvements to the dismounted Soldiers' equipment. This project develops or enhances equipment that provides the individual Soldier's day/night situational awareness and individual targeting capability, sniper fire detection and location capability, and integrates improved target location and self-location capability to eliminate friendly fire incidents.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Enhanced Night Vision Goggle (ENVG)	-	1.735	-
Articles:	-	-	-
Description: The AN/PSQ-20 ENVG is a helmet-mounted passive device for the individual Soldier that fuses image intensification and long wave infrared imagery into a single, integrated image.			
FY 2014 Plans: Initiate prodution qualification testing for multiple (AN/PSQ-20) new contracts.			
Title: Family of Weapons Sights (FWS)	-	9.530	14.256
Articles:	-	-	-
Description: FWS is a family of weapon sights that utilize advances in thermal and image intensified technologies to produce Individual (I) , Crew-Served (CS), and Sniper (S) weapon sights operable in-line with a day optic or in a stand-alone mode. FWS includes fused multi-band imagery and rapid target acquisition with ballistic equations, providing the Soldier with improved capabilities during day and night operations.			
FY 2014 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L67 / *Soldier Night Vision Devices*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
FWS-I Enginerring and Manufacturing Development (EMD) effort will design, build and deliver systems for Government and Contractor testing. ***FY 2015 Plans:*** Complete Government and Contractor testing of FWS-I EMD systems in support of Milestone C, 3rd quarter FY15. Initiate FWS-CS Engineering and Manufacturing Development including completion of CS system design and build of production representative systems to support of government and contractor testing.			
Title: Small Tactical Optical Rifle Mounted (STORM) Engineering Change Proposal (ECP) ***Description:*** The AN/PSQ-23 STORM Micro-Laser Range Finder (MLRF) is a weapon-mounted multi-function laser system. It provides an eye safe laser range finder, digital compass, Infrared (IR) and visible aiming lights, and an IR illuminator for far target location with continuous range, accuracy, weight and power performance enhanced capabilities. Funding supports qualifying smaller, lighter, cheaper STORM variant (STORM SLX) with Soldiers. ***FY 2015 Plans:*** Complete Qualification test for ECP units.	-	-	0.500
Title: Laser Target Locator Module (LTLM) Engineering Change Proposal (ECP) ***Description:*** LTLM is a second generation Lightweight, Handheld Laser Target Locator with a direct view optic, un-cooled thermal camera, eye-safe laser range finder, digital magnetic compass, and an internal SAASM GPS receiver. Funding supports qualifying smaller, lighter, cheaper LTLM variant (LTLM II) with Soldiers. ***FY 2015 Plans:*** Complete LTLM II qualification testing of ECP units.	-	-	0.500
Accomplishments/Planned Programs Subtotals	-	11.265	15.256

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• 603774A VT7: *603774A - Night Vision Systems Advanced Development (VT7)*	9.556	9.061	3.052	-	3.052	5.181	5.120	4.934	4.944	Continuing	Continuing
• Helmet Mounted Enhanced Vision Devi: *Helmet Mounted*	118.698	129.111	134.365	-	134.365	137.769	88.683	63.241	77.503	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L67 / *Soldier Night Vision Devices*	

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Enhanced Vision Devices (HMEVD) (SSN K36400)											
• Thermal Weapon Sight (TWS): *Thermal Weapon Sight (TWS) (SSN K22900)*	20.054	100.074	-	-	-	-	-	-	0.154	Continuing	Continuing
• Family of Weapons Sights - Inidivid: *Family of Weapons Sights - Inidividual (FWS-I) (SSN K22002)*	-	-	49.205	-	49.205	45.898	71.610	66.690	86.239	Continuing	Continuing
• Family of Weapons Sights - Crew Ser: *Family of Weapons Sights - Crew Served (FWS-CS) (SSN K22003)*	-	-	-	-	-	49.815	40.633	45.544	58.894	Continuing	Continuing
• Family of Weapons Sights - Sniper: *Family of Weapons Sights - Sniper (FWS-S) (SSN K22004)*	-	-	-	-	-	-	8.788	14.458	18.697	Continuing	Continuing
• Sniper Night Sight (SNS): *Sniper Night Sight (SNS) (SSN K41500)*	11.660	-	-	-	-	-	-	-	0.020	Continuing	Continuing
• Small Tactical Optical Rifle Mounte: *Small Tactical Optical Rifle Mounted (STORM) (SSN K35110)*	20.689	22.300	18.520	-	18.520	15.096	14.826	21.275	25.047	Continuing	Continuing
• Laser Target Locators: *Laser Target Locators (LTL) (SSN B53800)*	27.593	30.949	26.536	-	26.536	27.667	30.794	18.690	14.794	Continuing	Continuing

Remarks

D. Acquisition Strategy

The various developmental programs in this project continue to exercise competitively awarded contracts using best value source selection procedures.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*	Project (Number/Name) L67 / *Soldier Night Vision Devices*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PROGRAM MGMT	Allot	Various : Various	0.946	-		0.628	Jun 2014	1.171	Dec 2014	-		1.171	Continuing	Continuing	-
		Subtotal	0.946	-		0.628		1.171		-		1.171	-	-	-

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Family of Weapon Sights-Individual (FWS-I)	MIPR	Various : Various	15.904	-		8.663	Jun 2014	11.768	Dec 2014	-		11.768	-	36.335	-
		Subtotal	15.904	-		8.663		11.768		-		11.768	-	36.335	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	MIPR	NVESD : Ft Belvoir, VA	1.686	-		0.239	Jun 2014	0.221	Dec 2014	-		0.221	Continuing	Continuing	-
		Subtotal	1.686	-		0.239		0.221		-		0.221	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Test Support Activity	Various	Army Test and Evaluation Command : Various	41.560	-		1.735	Jun 2014	2.096	Dec 2014	-		2.096	Continuing	Continuing	-
		Subtotal	41.560	-		1.735		2.096		-		2.096	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*	Project (Number/Name) L67 / *Soldier Night Vision Devices*	

	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	60.096	-		11.265		15.256		-		15.256	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L67 / *Soldier Night Vision Devices*

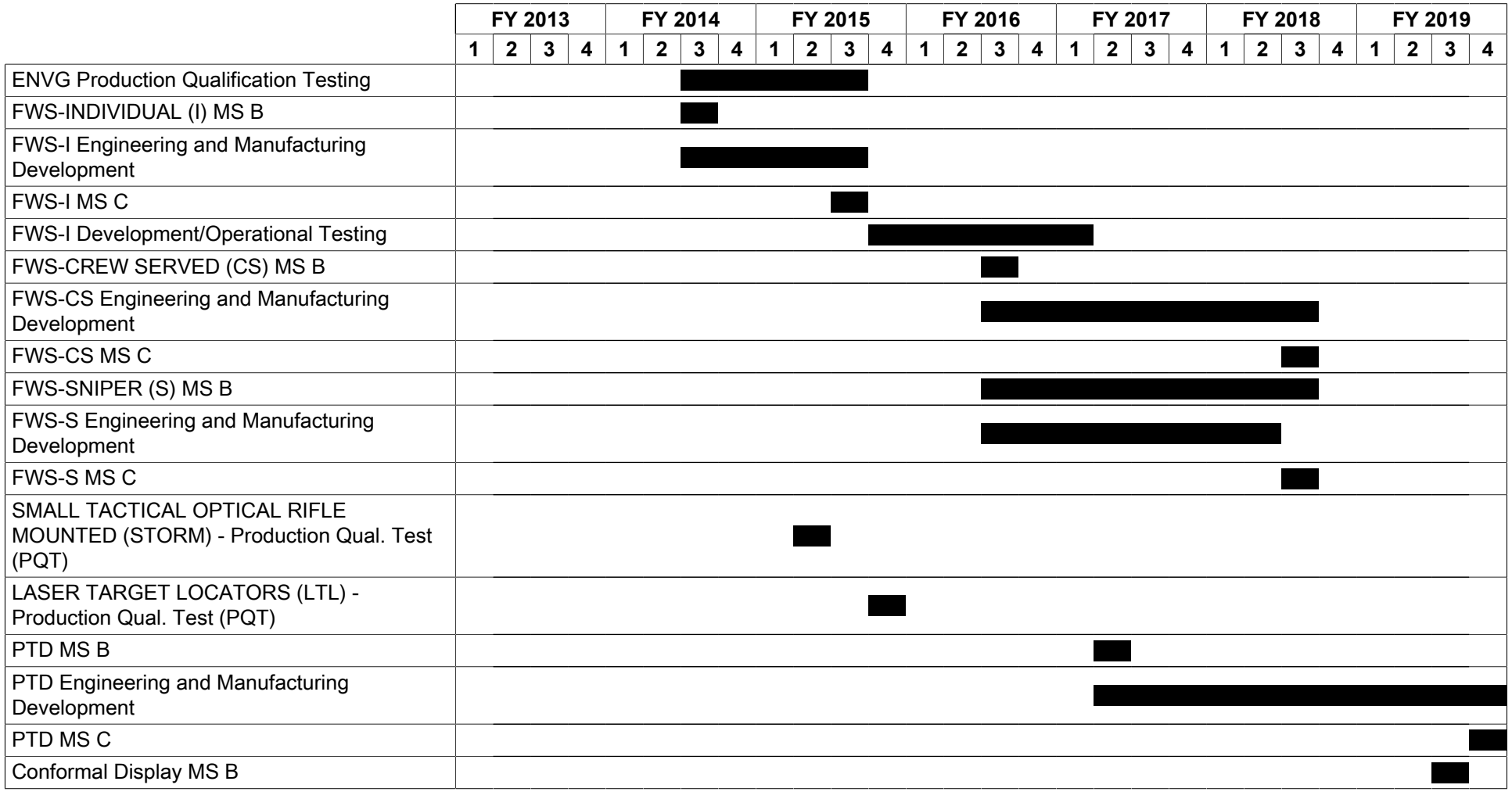

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L67 / *Soldier Night Vision Devices*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
ENVG Production Qualification Testing	3	2014	3	2015
FWS-INDIVIDUAL (I) MS B	3	2014	3	2014
FWS-I Engineering and Manufacturing Development	3	2014	3	2015
FWS-I MS C	3	2015	3	2015
FWS-I Development/Operational Testing	4	2015	1	2017
FWS-CREW SERVED (CS) MS B	3	2016	3	2016
FWS-CS Engineering and Manufacturing Development	3	2016	3	2018
FWS-CS MS C	3	2018	3	2018
FWS-SNIPER (S) MS B	3	2016	3	2018
FWS-S Engineering and Manufacturing Development	3	2016	2	2018
FWS-S MS C	3	2018	3	2018
SMALL TACTICAL OPTICAL RIFLE MOUNTED (STORM) - Production Qual. Test (PQT)	2	2015	2	2015
LASER TARGET LOCATORS (LTL) - Production Qual. Test (PQT)	4	2015	4	2015
PTD MS B	2	2017	2	2017
PTD Engineering and Manufacturing Development	2	2017	4	2019
PTD MS C	4	2019	4	2019
Conformal Display MS B	3	2019	3	2019

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army											Date: March 2014	
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*				Project (Number/Name) L70 / *Night Vision Dev Ed*			
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
L70: *Night Vision Dev Ed*	-	9.904	6.666	21.544	-	21.544	37.377	28.465	12.201	4.454	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This project performs Engineering and Manufacturing Development (EMD) on high performance night vision, Reconnaissance, Surveillance, and Target Acquisition (RSTA) systems and other related systems that allow forces to locate and track enemy units in day, night, and all battlefield conditions, and through natural and man-made structures and obscurants. It also develops and integrates suites of these sensors to provide well-defined surveillance and targeting capabilities, as well as architectures for these sensors to communicate automatically. These efforts focus on meeting the requisite night vision and RSTA capabilities required for evolving Current Force, Modular Force, and Future Force systems.

The project supports the 3rd Generation Improved Forward Looking Infra-Red (3rd GEN (IFLIR)), formerly called Improved Forward Looking Infra-Red(IFLIR), EMD program, which incorporates the next generation of forward looking infrared technologies. The 3rd GEN (IFLIR) EMD program will leverage critical technology development from the Advanced Thermal Imaging EMD and Combat Vehicle Advanced Sensor Technology (CVAST) effort to develop a common 3rd GEN (IFLIR) B-Kit for integration into US Army FLIR sensor systems in accordance with the approved I-FLIR Capability Development Document (CDD). The common 3rd GEN (IFLIR) B-Kit prescribed by the I-FLIR CDD will allow the Army to achieve economies of scale and avoid duplicative engineering and development costs. As a result, 3rd GEN (IFLIR) capabilities can be delivered at a lower cost to the Abrams, Bradley, Ground Combat Vehicle Infantry Fighting Vehicle (GCV IFV), reconnaissance systems, and potentially leverage 3rd GEN (IFLIR) components for airborne applications. The 3rd GEN (IFLIR) B-Kit provides Mid Wave Infrared and Long Wave Infrared digital video and the electronic interfaces required to integrate the 3rd GEN (IFLIR) technology with the host platform sensor. This 3rd GEN (IFLIR) technology enhances the war-fighters' survivability and lethality through increased identification range performance when integrated in current sensor packages, while enabling the detection of difficult or obscured targets and faster threat detection through automated processes. The 3rd GEN (IFLIR) B-Kit EMD program is also a key element in maintaining the Army FLIR industrial base.

This project also executes the Army Sensor Computing Environment effort which is part of the Assistant Secretary of the Army for Acquisition, Logistics and Technology ASA (ALT) Common Operating Environment (COE) program. The Sensor CE effort focuses on increasing network interoperability across the enterprise and improving the Soldier-machine interface. This is done by defining, demonstrating and standardizing Sensor interfaces across the Army networks. Standardized interfaces delivered from this effort will be incorporated into current and future sensor systems and programs.

FY 2015 Base Funding in the amount of $21.544 Million supports 3rd GEN (IFLIR) B-Kit EMD and finalization of milestone and contract award activities. Additionally, FY 2015 Base Funding supports the continued activities associated with meeting network interoperability requirements and improving the Soldier-machine interface in support of the Army's vision of the Common Operating Environment (COE).

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L70 / *Night Vision Dev Ed*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: 3rd GEN (IFLIR)	5.796	6.066	21.344
Articles:	-	-	-
Description: Development of the 3rd GEN (IFLIR) B-Kit. The 3rd GEN (IFLIR) B-Kit will represent the materiel solution in accordance with the I-FLIR CDD, resulting in a common sensor component for both Ground and Airborne host platforms. ***FY 2013 Accomplishments:*** In accordance with the FY13 approval of the I-FLIR CDD and Platform ECP/Sensor Upgrade programs, funding supports 3rd GEN (IFLIR) B-Kit specification development and MSB preparation activities. ***FY 2014 Plans:*** FY 2014 Base Funding will support 3rd GEN (IFLIR) B-Kit component and platform sensor integration assessments. Funding will also support milestone and solicitation preparation activities. ***FY 2015 Plans:*** FY 2015 Base Funding supports finalization of milestone and contract award activities. Following contract award, FY15 Base Funding initiates 3rd GEN (IFLIR) B-Kit EMD development engineering.			
Title: Common Operating Environment (COE)	4.108	0.600	0.200
Articles:	-	-	-
Description: This effort supports the Common Operating Environment vision by improving the network interoperability requirement and the Soldier-machine interface. Resultant improvements to be made on a program by program basis. ***FY 2013 Accomplishments:*** FY 2013 Base Funding supports continued development of COE to include meeting the network interoperability requirement and improving the soldier-machine interface of the POR. Resultant improvements would be implemented through maintenance upgrades to fielded systems. This effort establishes the Army Sensor Computing Environment (CE) effort in support of the Common Operating Environment (COE) vision. ***FY 2014 Plans:*** FY 2014 Base Funding supports continued development of meeting the network interoperability requirement and improving the Soldier-machine interface. Resultant improvements would be implemented through upgrades to fielded systems, or informing future programs. This effort continues the Army Sensor Computing Environment (CE) effort in support of the Common Operating Environment (COE) vision. ***FY 2015 Plans:***			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L70 / *Night Vision Dev Ed*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
FY 2015 Base Funding supports continued development of the COE program to include meeting the network interoperability requirement and improving the Soldier-machine interface. Specific FY15 activities include configuration management and specification development & implementation.			
Accomplishments/Planned Programs Subtotals	9.904	6.666	21.544

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• ABRAMS Tank Improvement Program: *Abrams Tank Improvement Program (PE 0203735A)*	86.764	101.265	112.544	-	112.544	159.205	138.377	63.262	94.795	Continuing	Continuing
• BRADLEY Improvement Program: *Bradley Improvement Program (PE 0203735A)*	75.769	76.172	92.427	-	92.427	98.997	100.118	115.444	158.070	Continuing	Continuing
• GCV (PE 0605625A FC8): *Ground Combat Vehicle (PE 0605625A FC8)*	570.121	100.147	49.160	-	49.160	49.247	-	-	-	-	768.675
• LRAS3 (K38300): *Long Range Advanced Scout Surveillance System (LRAS3) (K38300) OPA2*	-	5.183	-	-	-	-	-	-	-	-	5.183

Remarks

D. Acquisition Strategy

Fiscal Year 2015 1st and 2nd quarter activities will focus on finalization of contract solicitation and Milestone B (MSB) preparation activities. Following MSB approval, currently planned for 3QFY15, and Milestone Decision Authority (MDA) approval of the Acquisition Strategy, the 3rd GEN (IFLIR) program plans to award multiple competitive, cost plus type Engineering Manufacturing Development (EMD) contracts structured to mitigate technical and industrial base risks. Additional activities include continued development of meeting the network interoperability requirement and improving the Soldier-machine interface in support of the Army's vision of the Common Operating Environment (COE).

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*	Project (Number/Name) L70 / *Night Vision Dev Ed*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Management	C/FP	PM TS : Ft. Belvoir, VA	8.455	0.970	Sep 2013	0.229	Mar 2014	1.241	Mar 2015	-		1.241	-	10.895	9.454
		Subtotal	8.455	0.970		0.229		1.241		-		1.241	-	10.895	9.454

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
FY 2012-FY 2013: Develop, Fab, and Qual of a common Ground Platform Engine with Block II EOCCM	C/TBD	Various : Various	0.049	-		-		-		-		-	-	0.049	-
3rd GEN (IFLIR) Engineering/Document Prep	C/TBD	Various : Various	4.461	3.596	Sep 2013	3.246	Mar 2014	2.172	Mar 2015	-		2.172	-	13.475	-
3rd GEN (IFLIR) B-Kit EMD	C/CPFF	Various : Various	0.000	-		-		17.014	Jun 2015	-		17.014	-	17.014	-
PSS P3I: CE COE	C/FP	Various : Various	2.244	3.390	Sep 2013	-		-		-		-	-	5.634	8.904
		Subtotal	6.754	6.986		3.246		19.186		-		19.186	-	36.172	8.904

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
3rd GEN (IFLIR) Support	C/TBD	Various : Various	24.902	1.626	Sep 2013	2.820	Mar 2014	0.917	Mar 2015	-		0.917	-	30.265	27.995
COE Support	C/TBD	Various : Various	0.272	0.322	Apr 2014	0.371	Mar 2014	0.200	Mar 2015	-		0.200	Continuing	Continuing	-
		Subtotal	25.174	1.948		3.191		1.117		-		1.117	-	-	27.995

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*	Project (Number/Name) L70 / *Night Vision Dev Ed*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Other Test Support	MIPR	Various : Various	15.850	-		-		-		-		-	-	15.850	15.850
		Subtotal	15.850	-		-		-		-		-	-	15.850	15.850

	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	56.233	9.904		6.666		21.544		-		21.544	-	-	62.203

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L70 / *Night Vision Dev Ed*

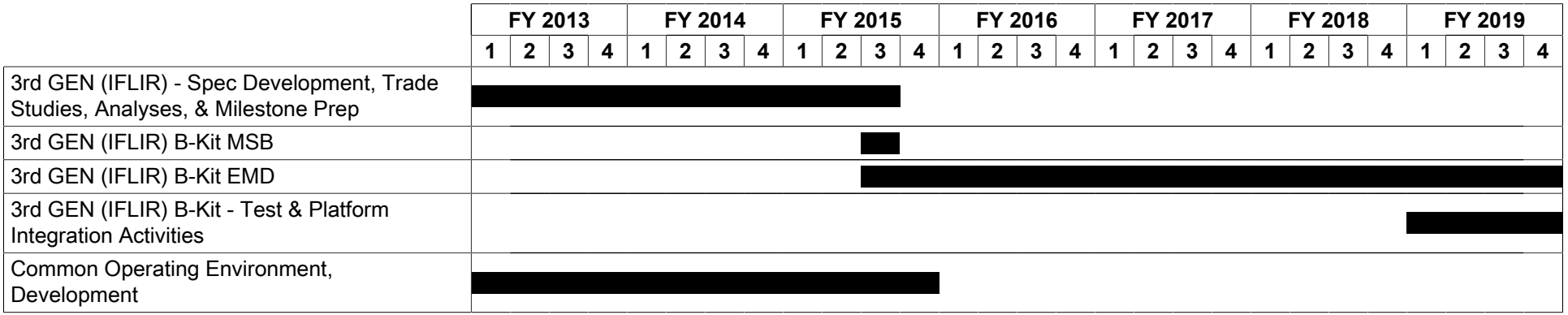

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L70 / *Night Vision Dev Ed*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
3rd GEN (IFLIR) - Spec Development, Trade Studies, Analyses, & Milestone Prep	1	2012	3	2015
3rd GEN (IFLIR) B-Kit MSB	3	2015	3	2015
3rd GEN (IFLIR) B-Kit EMD	3	2015	3	2020
3rd GEN (IFLIR) B-Kit - Test & Platform Integration Activities	1	2019	3	2020
Common Operating Environment, Development	2	2012	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*	Project (Number/Name) L75 / *Profiler*	

COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
L75: *Profiler*	-	-	2.757	3.048	-	3.048	0.591	-	-	-	-	6.396
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

Note

Not applicable for this item.

A. Mission Description and Budget Item Justification

The Profiler provides meteorological (MET) wind speed, wind direction, temperature, barometric pressure, and humidity information required for use in the Advance Field Artillery Tactical Data System (AFATDS). All of these are required for precise targeting and terminal guidance. Profiler uses a numerical mesoscale weather model to build a four-dimensional MET model (height, width, depth, and time) that includes terrain effects to cover an operational area of 500 kilometers. By providing more accurate MET messages, Profiler will enable the artillery to have a greater probability of a first round hit with indirect fire systems. This capability increases the lethality of field artillery systems such as the Multiple Launch Rocket System (MLRS), Paladin, self-propelled or towed howitzers, and mortars. Analysis determined that Profiler Block I satisfied the requirements of Profiler Block II leading to a decision to proceed directly to Profiler Block III. The Profiler Block I used a ground tactical meteorological (TACMET) sensor and MET data from the Air Force Weather Agency (AFWA) broadcast over communications satellites with the weather model to provide highly accurate MET data covering 60 kilometers. Profiler Block III replaces Profiler Block I and provides a networked laptop configuration that enhances system efficiencies and reduces the system's operational and logistics footprint with the elimination of support vehicles, trailers, external sensors and was tested out to the range of 500 kilometers. The Profiler Block III configuration consists of one computer with a common operating system co-located within the tactical Command Post (CP) with a direct interface to the CP local area network (LAN). The Profiler Virtual Module system can function in a manual or automatic mode allowing for an operator to manually create MET messages or for MET to be automatically generated in response to requests from any connected AFATDS computer. A significant Operations and Support cost is realized through this improved configuration. The Profiler Virtual Module will address emerging requirements and system long-term software sustainment challenges. The Profiler Virtual Module concept includes the following updates: update of the MET weather model which enables the use of Gridded Binary Version 2 data; update of software architecture removing legacy Block I code and creating a modular framework; development in conjunction with the AFATDS program, including AFATDS version II, to provide increased interoperability and usability; and to enable operation of the Profiler system in a virtual machine for use in the Common Operating Environment (COE) versions 2,3,4 and 5. This concept is a flexible approach that supports use of existing Block III hardware, increased accuracy during technical refresh of hardware with higher performance computers, and virtualization on the Command Post Computing Environment (CP CE) server.

FY2015 Base funding in the amount of $3.048 million supports the development and coding of requirements for Profiler Virtual Module Common Operating Environment (COE) Version 2 in support of Command Post Computing Environment (CP CE) Software Development and includes Digital Terrain Elevation Data (DTED) upgrades and improved elevation algorithms in the software.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L75 / *Profiler*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Profiler Virtual Module development	-	2.757	-
Articles:	-	-	-
Description: Profiler Virtual Module provides software architecture to create a modular framework. ***FY 2014 Plans:*** Profiler Virtual Module development			
Title: Profiler Virtual Module COE V2 development	-	-	1.948
Description: Implementation of COEv2 requirements and Digital Terrain and Elevation Data (DTED) upgrades and improved elevation algorithms. ***FY 2015 Plans:*** Implementation of COEv2 requirements and Digital Terrain and Elevation Data (DTED) upgrades and improved elevation algorithms.			
Title: Support cost for conversion of the MET model for Profiler Virtual Module	-	-	0.500
Description: Conversion of the MET model for Profiler Virtual Module ***FY 2015 Plans:*** Conversion of the MET model for Profiler Virtual Module and support for the implementation of Digital Terrain and Elevation Data (DTED) upgrades and improved elevation algorithms.			
Title: Formal Qualification Testing/Developmental Testing (FQT/DT)	-	-	0.400
Description: FQT/DT ***FY 2015 Plans:*** Formal Qualification Testing/Developmental Testing (FQT/DT)			
Title: Management Services	-	-	0.200
Description: Cost for Project Management ***FY 2015 Plans:*** Project Management			
Accomplishments/Planned Programs Subtotals	-	2.757	3.048

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L75 / *Profiler*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• Profiler OPA SSN K27900: *Profiler*	11.406	3.027	3.115	-	3.115	5.585	0.409	-	-	-	23.542

Remarks

D. Acquisition Strategy

The Profiler Block III acquisition strategy decision brief to the Milestone Decision Authority (MDA) was presented in January 2010. The Acquisition Decision Memorandum (ADM) authorizing initiation of Profiler Block III was signed by the MDA on 23 February 2010. A limited competitive Firm-Fixed Price (FFP)/Cost Plus Fixed Fee (CPFF) contract was awarded via the Strategic Services Sourcing (S3) contract to build, test and deliver the Block III software to support eight (8) Profiler Block III Production Representative Prototype Systems (PRPS). The Block III program is on schedule and entered production and fielding in the first quarter of FY13. The revised Profiler Acquisition Strategy was approved by the MDA on 28 March 2012 for a product improvement to the Profiler Block III for a Virtual Module supporting the Command Post Computing Environment of the Common Operating Environment (COE).

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*	Project (Number/Name) L75 / *Profiler*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Management	Allot	PM Terrestrial Sensors : Various	2.623	-		0.270	Mar 2014	0.200	Nov 2014	-		0.200	Continuing	Continuing	Continuing
		Subtotal	2.623	-		0.270		0.200		-		0.200	-	-	-

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Award efforts for s/w porting to laptop	C/FP	Mantech : Red Bank, NJ	5.495	-		-		-		-		-	-	5.495	-
Initiate backup sensor effort	Various	Army Research Lab : various	1.191	-		-		-		-		-	-	1.191	-
Profiler Virtual Module SW development and data gathering	MIPR	SEC, FSED : Ft. Sill, Oklahoma	0.000	-		1.997	Mar 2014	-		-		-	-	1.997	-
Profiler Virtual Module COE V2 development and data gathering	MIPR	SEC, FSED : Ft. Sill, Oklahoma	0.000	-		-		1.948	Nov 2014	-		1.948	-	1.948	-
		Subtotal	6.686	-		1.997		1.948		-		1.948	-	10.631	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	MIPR	CECOM : Aberdeen, MD	3.015	-		-		-		-		-	-	3.015	-
Sys Engr/Technical Assistance	MIPR	Various : Various	1.917	-		-		-		-		-	-	1.917	-
Conversion of MET model for Profiler Virtual Module	MIPR	ARL, Various : WSMR, NM	1.267	-		0.490	Mar 2014	0.500	Nov 2014	-		0.500	Continuing	Continuing	Continuing
		Subtotal	6.199	-		0.490		0.500		-		0.500	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*	Project (Number/Name) L75 / *Profiler*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Planning and Preparation	Various	ATEC, Various, CECOM, PRD, : Dir, APG, MD	1.557	-		-		-		-		-	-	1.557	-
Formal Qualification Test/ Developmental Test and test ramp up activities	MIPR	ATEC : Various	0.000	-		-		0.400	Nov 2014	-		0.400	Continuing	Continuing	Continuing
Limited User Test	MIPR	ATEC, : Various	1.552	-		-		-		-		-	-	1.552	-
Conduct Block III Austere Testing	MIPR	ARL, ATEC, : Aberdeen Proving Ground, MD	0.339	-		-		-		-		-	-	0.339	-
		Subtotal	3.448	-		-		0.400		-		0.400	-	-	-

	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	18.956	-		2.757		3.048		-		3.048	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L75 / *Profiler*

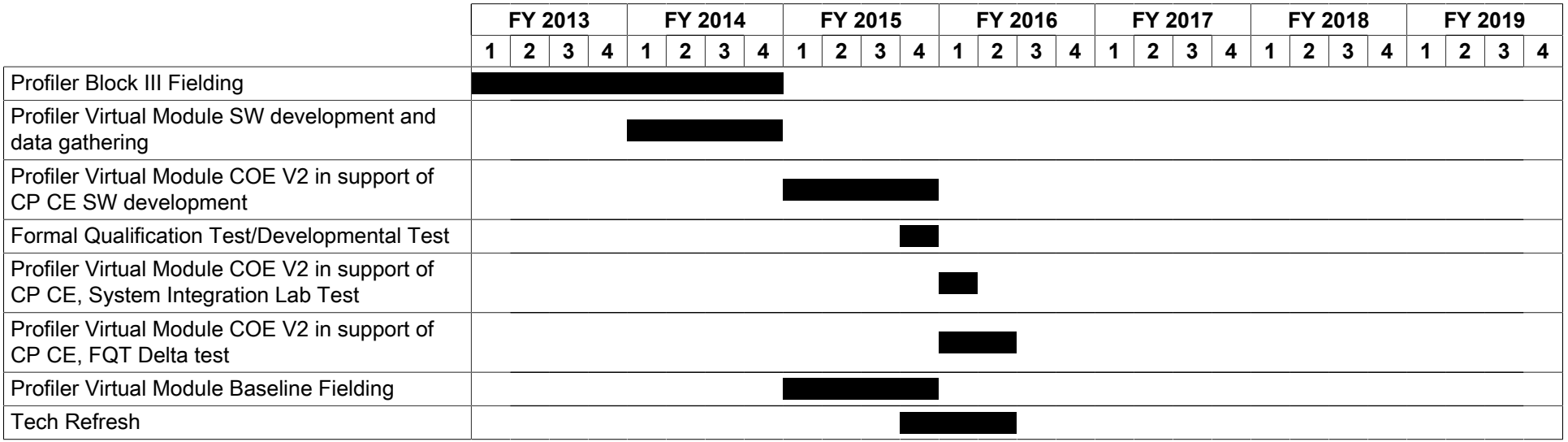

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L75 / *Profiler*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Profiler Block III Fielding	1	2013	4	2014
Profiler Virtual Module SW development and data gathering	1	2014	4	2014
Profiler Virtual Module COE V2 in support of CP CE SW development	1	2015	4	2015
Formal Qualification Test/Developmental Test	4	2015	4	2015
Profiler Virtual Module COE V2 in support of CP CE, System Integration Lab Test	1	2016	1	2016
Profiler Virtual Module COE V2 in support of CP CE, FQT Delta test	1	2016	2	2016
Profiler Virtual Module Baseline Fielding	1	2015	4	2015
Tech Refresh	4	2015	2	2016

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*	Project (Number/Name) L76 / *Dismounted Fire Support Laser Targeting Systems*	

COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
L76: *Dismounted Fire Support Laser Targeting Systems*	-	-	1.100	4.915	-	4.915	4.824	6.015	6.317	14.759	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This project matures technologies and capabilities which benefit the Lightweight Laser Designator Rangefinder (LLDR, AN/PED-1, AN/PED-1A, and AN/PED-1B), Joint Effects Targeting System (JETS), and other precisioning targeting systems. These precision targeting systems are used by dismounted Soldiers to locate, identify, and target enemy assets. This project focuses on reducing weight, improving imaging performance, and increasing targeting accuracy. Targeting accuracy improvements will focus on affordable, non-magnetic, high accuracy, full-time (24/7), and all weather Azimuth and Vertical Angle Measurement (AVAM) devices, with reduced size, weight and power characteristics.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Azimuth and Vertical Angle Measurement (AVAM) development	-	0.900	4.315
Articles:	-	-	-
Description: AVAM is a non-magnetic based inertial navigation materiel solution for targeting devices. This AVAM effort improves azimuth accuracy leading to reduced collateral damage and improved engagement efficiency.			
FY 2014 Plans: Will fund the integration and testing of emerging smaller, lightweight, low cost AVAMs that can be inserted into the legacy Lightweight Laser Designator Rangefinder (LLDR).			
FY 2015 Plans: Continue funding the development of improved precision AVAM devices and the development of better celestial navigation systems for application to the LLDR and the Joint Effects Targeting System (JETS), and fund the investigation of integration of emerging high accuracy capabilities into the current portfolio of targeting systems.			
Title: Laser development	-	0.200	0.500
Articles:	-	-	-
Description: Development of lightweight, low cost, multi-spectral, and more efficient lasers.			
FY 2014 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L76 / *Dismounted Fire Support Laser Targeting Systems*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Funds the integration of emerging high accuracy capabilities into the current portfolio of laser targeting systems. ***FY 2015 Plans:*** Continue funding of development of lightweight, low-cost, multi-spectral, and more efficient lasers.			
Title: Target Acquisition Development ***Description:*** Focuses on development of improvements to optical detection, recognition, and identification of targets. ***FY 2015 Plans:*** Initiate improvements to imaging performance, recognition, and identification of targets.	-	-	0.100
Accomplishments/Planned Programs Subtotals	-	1.100	4.915

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• LLDR Mod-of-In-Service (SSN KA3100): *Lightweight Laser Designator Rangefinder (LLDR) Modification-of-In-Service (SSN KA3100)*	68.287	38.037	14.085	-	14.085	14.405	14.998	15.282	15.753	Continuing	Continuing
• PE 654710/DL79: *Joint Effects Targeting System (JETS) (PE 654710 Project DL79)*	19.448	21.594	20.570	-	20.570	11.421	7.396	6.590	10.264	Continuing	Continuing
• JETS (SSN K32101): *Joint Effects Targeting System (JETS) (SSN K32101)*	-	-	27.450	-	27.450	50.005	84.113	51.102	56.379	Continuing	Continuing

Remarks

D. Acquisition Strategy

This project continues to exercise competitively awarded contracts using best value source selection procedures.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*	Project (Number/Name) L76 / *Dismounted Fire Support Laser Targeting Systems*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Allot	PM-SSL : Ft. Belvoir VA 22060	0.000	-		0.050	Feb 2014	0.100	Oct 2014	-		0.100	-	0.150	-
		Subtotal	0.000	-		0.050		0.100		-		0.100	-	0.150	-

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
AVAM Development and Integration	TBD	Various : TBD	0.000	-		0.850	Apr 2014	4.165	Nov 2014	-		4.165	Continuing	Continuing	-
Laser Development	TBD	Various : TBD	0.000	-		0.200	Apr 2014	0.500	Nov 2014	-		0.500	Continuing	Continuing	-
Target Acquisition Development	TBD	Various : TBD	0.000	-		-		0.100	Nov 2014	-		0.100	Continuing	Continuing	-
		Subtotal	0.000	-		1.050		4.765		-		4.765	-	-	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	MIPR	Various : Various	0.000	-		-		0.050	Dec 2014	-		0.050	Continuing	Continuing	-
		Subtotal	0.000	-		-		0.050		-		0.050	-	-	-

	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	-		1.100		4.915		-		4.915	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L76 / *Dismounted Fire Support Laser Targeting Systems*

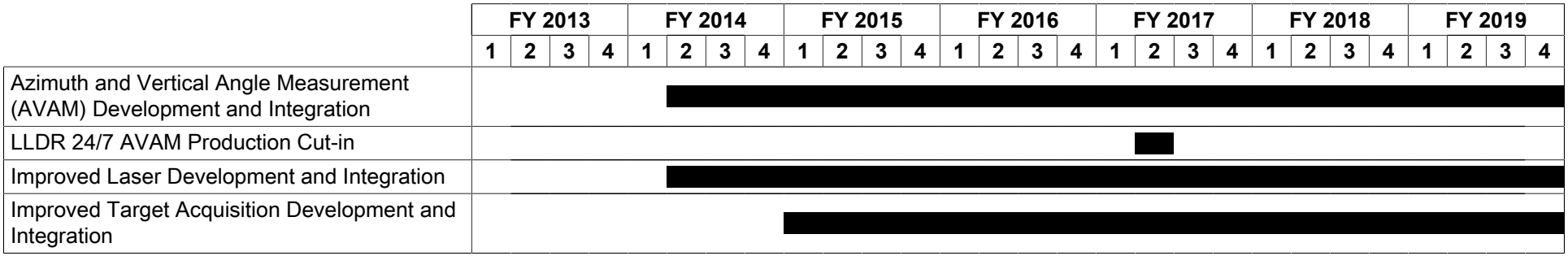

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L76 / *Dismounted Fire Support Laser Targeting Systems*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Azimuth and Vertical Angle Measurement (AVAM) Development and Integration	2	2014	4	2021
LLDR 24/7 AVAM Production Cut-in	2	2017	2	2017
Improved Laser Development and Integration	2	2014	4	2021
Improved Target Acquisition Development and Integration	1	2015	4	2021

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army											Date: March 2014	
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604710A / *Night Vision Systems - Eng Dev*				Project (Number/Name) L79 / *Joint Effects Targeting Systems (JETS)*			
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
L79: *Joint Effects Targeting Systems (JETS)*	-	19.448	21.594	20.570	-	20.570	11.421	7.396	6.590	10.264	-	97.283
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The Joint Effects Targeting System (JETS) is an Army program with joint interest (Air Force and Marine Corps). Joint Effects Targeting System (JETS) will meet the one-man, hand-held precision targeting gap identified by the Fire Center of Excellence (FCOE). JETS is a light-weight, handheld system that will provide the single dismounted observer and Joint Terminal Attack Controller (JTAC) with a common, enhanced capability to rapidly acquire, accurately locate, positively identify, and precisely designate targets. JETS Target Location and Designation System (TLDS) will be able to interface with existing and future Service Forward Entry Systems (FESs).

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Joint Effects Targeting System (JETS) Engineering and Manufacturing Development (EMD)	19.448	21.176	17.735
Articles:	-	-	-
Description: JETS is a lightweight mission equipment set for the dismounted forward observers and Joint Terminal Attack Controllers (JTAC). JETS provides observers and controllers the means to call for fire and control delivery of air, ground and naval surface fire support, including using precision munitions and effects (both lethal and non-lethal). ***FY 2013 Accomplishments:*** Completed Full and Open EMD source selection, awarded two prime contracts, and begin EMD of JETS prototype systems from the vendors. The prototypes will include integration with precision Azimuth and Vertical Angle Measurement (AVAM) solutions. ***FY 2014 Plans:*** Continue EMD. Will complete initial build of, up to, 30 prototypes and begin an Early User Assessment (EUA) and Development Testing (DT) of prototypes at White Sands Missle Range (WSMR) and Aberdeen Proving Ground (APG). Will develop supportability products and initiate production planning. ***FY 2015 Plans:*** Complete EMD phase activities with two prime contract vendors, including completing initial build of prototypes, complete contractor testing, begin government testing of prototypes, refine supportability planning, complete production planning.			
Title: AVAM Development	-	-	1.417

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Description: Focuses on improvements to azimuth accuracy by use of inertial navigation solutions (non-magnetic) for advanced precision AVAM solutions to provide high accuracy full-time (24/7) target location as well as celestial navigation systems that provide lightweight and low cost part-time precision AVAM for target location. ***FY 2015 Plans:*** Fund the development of precision AVAM and risk mitigation, and funds the development of improved celestial navigation systems, and explore the integration of both forward observer application to the JETS.			
Title: Laser Development	-	0.418	1.418
Articles:	-	-	-
Description: Focuses on development of lightweight, low-cost, multi-spectral, and more efficient lasers. ***FY 2014 Plans:*** Initiate government engineering efforts to develop lasers. ***FY 2015 Plans:*** Continue the development of lightweight, low-cost, multi-spectral, and more efficient lasers.			
Accomplishments/Planned Programs Subtotals	19.448	21.594	20.570

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• Fire Support Laser Targeting Sys: *Dismounted Fire Support Laser Targeting Systems (PE 654710 / DL76)*	-	1.100	4.915	-	4.915	4.824	6.015	6.317	14.759	Continuing	Continuing
• Joint Effects Targeting System: *Joint Effects Targeting System (SSN K32101)*	-	-	27.450	-	27.450	50.005	84.113	51.102	56.379	Continuing	Continuing

Remarks

D. Acquisition Strategy

This project continues to exercise competitively awarded contracts using best value source selection procedures.

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E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Allot	PM-SSL : Ft Belvoir, VA 22060	0.000	0.680	Oct 2012	0.735	Oct 2013	0.741	Oct 2014	-		0.741	-	2.156	-
		Subtotal	0.000	0.680		0.735		0.741		-		0.741	-	2.156	-

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
AVAM Development	C/T&M	A-Tech Corp : Albuquerque, NM 87123	7.810	0.735	Jan 2013	-		-		-		-	Continuing	Continuing	-
AVAM Development	C/T&M	Various : Various	0.000	-		-		1.417	Feb 2015	-		1.417	Continuing	Continuing	-
JETS TLDS EMD prototype development, integration, and test - Contractor BAE	C/CPFF	BAE Systems Information and Electronics : Nashua NH 03060-6909	0.000	7.800	Mar 2013	7.600	Mar 2014	5.720	Nov 2014	-		5.720	Continuing	Continuing	-
JETS TLDS EMD prototype development, integration, and test - Contractor DRS	C/CPFF	DRS RSTA, Inc : Dallas TX 75243	0.000	7.500	Mar 2013	7.900	Mar 2014	5.721	Nov 2014	-		5.721	Continuing	Continuing	-
Laser Development	C/T&M	Various : Various	0.000	-		0.418	Mar 2014	1.418	Feb 2015	-		1.418	Continuing	Continuing	-
		Subtotal	7.810	16.035		15.918		14.276		-		14.276	-	-	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	MIPR	Night Vision Electronics Sensors Directorate : Ft. Belvoir	6.960	1.719	Jan 2013	3.685	Jan 2014	3.824		-		3.824	Continuing	Continuing	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Science and Engineering Support	SS/CPFF	Johns Hopkins University : Laurel, MD	0.000	0.914	Mar 2013	1.000	Jan 2014	0.600	Feb 2015	-		0.600	-	2.514	-
		Subtotal	6.960	2.633		4.685		4.424		-		4.424	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Testing	MIPR	Various : Various	0.618	0.100		0.256		1.129		-		1.129	Continuing	Continuing	-
		Subtotal	0.618	0.100		0.256		1.129		-		1.129	-	-	-

	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	15.388	19.448		21.594		20.570		-		20.570	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L79 / *Joint Effects Targeting Systems (JETS)*

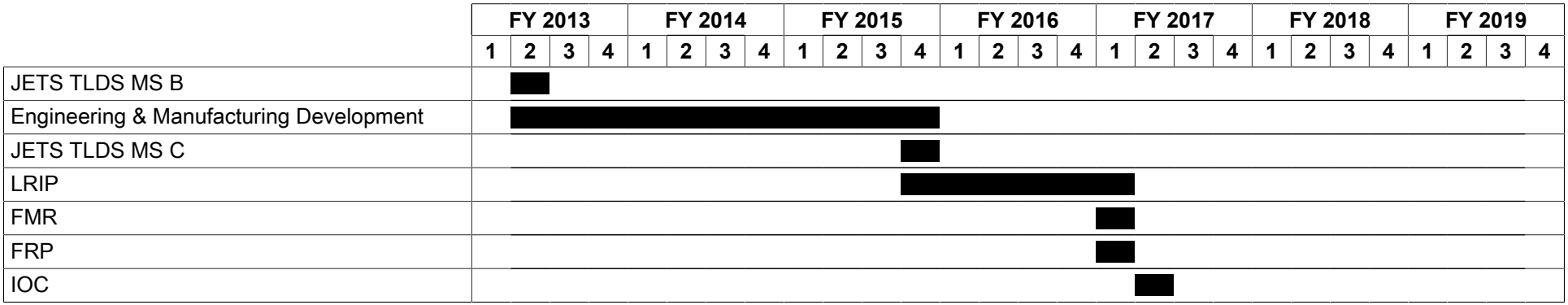

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604710A / *Night Vision Systems - Eng Dev*	**Project (Number/Name)** L79 / *Joint Effects Targeting Systems (JETS)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
JETS TLDS MS B	2	2013	2	2013
Engineering & Manufacturing Development	2	2013	4	2015
JETS TLDS MS C	4	2015	4	2015
LRIP	4	2015	1	2017
FMR	1	2017	1	2017
FRP	1	2017	1	2017
IOC	2	2017	2	2017