Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*							
COST ($ in Millions)	**FY 2010**	**FY 2011**	**FY 2012 Base**	**FY 2012 OCO**	**FY 2012 Total**	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**	**Cost To Complete**	**Total Cost**
Total Program Element	56.992	52.549	59.265	-	59.265	51.417	52.175	18.047	18.003	Continuing	Continuing
L67: *SOLDIER NIGHT VISION DEVICES*	21.637	23.891	23.984	-	23.984	18.979	18.470	18.047	18.003	Continuing	Continuing
L70: *NIGHT VISION DEV ED*	21.122	5.183	12.300	-	12.300	11.013	5.117	-	-	Continuing	Continuing
L75: *Profiler*	5.219	6.014	2.595	-	2.595	-	-	-	-	Continuing	Continuing
L76: *Dismounted Fire Support Laser Targeting Systems*	9.014	17.461	-	-	-	-	-	-	-	Continuing	Continuing
L79: *JOINT EFFECTS TARGETING SYSTEMS (JETS)*	-	-	20.386	-	20.386	21.425	28.588	-	-	Continuing	Continuing

Note

Program Change Summary Explanation:

Fiscal Year 2010: Program Decrease - $119 thousand realigned to higher priority requirements.

Fiscal Year 2012: Program Increase - $6.958 million for efforts associated with Thermal Imaging Engine development.
Program Increase - $2.929 million for development of the Joint Effects Targeting System (JETS)
Program Decrease - $91 thousand realigned to higher priority requirements.

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 focuses on night vision electro-optical, laser, and other target identification and location equipment for a variety of Future Combat System of Systems (FCS) Units of Action/Employment and Future Force soldiers. This project includes the enhanced night vision goggle, modular Horizontal Technology Insertion (HTI) multi-function laser activities, and thermal upgrades to include an uncooled medium thermal weapon sight.

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: System Development and Demonstration of the Thermal

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604710A: *Night Vision Systems - Eng Dev*

Imaging Engine (transitioned from an Advanced Technology Objective); night vision sensor acquisition support of Unattended Ground Sensors and ASTAMIDS; development of a Standard Ground Station for Persistent Surveillance Sensors (RAID and PTDS) and improvements and enhancements to Persistent Surveillance System (PSS).

Project L75 focuses on development of Profiler Block enhanced capabilities for meteorological 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 will provide 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. The Block III configuration consist of one computer with a common operating system co-located within the Tactical Operation Center (TOC) with a direct interface to the TOC Local Area Network (LAN). The system will be able to provide Gridded MET along with autonomously generate MET messages upon request from AFATDS eliminating the need for a dedicated MET section crew. The Army will realize a significant cost avoidance with the improved configuration.

Project L76 focuses on the engineering development of technologies for insertion into Laser Target Locators and Laser Designators to improve overall performance of those systems and reduce weight. Technologies developed under this project will benefit the Lightweight Laser Designator Rangefinder (LLDR, AN/PED-1), various Laser Target Locators, and future precision targeting programs based on emerging Army requirements. In addition, this line will support improved accuracy (reduced target location error) in support of coordinate seeking weapons, such as Joint Direct Attack Munition (JDAM) and Excalibur.

Project L79 focuses on development of the Joint Effects Targeting System (JETS). The goal is to develop a lightweight set of mission equipment for the dismounted forward observers and controller (including Joint Tactical Air Controllers - JTAC) that will provide means to call for fire and control delivery of air, ground and naval surface fire support using precision/near-precision/non-precision munitions and effects (lethal and non-lethal). JETS consist of two subsystems, the Target Location Designation System (TLDS) and the Target Effects Coordination System (TECS).

B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	57.111	52.549	49.469	-	49.469
Current President's Budget	56.992	52.549	59.265	-	59.265
Total Adjustments	-0.119	-	9.796	-	9.796
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	9.796	-	9.796
• Other Adjustments 2	-0.119	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L67: *SOLDIER NIGHT VISION DEVICES*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
L67: *SOLDIER NIGHT VISION DEVICES*	21.637	23.891	23.984	-	23.984	18.979	18.470	18.047	18.003	Continuing	Continuing
Quantity of RDT&E Articles											

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. It focuses on adapting demonstrated technologies that can 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. The Enhanced Night Vision Goggle(ENVG)is a head/ helmet mounted night vision system for the individual Soldier. Other efforts include a Soldier-borne gunshot detection system to determine location of sniper gunfire, development of a Green Laser Interdiction System (GLIS) to deter potential combatants and the development of Sense Through The Wall (STTW) technology giving Soldiers the ability to detect threats through walls during Military Operations in Urban Terrain (MOUT). This project also develops a Family of Weapon Sights(FWS), with fused electro-optical performance, including focal plane and high resolution micro-display FWS enabling technologies increasing product resolution, range, and imaging performance.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Enhanced Night Vision Goggle (Optical) ***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 2010 Accomplishments:*** AN/PSQ-20 ENVG (O) Program Support ***FY 2011 Plans:*** Initiate Product Qualification Test (PQT) for multiple sources for the AN/PSQ-20 (Enhanced Night Vision Goggle Optical). ***FY 2012 Base Plans:*** Complete PQT for multiple sources of AN/PSQ-20 (Enhanced Night Vision Goggle Optical).	0.148 0	2.000 0	1.500	-	1.500
Title: Green Laser Interdiction System (GLIS)	0.478	3.423	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L67: *SOLDIER NIGHT VISION DEVICES*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Articles:	0	0			
Description: The Green Laser Interdiction System (GLIS) is a rifle-mounted laser that allows the Soldier to interdict hostile actions through non-lethal effects. ***FY 2010 Accomplishments:*** Initiate the development of lightweight multi-purpose lasers with a nonlethal method of warning a vehicle operator or gaining their attention beyond 75 meters and to identify whether friend or foe (IFF). ***FY 2011 Plans:*** Complete the development of lightweight multi-purpose lasers with a nonlethal method of warning a vehicle operator or gaining their attention beyond 75 meters and to identify whether friend or foe (IFF).					
Title: Enhanced Night Vision Goggle (Digital)	-	1.921	8.281	-	8.281
Articles:		0			
Description: The ENVG(D) is a helmet-mounted passive device for the individual Soldier that fuses image intensification and long wave infrared imagery into a single, integrated image with digital technology and interconnectivity. ***FY 2011 Plans:*** Continue the integration, testing and evaluation of demonstrated digital enhanced night vision technologies to support Engineering and Manufacturing Development (EMD). ***FY 2012 Base Plans:*** Initiate integrated system design for ENVG (D).					
Title: Sense Through The Wall (STTW)	19.744	1.222	-	-	-
Articles:	0	0			
Description: The STTW is a handheld sensor that provides dismounted Soldiers with the capability to detect and locate personnel targets through walls from a standoff distance. ***FY 2010 Accomplishments:*** Initiate developmental and operational test activities for STTW representative test articles. ***FY 2011 Plans:***					

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L67: *SOLDIER NIGHT VISION DEVICES*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Complete developmental and operational test activities for STTW representative test articles.					
Title: Family of Weapons Sights (FWS) ***Articles:*** ***Description:*** FWS is a family of weapon sights that will utilize advances in thermal and image intensified technologies to produce an Individual, Crew-Served, and Sniper weapon sights operable in-line with a day optic and stand-alone mode. FWS will include fused multi-band imagery and rapid target acquisition with ballistic equations, providing the Soldier with improved capabilities during day and night operations. ***FY 2011 Plans:*** Initiate the development of the Family Weapon Sight (FWS) program. ***FY 2012 Base Plans:*** Continue the development of the Family of Weapon Sights (FWS) systems, which includes clip-on and fused weapon sights, rapid target acquisition capabulity, and ballistic equations.	-	4.282 0	9.219	-	9.219
Title: Focal Plane Arrays (FPA) ***Articles:*** ***Description:*** This program invests in the development of smaller pixel (12 micron) uncooled long-wave infrared focal plane arrays in multiple large format sizes. These arrays will improve sensitivity, clarity, and range, while simultaneously reducing the size, weight and power consumption of the weapon sights. ***FY 2010 Accomplishments:*** Initiate the development, testing and evaluation of improved Focal Plane Arrays (FPA), with larger array sizes, improved sensitivity, clarity and range. Also develop next generation FPA with smaller, 12 micron pitch. ***FY 2011 Plans:*** Initiate the development, testing and evaluation of improved Focal Plane Arrays (FPA), with smaller pixels (12 micron). Develop next generation 640x480 format FPA and ROIC. ***FY 2012 Base Plans:*** Continue the development, testing and evaluation of improved Focal Plane Arrays (FPA), with smaller pixels 912 microns) and larger format (1600x1200 and larger).	1.267 0	4.869 0	3.904	-	3.904
Title: Individual Gunshot Detector (IGD)	-	2.445	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L67: *SOLDIER NIGHT VISION DEVICES*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Articles: ***Description:*** IGD is a self-contained passive acoustic system based on a small rugged light-weight low-power sensor/signal processing core that has the capability to detect and localize the source of small arms fire. ***FY 2011 Plans:*** Complete the development of sniper fire detection and location systems, using portable sensors on Soldiers to locate gunfire.		0			
Title: Optical Augmentation (OA) Sniper Detection ***Articles:*** ***Description:*** This Sniper Detection System is designed to detect and locate optical scopes used by snipers or optronic sight systems on the battlefield or urban zone. ***FY 2011 Plans:*** Continue the development of laser defense capabilities for sniper detection/laser warning system man portable ***FY 2012 Base Plans:*** Continue the development of laser defense capabilities for sniper detection/laser warning system man portable	-	3.729 0	1.080	-	1.080
Accomplishments/Planned Programs Subtotals	21.637	23.891	23.984	-	23.984

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• SSN 36400: *Helmet Mounted Enhanced Vision Devices (HMEVD)*	86.306	8.098	117.442		117.442		149.768	172.118	219.384	Continuing	Continuing
• SSN 22900: *Thermal Weapon Sight (TWS)*	306.044	248.899	186.859		186.859		78.481	94.415	139.004	Continuing	Continuing
• SSN 41500: *Sniper Night Sight (SNS)*	0.211	12.880	4.892		4.892				10.883	Continuing	Continuing
• SSN K35000: *Multi-Function Aiming Light (MFAL)*	0.546	21.434								0.000	21.980
		24.939	47.498	10.000	57.498		37.707			0.000	161.191

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L67: *SOLDIER NIGHT VISION DEVICES*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• SSN KA2300: *Sense Through The Wall (STTW)*											
• SSN K35110: *Small Tactical Optical Rifle Mounted (STORM)*	23.236	8.520	10.227		10.227		15.001	29.643	32.837	Continuing	Continuing
• SSN AD5311: *Green Laser Interdiction System (GLIS)*			25.356		25.356		3.251			0.000	35.709

D. Acquisition Strategy

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

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 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L67: *SOLDIER NIGHT VISION DEVICES*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Enhanced Night Vision Goggles (Optical) ENVG (O)	Various	TBD:TBD	-	1.421		8.281		-		8.281	Continuing	Continuing	Continuing
Multi-purpose Laser	Various	TBD:TBD	-	3.304		-		-		-	Continuing	Continuing	Continuing
Sense Through The Wall (STTW)	Various	TBD:TBD	-	1.222		-		-		-	Continuing	Continuing	Continuing
Laser Detection/Laser Warning Device	Various	Fibertek:HERNDON, VA	2.428	3.729		-		-		-	Continuing	Continuing	Continuing
Family of Weapon Sights (FWS)	Various	CECOM AQC CENTER:ALEXANDRIA, VA	-	4.401		5.671		-		5.671	Continuing	Continuing	Continuing
Focal Plane Arrays (FPA)	Various	DOI:FT HUACHUCA, AZ	17.543	4.869		-		-		-	Continuing	Continuing	Continuing
Focal Plane Arrays (FPA)	SS/CPFF	CERDEC:ABERDEEN, MD	-	-		4.648		-		4.648	Continuing	Continuing	Continuing
Sniper Fire Detection and Location Technology	Various	Fibertek:HERNDON, VA	1.790	2.445		-		-		-	Continuing	Continuing	Continuing
		Subtotal	21.761	21.391		18.600		-		18.600			

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Small Business Innovative Research/ Small Business Technology Transfer Programs.	Various	TBD:TBD	-	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	-	-		-		-		-			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L67: *SOLDIER NIGHT VISION DEVICES*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Test Support Activity	Various	Various Activities:Various	12.700	2.500		5.384		-		5.384	Continuing	Continuing	Continuing
		Subtotal	12.700	2.500		5.384		-		5.384			

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	34.461	23.891		23.984		-		23.984			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604710A: *Night Vision Systems - Eng Dev*	**PROJECT** L67: *SOLDIER NIGHT VISION DEVICES*

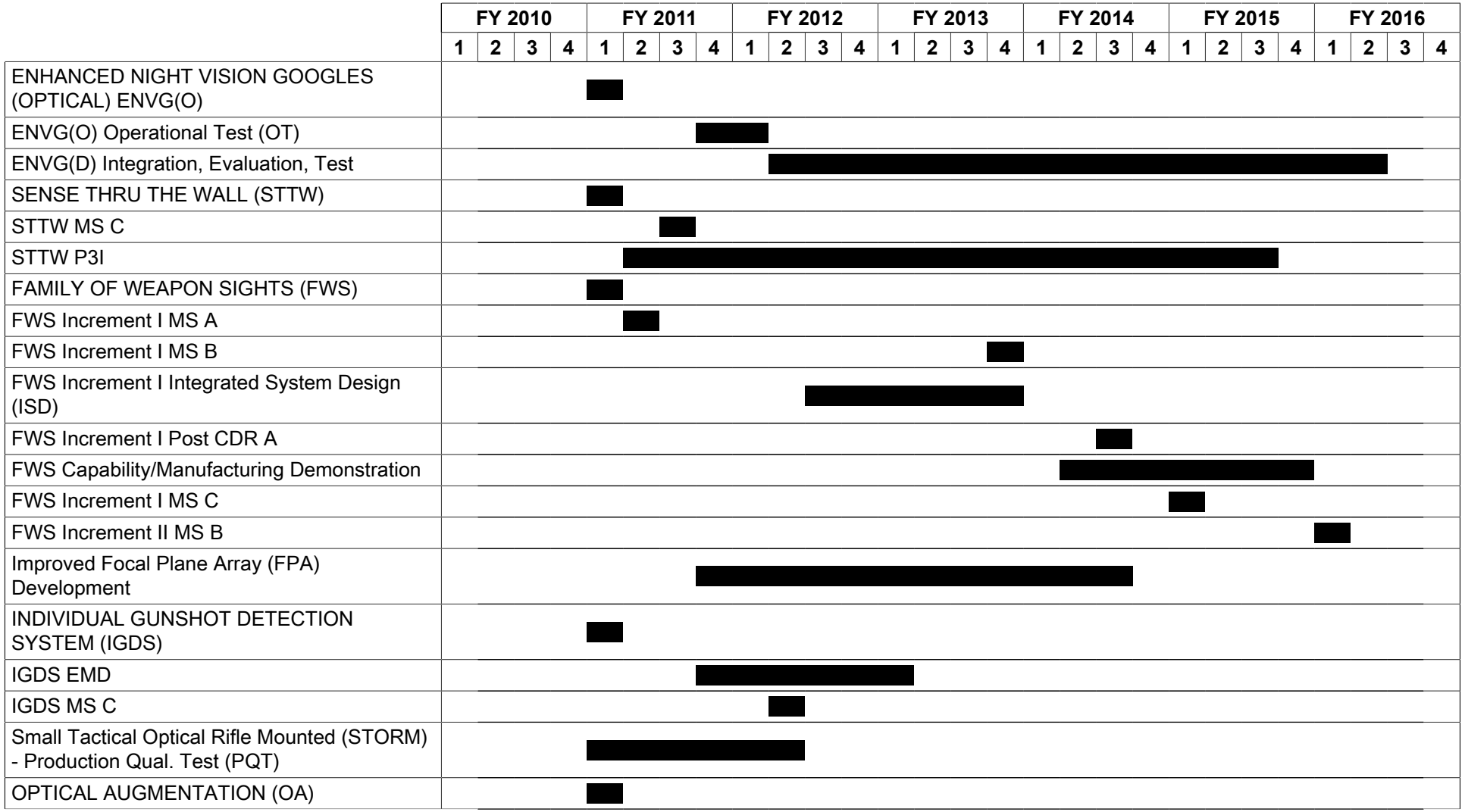

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L67: *SOLDIER NIGHT VISION DEVICES*

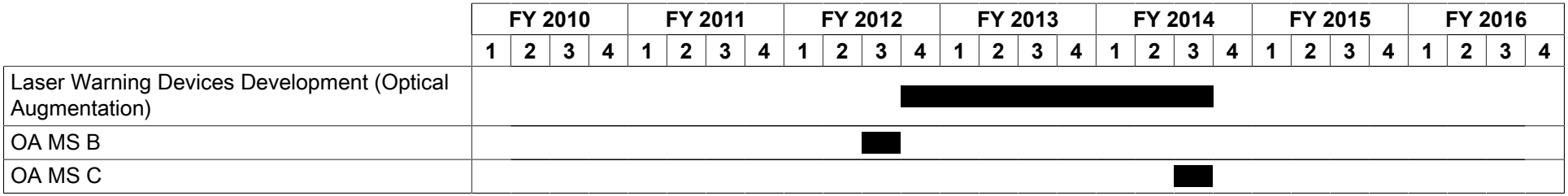

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604710A: *Night Vision Systems - Eng Dev*	**PROJECT** L67: *SOLDIER NIGHT VISION DEVICES*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
ENHANCED NIGHT VISION GOOGLES (OPTICAL) ENVG(O)	1	2011	1	2011
ENVG(O) Operational Test (OT)	4	2011	1	2012
ENVG(D) Integration, Evaluation, Test	2	2012	2	2016
SENSE THRU THE WALL (STTW)	1	2011	1	2011
STTW MS C	3	2011	3	2011
STTW P3I	2	2011	3	2015
FAMILY OF WEAPON SIGHTS (FWS)	1	2011	1	2011
FWS Increment I MS A	2	2011	2	2011
FWS Increment I MS B	4	2013	4	2013
FWS Increment I Integrated System Design (ISD)	3	2012	4	2013
FWS Increment I Post CDR A	3	2014	3	2014
FWS Capability/Manufacturing Demonstration	2	2014	4	2015
FWS Increment I MS C	1	2015	1	2015
FWS Increment II MS B	1	2016	1	2016
Improved Focal Plane Array (FPA) Development	4	2011	3	2014
INDIVIDUAL GUNSHOT DETECTION SYSTEM (IGDS)	1	2011	1	2011
IGDS EMD	4	2011	1	2013
IGDS MS C	2	2012	2	2012
Small Tactical Optical Rifle Mounted (STORM) - Production Qual. Test (PQT)	1	2011	2	2012
OPTICAL AUGMENTATION (OA)	1	2011	1	2011
Laser Warning Devices Development (Optical Augmentation)	4	2012	3	2014
OA MS B	3	2012	3	2012

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604710A: *Night Vision Systems - Eng Dev*	**PROJECT** L67: *SOLDIER NIGHT VISION DEVICES*

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
OA MS C	3	2014	3	2014

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L70: *NIGHT VISION DEV ED*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
L70: *NIGHT VISION DEV ED*	21.122	5.183	12.300	-	12.300	11.013	5.117	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

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. The focus is on meeting the requisite night vision and RSTA capabilities required for evolving Current Force, Modular Force, and Future Force systems.

The project transitions Advanced Thermal Imaging Technology from an Advanced Technology Objective to the development of a thermal engine intended to be common among all US Army FLIR sensor systems. This program will initiate and continue the development and qualification of the thermal Engine to meet requirements of Next Gen FLIR Army Combat and reconnaissance systems. The thermal imaging engine provides Mid Wave Infrared and Long Wave Infrared digital video. This 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 thermal imaging engine can also be used to enhance mobility by maintaining current range performance in significantly smaller and lighter sensor packages.

This project provided Program Office technical support of the FCS Unattended Ground Sensors (UGS) hardware and software development, demonstration and test for a family of UGS systems for Intelligence, Surveillance and Reconnaissance (ISR). This provided FCS and the Army a networked Unattended Ground Sensor capability for ISR and physical security.

This project develops the Standard Ground Station (SGS) for PM NV/RSTA sensor systems. Leveraging the success in theater of the Persistent Surveillance and Dissemination System of Systems (PSDS2) Quick Response Capability (QRC), this effort takes the 3D visualization capability from PSDS2 and applies it to the Operator's station for RAID tower systems, aerostats and other RSTA Sensor systems. This effort was prioritized and performed on an accelerated schedule to support fielding in October 2008 as part of the RAID tower systems in response to the Base Expeditionary Target and Surveillance Systems - Combined (BETSS-C) JUONS. This SGS improves the effectiveness of RSTA systems by combining sensor videos, sensor cues and Battle Command information into a geo-registered 3D visualization of the terrain. FY 2010 Congressional add is for development of SGS enhancements.

FY 2012 funding supports the continuation of development efforts for the Advanced Thermal Imaging Engine. Specifically, FY 2012 funding will support development of the Ground Platform Thermal Imaging Engine leading to the fabrication of multiple prototypes with Block II EOCCM improvements incorporated, and support future second source development activities. The FY 2012 funding also supports the development of the Pre Planned Product Improvements (P3I), including meeting the Net Ready KPP and improving the Human Factors Engineering for the Persistent Surveillance System (PSS) Program of Record (POR).

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L70: *NIGHT VISION DEV ED*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Thermal Imaging Engine ***Articles:*** ***Description:*** Engineering and Manufacturing Development (EMD) of Thermal Imaging Engine. MS B approval in FY08 initiated EMD effort. EMD program develops the Thermal Imaging Engine for the Next Gen FLIR Army Combat and reconnaissance systems to include fabrication and qualification of 15 prototypes. ***FY 2010 Accomplishments:*** continued the development of the Thermal Imaging Engine for the Next Gen FLIR (AN/ZSQ-2/Q-3) aviation systems, Army Combat and Reconnaissance systems, and the fabrication of 15 prototypes. Contractor qualification testing, support for system integration activities, and competition stimulation efforts were also conducted with FY10 funding. ***FY 2011 Plans:*** Funding will support Qualification Testing, system-level test activities, completion of production preparation activities, and competition stimulation. ***FY 2012 Base Plans:*** Begin development of the Ground Platforms Thermal Imaging Engine leading to the fabrication of multiple prototypes that will incorporate Block II EOCCM improvements to realize a common protected FLIR. To promote competitive pricing and strengthen the industrial base, the ground platforms development effort will be competed; with award of up to two vendors.	7.432 0	5.183 0	6.976	-	6.976
Title: Standard Ground Station ***Articles:*** ***Description:*** Funding is provided for the following effort ***FY 2010 Accomplishments:*** Standard Ground Station enhancement work (Congressional Adds) focuses on Sensor networking, interoperability, plug-and-play and other enhancements	4.190 0	-	-	-	-
Title: Pre Planned Product Improvements (P3I) for the Persistent Surveillance System (PSS) Program of Record (POR) ***Description:*** Funding is provided for the following effort	-	-	5.324	-	5.324

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L70: *NIGHT VISION DEV ED*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
FY 2012 Base Plans: Develop Pre Planned Product Improvements (P3I) for the Persistent Surveillance System (PSS) Program of Record (POR), to include meeting the Net Ready KPP and improving the Human Factors Engineering of the POR					
Title: Standoff Suicide Bomber Detection System (SSBDS). ***Articles:*** ***Description:*** Standoff Suicide Bomber Detection System (SSBDS) for an an enhanced standoff capability. ***FY 2010 Accomplishments:*** Standoff Suicide Bomber Detection System (SSBDS). Effort planned to build, test and prepare to deploy to theater an enhanced standoff capability to detect PBIEDs at Entry Control Points by employing: collaborating sensors, decision aide tools, singular display and interactive training.	2.000 0	-	-	-	-
Title: Remotely Operated HMDS (Husky Mounted Detection System) ***Articles:*** ***Description:*** Remotely Operated HMDS (Husky Mounted Detection System) for route clearance operations. ***FY 2010 Accomplishments:*** Effort to develop a remotely operated HMDS (Husky Mounted Detection System) for route clearance operations which allows for low-metallic IED detection from by an operator in a trailing RG-31 via ECM and GPR compatible link.	7.000 0	-	-	-	-
Title: FOB S2S (Forward Operating Base Sensor to Shooter) ***Articles:*** ***Description:*** FOB S2S (Forward Operating Base Sensor to Shooter) is an integration effort of fielded and emerging Sensor systems. ***FY 2010 Accomplishments:*** FOB S2S (Forward Operating Base Sensor to Shooter) is an integration effort of fielded and emerging Sensor systems that can quickly detect, assess and generate an accurate target locations and then transfer that location	0.500 0	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L70: *NIGHT VISION DEV ED*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
to a weapons systems such as Griffin, CROWS, Spider and Lethal Miniature Aerial Munition System (LMAMS). Effort includes System Integration and data link.					
Accomplishments/Planned Programs Subtotals	21.122	5.183	12.300	-	12.300

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• K38300: *Long Range Advanced Scout Surveillance System (LRAS3) OPA2*	133.413	255.641	102.509		102.509					0.000	511.633
• BZ6501: *Base Expeditionary Target and Surveillance System - Combines (BETSS-C)*	273.000									0.000	273.000

D. Acquisition Strategy

The development programs in this project are currently based on competitive awards and under cost reimbursement type contracts. The FY09 Congressional increase was a CRS3 sole source award. The FY12 funding continues the development, demonstration and source risk reduction efforts for thermal imaging engine and begins development of the P3I for the Persistent Surveillance System Program Of Record.

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 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L70: *NIGHT VISION DEV ED*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Management	C/FP	PM, NV/RSTA:Ft. Belvoir, VA & Ft. Monmouth, NJ	7.085	0.220		0.599		-		0.599	Continuing	Continuing	Continuing
SGS Support	C/FP	BAH:Various	0.498	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	7.583	0.220		0.599		-		0.599			

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior Historical Systems Development	C/FP	Various:Various	145.208	-		-		-		-	Continuing	Continuing	Continuing
SGS/RAID	C/CPIF	Sarnoff:Princeton, NJ	4.913	-		-		-		-	Continuing	Continuing	Continuing
FY09 - FY11: Thermal Imaging - Design and Demonstration	C/FP	Various:Various	9.698	2.769		-		-		-	Continuing	Continuing	Continuing
FY10-FY11:Thermal Imaging - Source Risk Reduction	C/CPAF	Various:Various	-	0.441		-		-		-	Continuing	Continuing	0.000
FY12-FY14: Develop, Fab, and Qual of a common Ground Platform Engine with Block II EOCCM	TBD	TBD:TBD	-	-		4.617		-		4.617	Continuing	Continuing	Continuing
FY 09 Base: CRS3	SS/FP	DRS:St. Louis, MO	2.800	-		-		-		-	Continuing	Continuing	Continuing
FY 09 OCO: Heterogeneous Airborne Reconnaissance Team (HART) system development	C/FFP	Northrop Grumman Systems Corp:El Segundo, CA	17.000	-		-		-		-	Continuing	Continuing	Continuing
FY 10 Base: Standard Ground Station Enhancement (Congressional Add)	C/FFP	Sarnoff:Princeton, NJ	-	-		-		-		-	Continuing	Continuing	Continuing
FY 09 OCO: Beyond Line of Sight Development and	SS/FFP	PM RUS:Fort Monmouth, NJ	3.324	-		-		-		-	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L70: *NIGHT VISION DEV ED*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Design of Seismic Expendable RDA UGS.													
FY 09 OCO: ISR Net Development	SS/FFP	Rockwell Collins:Cedar Rapids, IA	22.500	-		-		-		-	Continuing	Continuing	Continuing
FY 09 OCO: Development and Design Of PTDS Enhancements.	SS/FFP	Sarnoff:Princeton, NJ	0.700	-		-		-		-	Continuing	Continuing	Continuing
FY 09 OCO: Development and Design Of PTDS Enhancements.	SS/FFP	Raytheon:Falls Church, VA	1.500	-		-		-		-	Continuing	Continuing	Continuing
FY 09 OCO: Development and Design Of PTDS Enhancements.	SS/FFP	Lockheed Martin,:Akron, OH	2.200	-		-		-		-	Continuing	Continuing	Continuing
PSS P3I	C/FP	TBD:TBD	-	-		5.324		-		5.324	Continuing	Continuing	Continuing
Standoff Suicide Bomber Detection System (SSBDS)	TBD	TBD:TBD	-	-		-		-		-	Continuing	Continuing	Continuing
FOB S2S (Forward Operating Base Sensor to Shooter)	TBD	TBD:TBD	-	-		-		-		-	Continuing	Continuing	Continuing
Remotely Operated HMDS (Husky Mounted Detection System)	TBD	TBD:TBD	-	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	209.843	3.210		9.941		-		9.941			

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Matrix Spt	Various	Various:Various	19.904	-		-		-		-	Continuing	Continuing	Continuing
Matrix Support	Various	Various:Various	0.720	-		-		-		-	Continuing	Continuing	Continuing
Matrix Support	Various	TRADOC:Ft. Monroe, VA	0.400	-		-		-		-	Continuing	Continuing	Continuing
Matrix Support 2	Various	Various:Various	0.231	-		-		-		-	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L70: *NIGHT VISION DEV ED*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Support	Various	Various:Various	18.258	1.753		1.760		-		1.760	Continuing	Continuing	Continuing
EO/IR/LD(ASTAMIDS) Support	Various	Various:Various	0.347	-		-		-		-	Continuing	Continuing	Continuing
LRAS3 Netted Sensor Support	Various	Various:Various	0.500	-		-		-		-	Continuing	Continuing	Continuing
UGS Matrix	Various	Various:Various	0.893	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	41.253	1.753		1.760		-		1.760			

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DT/IOT&E*	Various	ATEC:Various	8.769	-		-		-		-	Continuing	Continuing	Continuing
Other Test Support*	Various	Various:Various	6.351	-		-		-		-	Continuing	Continuing	Continuing
SGS/RAID C&L	Various	ATEC/DTC:Various	0.730	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	15.850	-		-		-		-			

Remarks

* Includes PSDS2, UGS, STTW, 3GF and other sensor test and evaluation activities.
Includes PSDS2 and FCS UGS test and evaluation.

	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	274.529	5.183		12.300		-		12.300			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L70: *NIGHT VISION DEV ED*

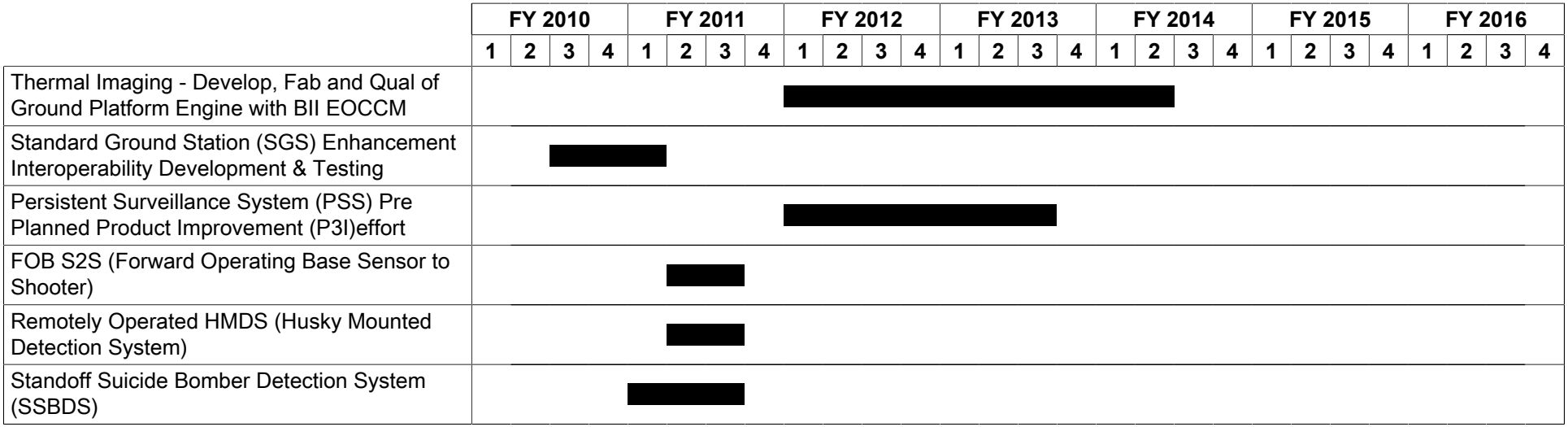

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604710A: *Night Vision Systems - Eng Dev*	**PROJECT** L70: *NIGHT VISION DEV ED*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Thermal Imaging - Develop, Fab and Qual of Ground Platform Engine with BII EOCCM	1	2012	2	2014
Standard Ground Station (SGS) Enhancement Interoperability Development & Testing	3	2010	1	2011
Persistent Surveillance System (PSS) Pre Planned Product Improvement (P3I)effort	1	2012	3	2013
FOB S2S (Forward Operating Base Sensor to Shooter)	2	2011	3	2011
Remotely Operated HMDS (Husky Mounted Detection System)	2	2011	3	2011
Standoff Suicide Bomber Detection System (SSBDS)	1	2011	3	2011

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L75: *Profiler*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
L75: *Profiler*	5.219	6.014	2.595	-	2.595	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

Note

Not applicable for this item.

A. Mission Description and Budget Item Justification

The AN/TMQ-52 Meteorological Measuring Set-Profiler (MMS-P) uses a ground tactical meteorological (TACMET) sensor and Meteorological (MET) data from communication satellites along with an advanced weather model to provide highly accurate MET data covering an operational area of 500 kilometers with a tested range of 60 kilometers. Profiler provides MET information such as wind speed, wind direction, temperature, pressure, humidity, rate of precipitation, visibility, cloud height and cloud ceiling. All of these are required for precise targeting and terminal guidance. Profiler uses this information to build a four-dimensional MET model (height, width, depth and time) that includes terrain effects. 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. The new capabilities will increase the lethality of field artillery systems such as Multiple Launch Rocket Systems (MLRS), Paladin, and self-propelled or towed howitzers. When analysis determined that Block I Profiler already satisfied the requirements of Block II, the decision was made to proceed directly to Block III as the next evolution of the Profiler capability. Block III will provide a networked laptop configuration that will enhance system efficiencies while further reducing the system's operational and logistical footprint with the elimination of the High Mobility Multi-purpose Wheeled Vehicle (HMMWV) mounted shelter and trailer. The Block III configuration consists of one computer with a common operating system co-located within the Tactical Operation Center (TOC) with a direct interface to the TOC Local Area Network (LAN). The system will be able to autonomously generate MET messages upon request from Advanced Field Artillery Tactical Data Systems (AFATDS) eliminating the need for a dedicated MET section crew. The Army will realize a significant Operations and Support cost avoidance with the improved configuration.

FY12 supports operational and austere test requirements.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Block III backup sensor effort.	0.937	0.245	-	-	-
Articles:	0	0			
Description: Funding is provided for the following effort					
FY 2010 Accomplishments:					

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L75: *Profiler*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Initiate Block III backup sensor effort. ***FY 2011 Plans:*** Continue Block III backup sensor effort					
Title: software porting to laptop. ***Articles:*** ***Description:*** Funding is provided for the following effort ***FY 2010 Accomplishments:*** Award effort for software porting to laptop. ***FY 2011 Plans:*** Complete effort for software porting to laptop	2.424 0	5.201 0	-	-	-
Title: Production Representative Prototype Systems (PRPS). ***Articles:*** ***Description:*** Funding is provided for the following effort ***FY 2010 Accomplishments:*** Reduction of physical configuration, build and test of eight Production Representative Prototype Systems (PRPS). ***FY 2011 Plans:*** Continue reduction of physical configuration, build and test eight Production Representative Prototype Systems (PRPS).	0.775 0	0.568 0	-	-	-
Title: SBIR/STTR ***Articles:*** ***Description:*** Funding is provided for the following effort ***FY 2010 Accomplishments:*** SBIR/STTR	0.151 0	-	-	-	-
Title: common operating system ***Articles:***	0.932 0	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L75: *Profiler*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Description: Funding is provided for the following effort ***FY 2010 Accomplishments:*** Conduct migration effort to a common operating system hosted on one computer.					
Title: Block III Limited User Testing and Austere Testing. ***Description:*** Funding is provided for the following effort ***FY 2012 Base Plans:*** Conduct Block III Limited User Testing and Austere Testing.	-	-	2.595	-	2.595
Accomplishments/Planned Programs Subtotals	5.219	6.014	2.595	-	2.595

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• K27900: *Profiler*	4.751	4.408	3.312	2.000	5.312		7.277	4.137	4.963	0.000	43.159

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 eight (8) Profiler Block III Production Representative Prototype Systems (PRPS). The Block III program is expected to enter production beginning in FY13.

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 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L75: *Profiler*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SBIR/STTR	SS/FP	TBD:TBD	-	-		-		-		-	Continuing	Continuing	Continuing
Project Management	SS/FP	PM Nav Sys/JTCI-G:Various	1.425	0.477		0.473		-		0.473	Continuing	Continuing	Continuing
		Subtotal	1.425	0.477		0.473		-		0.473			

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SDD Contract	C/FP	Smiths Detection:Edgewood, MD	14.999	-		-		-		-	Continuing	Continuing	Continuing
SDD T&M	C/FP	Smiths Detection:Edgewood, MD	0.103	-		-		-		-	Continuing	Continuing	Continuing
Studies and Simulations	SS/FP	Army Research Lab:WSMR, NM	0.429	-		-		-		-	Continuing	Continuing	Continuing
Government Furnished Equipment	Various	HQCPSQ/ZJ:CECOM	0.120	-		-		-		-	Continuing	Continuing	Continuing
Award efforts for s/w porting to laptop	C/FP	Mantech:Red Bank, NJ	-	3.806		-		-		-	Continuing	Continuing	Continuing
Initiate backup sensor effort	Various	Army Research Lab:various	-	0.245		-		-		-	Continuing	Continuing	Continuing
Reduction of Physical Configuration	Various	TBD:TBD	-	-		-		-		-	Continuing	Continuing	Continuing
Migration to common operating system	Various	TBD:TBD	-	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	15.651	4.051		-		-		-			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L75: *Profiler*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	MIPR	CECOM:Aberdeen, MD	2.063	0.381		0.501		-		0.501	Continuing	Continuing	Continuing
Sys Engr/Technical Assistance	SS/FP	Various:Various	0.378	0.490		0.752		-		0.752	Continuing	Continuing	Continuing
OGA	MIPR	ARL, Various:WSMR, NM	1.089	-		0.178		-		0.178	Continuing	Continuing	Continuing
		Subtotal	3.530	0.871		1.431		-		1.431			

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Planning and Preparation	Various	ATEC, Various, CECOM, PRD Dir,:Ft. Monmouth, NJ	0.942	0.615		-		-		-	Continuing	Continuing	Continuing
Developmental Testing	Various	ATEC,:Various	1.049	-		-		-		-	Continuing	Continuing	Continuing
Limited User Test	MIPR	ATEC,:Various	1.200	-		0.352		-		0.352	Continuing	Continuing	Continuing
Conduct Block III Austere Testing	MIPR	ARL, ATEC,:Aberdeen Proving Ground, MD	-	-		0.339		-		0.339	Continuing	Continuing	Continuing
		Subtotal	3.191	0.615		0.691		-		0.691			

	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	23.797	6.014		2.595		-		2.595			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L75: *Profiler*

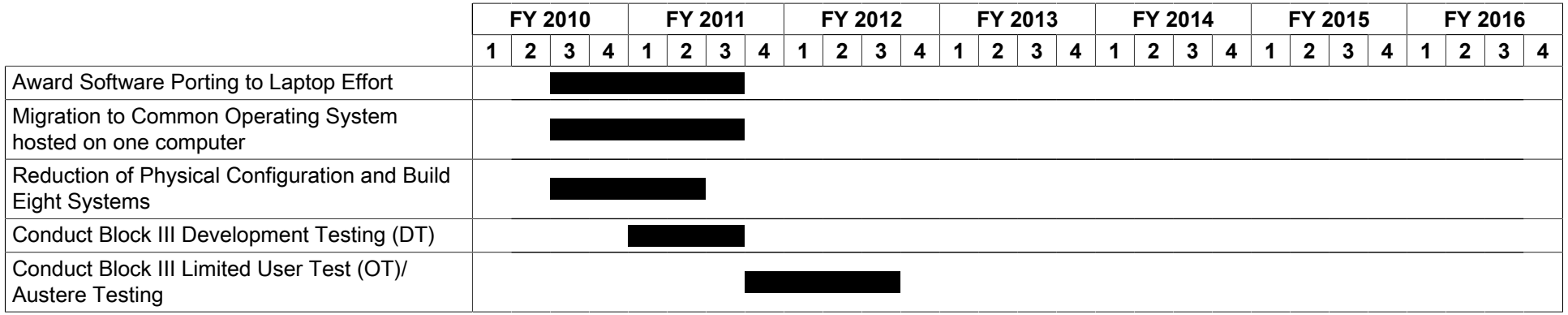

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604710A: *Night Vision Systems - Eng Dev*	**PROJECT** L75: *Profiler*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Award Software Porting to Laptop Effort	3	2010	3	2011
Migration to Common Operating System hosted on one computer	3	2010	3	2011
Reduction of Physical Configuration and Build Eight Systems	3	2010	2	2011
Conduct Block III Development Testing (DT)	1	2011	3	2011
Conduct Block III Limited User Test (OT)/Austere Testing	4	2011	3	2012

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L76: *Dismounted Fire Support Laser Targeting Systems*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
L76: *Dismounted Fire Support Laser Targeting Systems*	9.014	17.461	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project will adapt demonstrated technologies for insertion into Laser Target Locators (LTL) and Laser Designators to improve overall performance of those systems and reduce weight. Technologies selected under this project will benefit the Lightweight Laser Designator Rangefinder (LLDR, AN/PED-1), the Laser Target Locator Systems, and the Joint Effects Targeting System (JETS). This project will integrate the next generation uncooled Forward Looking Infrared (FLIRs) into the Laser Target Locator Module (LTLM), improving its imaging performance with no impact on its weight. This project will initiate interface design for a reduced weight common laser designator to the next generation LTL which will form a bridge to the JETS. In addition, this line will support improved targeting accuracy in support of coordinate seeking weapons, such as Joint Direct Attack Munition (JDAM), Small Diameter Bomb, and Excalibur. Development will primarily focus on affordable, non-magnetic, high accuracy, azimuth and vertical angle measurement (AVAM) devices with reduced size, weight and power characteristics.

JETS is an Army program with joint interest (Air Force and Marine). The goal is to develop a lightweight mission equipment set for the dismounted forward observers and controllers (including Joint Tactical Air Controllers - JTAC). The JETS will provide observers and controllers the means to call for fire and control delivery of air, ground and naval surface fire support, using precision, near-precision, and non-precision munitions and effects (both lethal and non-lethal). The JETS will consist of two subsystems: the Target Location Designation System (TLDS) and the Target Effects Coordination Capability (TECC). The TLDS will provide the observers and controllers the ability to conduct surveillance; acquire and accurately locate targets; designate targets for attack by laser seeking munitions; mark targets for aviation and ground based targeting systems; and transmit targeting data to existing forward entry devices. The TECC will leverage existing forward entry devices to provide access to current and future joint targeting networks, formats, and generate digital calls for fire and Close Air Support (CAS) requests to all joint fires platforms; will display information to the observers and controllers to enable effective target engagement and integration of fires with Joint maneuver forces; and will support fire support planning functions.

Efforts previously planned under this line to support JETS are to be performed under Program Element 0604710A project L79 beginning in FY12.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Azimuth and Verticale Angle Measurement (AVAM)	3.600	4.808	-	-	-
Articles:	0	0			
Description: AVAM (Azimuth Vertical Angle Module) is a non-magnetic based inertial navigation materiel solution for targeting devices. The AVAM effort will improve azimuth accuracy leading to reduced collateral damage and improved engagement efficiency.					
FY 2010 Accomplishments:					

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L76: *Dismounted Fire Support Laser Targeting Systems*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Continue the development of Azimuth and Vertical Angle Measurement (AVAM) devices. ***FY 2011 Plans:*** Complete the development of Azimuth and Vertical Angle Measurement (AVAM) devices.					
Title: Joint Effects Targeting System (JETS) ***Articles:*** ***Description:*** JETS TLDS is a lightweight mission equipment set for the dismounted forward observers and controllers (including Joint Tactical Air Controllers - JTAC). JETS will provide observers and controllers the means to call for fire and control delivery of air, ground and naval surface fire support, using precision, near-precision, and non-precision munitions and effects (both lethal and non-lethal). ***FY 2010 Accomplishments:*** Continue Target Locator improvements within LTLM to support use of Precision Guided Weapons by dismounted Soldiers and reduce soldier load. LTLM improvements will also support a goal of transitioning LTLS improved technical elements to support future Army JETS system design requirements. ***FY 2011 Plans:*** Continue Target Locator improvements within LTLM to support use of Precision Guided Weapons by dismounted Soldiers and reduce soldier load. LTLM improvements will also support a goal of transitioning LTLS improved technical elements to support future Army JETS system design requirements. Develop and build Technology Development (TD)prototypes to support JETS TLDS Milestone B decision.	5.414 0	12.653 0	-	-	-
Accomplishments/Planned Programs Subtotals	9.014	17.461	-	-	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• K31100: *Lightweight Laser Designator Rangefinder (LLDR)*	155.918	88.341	58.042		58.042		1.552	37.407	37.591	Continuing	Continuing
• B53800: *Laser Target Locating System (LTLS)*	4.873	31.444	33.820		33.820		30.466	11.762	11.820	Continuing	Continuing
			19.191		19.191		28.588			0.000	69.204

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L76: *Dismounted Fire Support Laser Targeting Systems*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• L79: *Joint Effects Targeting System (JETS)*											

D. Acquisition Strategy

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

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 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L76: *Dismounted Fire Support Laser Targeting Systems*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
JETS TLDS Technology Development prototype	Various	Northrop-Gruman Laser Systems:FL	-	12.653		-		-		-	Continuing	Continuing	0.000
Azimuth and Vertical Angle Measurement (AVAM)	MIPR	Johns Hopkins Applied Physics Lab:Laurel MD	-	3.808		-		-		-	Continuing	Continuing	0.000
JETS TLDS Technology Development prototypes	Various	BAE Systems:NH	-	-		-		-		-	Continuing	Continuing	0.000
		Subtotal	-	16.461		-		-		-			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TLDS Support	MIPR	NVESD:Ft. Belvoir, VA	-	-		-		-		-	Continuing	Continuing	0.000
Azimuth and Vertical Angle Measurement (AVAM)	MIPR	NVESD:Ft. Belvoir, VA	-	1.000		-		-		-	Continuing	Continuing	0.000
TLDS Support for Contractor 1	TBD	CECOM SEC:Ft. Belvoir	-	-		-		-		-	Continuing	Continuing	0.000
TLDS Support for Contractor 2	TBD	CECOM SEC:Ft. Belvoir	-	-		-		-		-	Continuing	Continuing	0.000
		Subtotal	-	1.000		-		-		-			0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Marker/Designator Low energy testing	MIPR	Various:Various	-	-		-		-		-	Continuing	Continuing	0.000
		Subtotal	-	-		-		-		-			0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L76: *Dismounted Fire Support Laser Targeting Systems*	

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	17.461		-		-		-			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604710A: *Night Vision Systems - Eng Dev*	**PROJECT** L76: *Dismounted Fire Support Laser Targeting Systems*

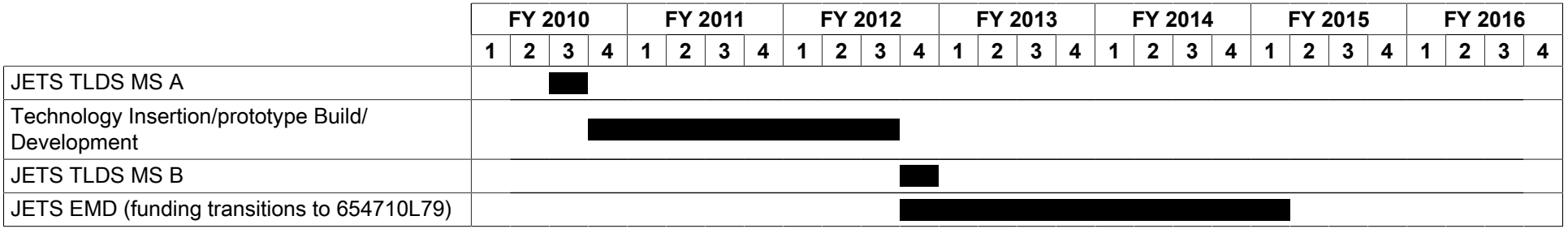

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604710A: *Night Vision Systems - Eng Dev*	**PROJECT** L76: *Dismounted Fire Support Laser Targeting Systems*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
JETS TLDS MS A	3	2010	3	2010
Technology Insertion/prototype Build/Development	4	2010	3	2012
JETS TLDS MS B	4	2012	4	2012
JETS EMD (funding transitions to 654710L79)	4	2012	1	2015

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L79: *JOINT EFFECTS TARGETING SYSTEMS (JETS)*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
L79: *JOINT EFFECTS TARGETING SYSTEMS (JETS)*	-	-	20.386	-	20.386	21.425	28.588	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Joint Effects Targeting System (JETS) is an Army program with joint interest (Air Force and Marine). The goal is to develop a lightweight mission equipment set for the dismounted forward observers and controllers (including Joint Tactical Air Controllers - JTAC). The JETS will provide observers and controllers the means to call for fire and control delivery of air, ground and naval surface fire support, using precision, near-precision, and non-precision munitions and effects (both lethal and non-lethal). The JETS will consist of two subsystems: the Target Location Designation System (TLDS) and the Target Effects Coordination Capability (TECC). The TLDS will provide the observers and controllers the ability to conduct surveillance; acquire and accurately locate targets; designate targets for attack by laser seeking munitions; mark targets for aviation and ground based targeting systems; and transmit targeting data to existing forward entry devices. The TECC will leverage existing forward entry devices to provide access to current and future joint targeting networks, formats, and generate digital calls for fire and Close Air Support (CAS) requests to all joint fires platforms; will display information to the observers and controllers to enable effective target engagement and integration of fires with Joint maneuver forces; and will support fire support planning functions.

JETS TLDS recently achieved MS-A (4Q FY10). As part of the MS A, an Army Cost Position (ACP) was developed. Starting in FY12, the ACP aligns JETS TLDS funding under this project in lieu of 0604710A L76 (Dismounted Fire Support Targeting System). A 6.4 RDTE line (Soldier Precision Targeting Devices - Advanced Development 6.4, PE: 603774A Project: VT8) will also be associated with this effort in the future.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Joint Effects Targeting System (JETS) TLDS ***Description:*** JETS TLDS is a lightweight mission equipment set for the dismounted forward observers and controllers (including Joint Tactical Air Controllers - JTAC). It will provide observers and controllers the means to call for fire and control delivery of air, ground and naval surface fire support, using precision, near-precision, and non-precision munitions and effects (both lethal and non-lethal). ***FY 2012 Base Plans:*** Develop two prototype Target Location Designator Systems (TLDS) to support Technical Development Phase and Engineering Management Development Phase (EMD).	-	-	20.386	-	20.386
Accomplishments/Planned Programs Subtotals	-	-	20.386	-	20.386

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L79: *JOINT EFFECTS TARGETING SYSTEMS (JETS)*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• L76: *Dismounted Fire Support Laser Targeting Systems*	9.014	17.461								0.000	26.475
• K32101: *Joint Effects Targeting System*								60.500	76.125	0.000	136.625

D. Acquisition Strategy

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

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 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L79: *JOINT EFFECTS TARGETING SYSTEMS (JETS)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
JETS TLDS Year 2 Contractor 1 prototype development, integration, and test.	TBD	NGLS:Apopka, FL	-	-		2.796		-		2.796	Continuing	Continuing	0.000
JETS TLDS Year 2 Contractor 2 prototype development, integration, and test	TBD	BAE Systems:Nashua, NH	-	-		2.796		-		2.796	Continuing	Continuing	0.000
		Subtotal	-	-		5.592		-		5.592			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
JETS TLDS prototype technical maturation	TBD	TBD:TBD	-	-		2.476		-		2.476	Continuing	Continuing	0.000
Functional Support Cost	TBD	Night Vision Electronics Sensors Directorate:Ft. Belvoir	-	-		1.920		-		1.920	Continuing	Continuing	0.000
Science and Engineering Support	TBD	Johns Hopkins Applied Physics Lab:Laurel, MD	-	-		3.573		-		3.573	Continuing	Continuing	0.000
Program Management Support	TBD	TBD:TBD	-	-		1.925		-		1.925	Continuing	Continuing	0.000
		Subtotal	-	-		9.894		-		9.894			0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
All RDTE Testing and Support	TBD	TBD:TBD	-	-		4.900		-		4.900	Continuing	Continuing	0.000
		Subtotal	-	-		4.900		-		4.900			0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L79: *JOINT EFFECTS TARGETING SYSTEMS (JETS)*	

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-		20.386		-		20.386			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604710A: *Night Vision Systems - Eng Dev*	PROJECT L79: *JOINT EFFECTS TARGETING SYSTEMS (JETS)*

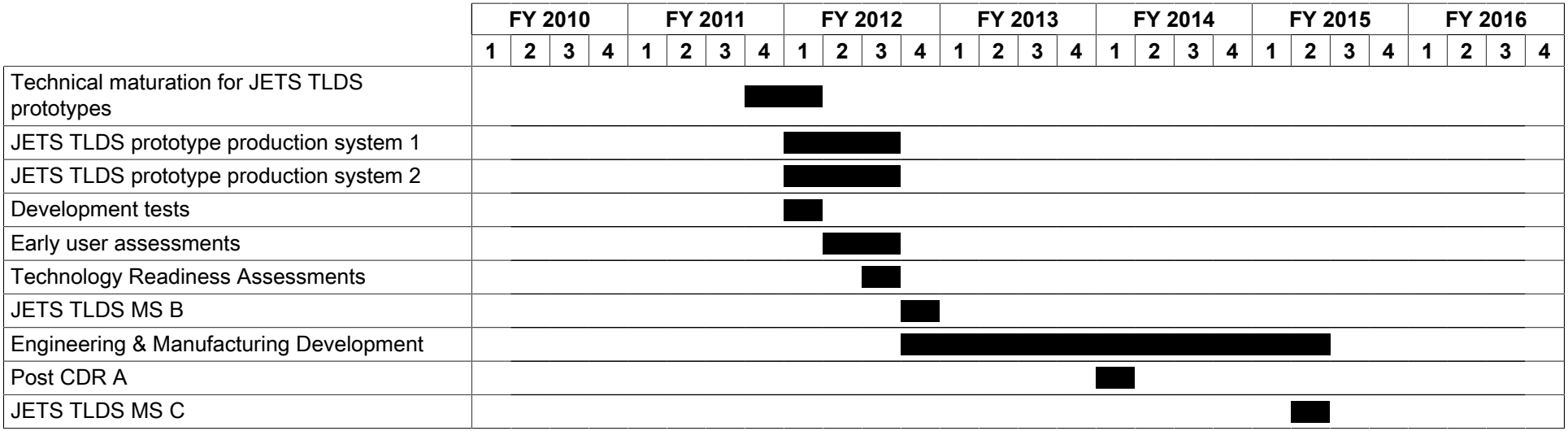

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604710A: *Night Vision Systems - Eng Dev*	**PROJECT** L79: *JOINT EFFECTS TARGETING SYSTEMS (JETS)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Technical maturation for JETS TLDS prototypes	4	2011	1	2012
JETS TLDS prototype production system 1	1	2012	3	2012
JETS TLDS prototype production system 2	1	2012	3	2012
Development tests	1	2012	1	2012
Early user assessments	2	2012	3	2012
Technology Readiness Assessments	3	2012	3	2012
JETS TLDS MS B	4	2012	4	2012
Engineering & Manufacturing Development	4	2012	2	2015
Post CDR A	1	2014	1	2014
JETS TLDS MS C	2	2015	2	2015