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**Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>
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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
Total Program Element	-	89.273	48.720	89.259	-	89.259	64.969	100.824	40.427	66.951	Continuing	Continuing
BQ6: <i>Visual Augmentation System Eng Dev</i>	-	66.782	7.973	39.183	-	39.183	45.371	81.675	21.066	47.396	Continuing	Continuing
DI5: <i>FALCONS</i>	-	-	-	10.450	-	10.450	-	-	-	-	0.000	10.450
L67: <i>Soldier Night Vision Devices</i>	-	2.881	6.061	12.140	-	12.140	5.585	5.644	5.706	5.763	Continuing	Continuing
L70: <i>Night Vision Dev Ed</i>	-	8.209	10.521	7.473	-	7.473	7.514	7.593	7.678	7.755	Continuing	Continuing
L79: <i>Joint Effects Targeting Systems (JETS)</i>	-	11.401	24.165	20.013	-	20.013	6.499	5.912	5.977	6.037	Continuing	Continuing

**Note**

Project DI5 / FALCONS is a New Start in FY2025.

**A. Mission Description and Budget Item Justification**

A portion of this funding line is directly aligned to the Army Soldier Lethality Modernization Priority in support of situational awareness for the Close Combat Soldier. This program element provides night vision/reconnaissance, surveillance and target acquisition technologies required for United States 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 BQ6 focuses on transitioning demonstrated technologies that bring improvements to the dismounted Soldier's augmented vision and situational awareness system and provide Soldiers with the ability to fight, rehearse, train and win during multi-domain operations. Funded efforts will accelerate the implementation of components, terrain shared coordinate data and processing, algorithms including machine learning/artificial intelligence and demonstrations in support of the next generation augmented vision and situational awareness. Efforts will provide rapid decision making and targeting capabilities with the integration of external video and data sources such as weapon sights, air and ground vehicles and other data sources enabled by tactical cloud package and advanced network services. This project will provide data driven analytics to optimize unit performance and enhance lethality and to enable Synthetic Training Environment (STE) squad capability to perform live mixed reality training and rehearsing. This project includes costs for efforts associated with movement of information and high level processing, integration, and interface of products with the Soldiers' head, body, weapon, and platforms. Funding for this project aligns with the Army's priorities in support of the National Defense Strategy and this project supports the Soldier Lethality Cross Functional Team.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	
<p>The total cost of the Integrated Visual Augmentation 1.2 Rapid Prototyping Middle Tier of Acquisition effort is \$314.0 million RDT&amp;E from FY22 to FY25. The remainder of the IVAS 1.2 Rapid Prototyping MTA is fully funded across the Future Years Defense Program.</p> <p>Project DI5 begins development on Future Advanced Long-range Common Optical/Netted-fires Sensor (FALCONS). FALCONS is the replacement for the Long Range Advanced Scout Surveillance System (LRAS3) and Fire Support Sensor System (FS3) providing an unmatched capability to detect, identify, and locate threats in all battlefield conditions at extended ranges, in all conditions, locate targets with the fidelity required to employ numerous Army and Joint precision, near precision, and conventional munitions, and have a networked capability to provide direct links for Scouts and Fire Supporters to streamline the kill chain.</p> <p>Project L67 develops, improves and miniaturizes high performance electro-optics, thermal and laser systems. It 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 also adapts demonstrated technologies that bring improvements to the mounted and dismounted Soldiers' equipment and capabilities. This project develops or enhances equipment that provides the individual Soldier's day and/or night situational awareness and individual targeting capability. This project includes cost associated with efforts for the development, integration and interface of products on Soldiers head, body and weapons. Funding in this project supports the Army Future's Command Situational Awareness Strategy. Funding in this project aligns with the Army's priorities in support of the National Defense Strategy.</p> <p>Project L70 supports the 3rd Generation Forward Looking Infrared (3GEN FLIR) B-Kit program, which incorporates the next generation of forward-looking infrared technologies. The 3GEN FLIR program provides a common 3GEN FLIR B-Kit for integration into US Army FLIR sensor systems in accordance with the approved Improved Forward Looking Infrared (I-FLIR) Capability Development Document (CDD). When integrated in platform sensor packages, 3GEN FLIR technology enhances the warfighters' survivability and lethality through increased identification range performance, while enabling the detection of difficult or obscured targets and faster threat detection through automated processes. Executing Army guidance to implement advancements in digital processing and artificial intelligence has positioned 3GEN FLIR as the lead sensor to provide the Army's path forward for AI/ML capabilities for ground platforms. The 3GEN FLIR B-Kit program is key to the maintenance of the Army's FLIR industrial base.</p> <p>Project L79 is an Army program with joint information (Air Force and Marine Corps). JETS addresses the one-man, hand-held precision targeting gap identified by the Fires Center of Excellence (FCoE). JETS is a lightweight, handheld system that will provide the single dismounted observer with a common, enhanced day and night thermal 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 Forward Entry Systems (FESs) and operate in environments where global positioning system (GPS) capabilities are degraded or denied and will integrate the military-code (M-Code) GPS receivers. This project will address continued development and integration of improved precision targeting components to reduce size, weight, power, and cost of systems for dismounted precisions Fires mission. Funding in this project aligns with the Army's priorities in support of the National Defense Strategy.</p>		

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2025 Army	<b>Date:</b> March 2024
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<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
Previous President's Budget	92.951	48.720	104.429	-	104.429
Current President's Budget	89.273	48.720	89.259	-	89.259
Total Adjustments	-3.678	0.000	-15.170	-	-15.170
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.509	-			
• SBIR/STTR Transfer	-2.169	-			
• Adjustments to Budget Years	-	-	-15.170	-	-15.170

**Congressional Add Details (\$ in Millions, and Includes General Reductions)**

**Project:** BQ6: *Visual Augmentation System Eng Dev*

Congressional Add: *HUD Congressional Add*

	<b>FY 2023</b>	<b>FY 2024</b>
Congressional Add Subtotals for Project: BQ6	33.500	-
Congressional Add Totals for all Projects	33.500	-

**Change Summary Explanation**

The overall decrease in funding is attributed to the realignment of resources to PE 0603774A / Night Vision Systems Advanced Development's BQ5 (6.4) to support IVAS' modernization cycle. This reduction offset increases supporting EMD requirements for NVD-N and FALCONS.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>				<b>Project (Number/Name)</b> BQ6 / <i>Visual Augmentation System Eng Dev</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
BQ6: <i>Visual Augmentation System Eng Dev</i>	-	66.782	7.973	39.183	-	39.183	45.371	81.675	21.066	47.396	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

This project focuses on transitioning demonstrated technologies that bring improvements to the dismounted Soldier's augmented vision and situational awareness system and provide Soldiers with the ability to fight, rehearse, train and win during multi-domain operations. Funded efforts will accelerate the implementation of components, terrain shared coordinate data and processing, algorithms including machine learning/artificial intelligence and demonstrations in support of the next generation augmented vision and situational awareness. Efforts will provide rapid decision making and targeting capabilities with the integration of external video and data sources such as weapon sights, air and ground vehicles and other data sources enabled by tactical cloud package and advanced network services. This project will provide data driven analytics to optimize unit performance and enhance lethality and to enable Synthetic Training Environment (STE) squad capability to perform live mixed reality training and rehearsing. This project includes costs for efforts associated with movement of information and high-level processing, integration, and interface of products with the Soldiers' head, body, weapon, and platforms. Funding for this project aligns with the Army's priorities in support of the National Defense Strategy. This project supports the Soldier Lethality Cross Functional Team.

The total cost of the Integrated Visual Augmentation 1.2 Rapid Prototyping Middle Tier of Acquisition effort is \$314.0 million RDT&E from FY22 to FY25. The remainder of the IVAS 1.2 Rapid Prototyping MTA is fully funded across the Future Years Defense Program.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> Heads Up Display (HUD)	33.282	7.973	39.183
<b>Description:</b> Integrated Visual Augmentation System (IVAS) HUD provides a digital platform for Soldier to fight, rehearse, and train in day and night that provides increased lethality, mobility, and situational awareness necessary to achieve overmatch against our current and future adversaries.			
<b>FY 2024 Plans:</b> Improve IVAS 1.2 producibility and reliability. Continue test and evaluation of IVAS 1.2			
<b>FY 2025 Plans:</b> Continue test and evaluation of IVAS 1.2. Supports software development, implementation, and reliability.			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> BQ6 / <i>Visual Augmentation System Eng Dev</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
Increase in FY2025 due to the integration of improved components; continuation with test and evaluation of 1.2; initiation of vehicle integration of IVAS cloud and edge computing capability; and continued support of software development, implementation, and reliability.			
<b>Accomplishments/Planned Programs Subtotals</b>	33.282	7.973	39.183

	<b>FY 2023</b>	<b>FY 2024</b>
<b>Congressional Add:</b> HUD Congressional Add	33.500	-
<b>FY 2023 Accomplishments:</b> Congressional Interest Item funding provided for continued 1.2 development.		
<b>Congressional Adds Subtotals</b>	33.500	-

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• K36402: <i>IVAS/Heads Up Display</i>	-	89.451	255.491	-	255.491	-	-	-	-	Continuing	Continuing
• BQ5: <i>Visual Augmentation System Advanced Development</i>	68.153	67.935	58.592	-	58.592	44.459	9.222	70.958	45.650	Continuing	Continuing

**Remarks**

**D. Acquisition Strategy**

The Army has adjusted the IVAS program plan to field IVAS 1.0 and IVAS 1.1 systems while accelerating the development, production, and fielding of IVAS 1.2. IVAS 1.2 is accomplished as a technology insertion to the base production agreement awarded in Dec 2022. Initial 1.2 prototypes were delivered in 4QFY2023, an IVAS 1.2 phase 2 Technology Insertion (TI) was awarded in 4QFY2023. IVAS 1.2 Operational Test (OT) in 2QFY2025 will validate the system improvements and inform a production and fielding decision in 4QFY2025. IVAS will transition to a Major Capability Acquisition pathway no later than October 2025.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / Night Vision Systems - Eng Dev	<b>Project (Number/Name)</b> BQ6 / Visual Augmentation System Eng Dev
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<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management	C/TBD	Various : Various	-	1.189	Apr 2024	-		3.736	Nov 2024	-		3.736	Continuing	Continuing	Continuing
<b>Subtotal</b>			-	1.189		-		3.736		-		3.736	Continuing	Continuing	N/A

**Remarks**  
FY2023 Program Management will be completed with its final \$167K between December 2023 through April 2024. FY2025 costs increased from FY 2024 for personnel completing 1.2 and ramping towards work for IVAS Next.

<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Heads Up Display (HUD)	Various	Various : Various	27.919	0.944	Nov 2023	0.226	Nov 2023	18.480	Sep 2025	-		18.480	Continuing	Continuing	Continuing
Heads Up Display (HUD)	C/FFP	Microsoft : Redmond, WA	2.689	62.847	Sep 2023	4.677	Mar 2024	5.889	Mar 2025	-		5.889	Continuing	Continuing	Continuing
Vehicle Integration	TBD	Various : Various	-	-		-		1.200	Mar 2025	-		1.200	0.000	1.200	-
<b>Subtotal</b>			30.608	63.791		4.903		25.569		-		25.569	Continuing	Continuing	N/A

**Remarks**  
FY 2025 costs increased in Heads Up Display Various from FY 2024 for software development. FY 2025 costs increased in Heads Up Display Microsoft from FY 2024 due to completing IVAS 1.2 development. Vehicle Integration costs in FY 2025 is for GMR Circuit Card work for See Through Armor.

<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
IVAS HUD Testing	MIPR	Various : Various	13.992	1.802	Dec 2023	3.070	Mar 2024	9.878	Mar 2025	-		9.878	Continuing	Continuing	Continuing
<b>Subtotal</b>			13.992	1.802		3.070		9.878		-		9.878	Continuing	Continuing	N/A

**Remarks**  
FY 2025 costs increased from FY 2024 due to any governmental operational testing for IVAS 1.2.

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2025 Army</b>								<b>Date: March 2024</b>			
<b>Appropriation/Budget Activity</b> 2040 / 5				<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>				<b>Project (Number/Name)</b> BQ6 / <i>Visual Augmentation System Eng Dev</i>			
	<b>Prior Years</b>	<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	44.600	66.782		7.973		39.183	-	39.183	Continuing	Continuing	N/A

**Remarks**  
Some cost categories include multiple efforts, so award date is the last scheduled award date.

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2025 Army</b>		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> BQ6 / <i>Visual Augmentation System Eng Dev</i>

Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1.2 Tech Insertion	Development																											
1.2 Test																												
Platform Integration																												
IVAS Extensibility and Improvements																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> BQ6 / <i>Visual Augmentation System Eng Dev</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
1.2 Tech Insertion	1	2023	1	2025
1.2 Test	1	2023	3	2025
Platform Integration	2	2023	4	2029
IVAS Extensibility and Improvements	1	2025	4	2029

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**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Army **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> DI5 / FALCONS
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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
DI5: FALCONS	-	-	-	10.450	-	10.450	-	-	-	-	0.000	10.450
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**  
FALCONS is a new start within the Night Vision Systems - Eng Dev program in FY 2025.

**A. Mission Description and Budget Item Justification**

Future Advanced Long-range Common Optical/Netted-fires Sensor (FALCONS) is the next generation sensor for Reconnaissance and Fires missions to enhance lethality and survivability of Brigade Combat Teams (BCTs) in Large Scale Combat Operations (LSCO). FALCONS provides interoperability between ground platforms and dismounted personnel through a Common Operational Picture (COP) of the battlefield and interchangeable components. The enhanced capabilities of FALCONS provide the ability to detect threats at greater distances in full spectrum conflict, terrain, and weather conditions with greater image resolution to develop civil considerations. It is envisioned FALCONS capabilities will be part of the system of systems approach enabled by current or future data sharing networks and transport layers to transmit target quality data to effectors in operational and tactical environments maintaining overmatch in the 2030 and 2040 timeframe. FALCONS equipped systems will be part of an Army 2030/2040 force that is decisive in varying operations against threats in environments of national interest. The Army requires FALCONS equipped forces be operationally responsive and able to adapt and exploit patterns of operations faster than the enemy, while dominating situations and adversaries. FALCONS equipped systems are a key entity of maneuver and fires tactical forces, and provides versatility, agility, and lethality.

The FY2025 RDTE Dollars in the amount of \$10.450 million will fund the award of a prototype contract to begin system development. Efforts will include initial system design and the beginning of digital prototyping.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	FY 2023	FY 2024	FY 2025
<b>Title:</b> FALCONS Prototype Development	-	-	10.450
<b>Description:</b> Development effort to build prototype systems, complete Soldier Touch Points, and testing.			
<b>FY 2025 Plans:</b> Funds in FY2025 will award development contract to begin initial design and digital prototyping.			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> FALCONS is a new start effort in FY2025.			
<b>Accomplishments/Planned Programs Subtotals</b>	-	-	10.450

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> DI5 / FALCONS

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

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2025</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u>	
			<u>Base</u>	<u>OCO</u>	<u>Total</u>					<u>Complete</u>	<u>Total Cost</u>
• KA4511: <i>Improved Forward Looking Infrared (IFLIR) B-Kit</i>	37.914	20.438	68.504	-	68.504	66.989	122.356	122.464	123.686	Continuing	Continuing
• L70: <i>Night Vision Dev Ed</i>	8.209	10.521	7.473	-	7.473	7.514	7.593	7.678	7.755	Continuing	Continuing

**Remarks**

FALCONS will use a 3GEN FLIR B-Kit which will extend range and resolution.

**D. Acquisition Strategy**

The FALCONS Abbreviated Capability Development Document (A-CDD) was approved 23 March 2023. The program was approved by the AAE on 17 November 2023 to proceed with a Mid-Tier Acquisition-Rapid Prototyping (MTA-RP) strategy using an Other Transaction Agreement (OTA). FALCONS is currently drafting the Simplified Acquisition Management Plan (SAMP) and the required OTA award documentation. FALCONS plans to award the prototype OTA in 2QFY2025 that will complete the initial design and begin digital prototyping for the program.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> DI5 / <i>FALCONS</i>
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<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
FALCONS Program Management	MIPR	PM GS : Fort Belvoir, VA	-	-		-		1.048	Dec 2024	-		1.048	15.260	16.308	-
SBIR Tax	Various	Various : Various	-	-		-		0.497	Dec 2024	-		0.497	8.318	8.815	-
<b>Subtotal</b>			-	-		-		1.545		-		1.545	23.578	25.123	N/A

<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
FALCONS Development	C/TBD	TBD : TBD	-	-		-		8.302	Mar 2025	-		8.302	155.186	163.488	-
<b>Subtotal</b>			-	-		-		8.302		-		8.302	155.186	163.488	N/A

<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
FALCONS Matrix Support	MIPR	Various : Various	-	-		-		0.603	Dec 2024	-		0.603	1.499	2.102	-
<b>Subtotal</b>			-	-		-		0.603		-		0.603	1.499	2.102	N/A

			Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>			-	-	-	10.450	-	10.450	180.263	190.713	N/A

**Remarks**

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2025 Army</b>			<b>Date:</b> March 2024	
<b>Appropriation/Budget Activity</b> 2040 / 5		<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>		<b>Project (Number/Name)</b> DI5 / <i>FALCONS</i>

Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Contract Award Prep									Contract Award Prep																							
Contract Award									1																							
FALCONS Development																	FALCONS Development															

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> DI5 / <i>FALCONS</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Contract Award Prep	1	2025	2	2025
Contract Award	2	2025	2	2025
FALCONS Development	2	2025	4	2026

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>				<b>Project (Number/Name)</b> L67 / <i>Soldier Night Vision Devices</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
L67: <i>Soldier Night Vision Devices</i>	-	2.881	6.061	12.140	-	12.140	5.585	5.644	5.706	5.763	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

This project develops, improves and miniaturizes high performance 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 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 and supports the Night Vision Goggles Modernization Strategy. This project includes cost associated with efforts for the development, integration and interface of products on Soldiers head, body and weapons. Funding in this project supports the Army's Soldier Lethality Cross Functional Teams (SL CFT) initiatives. Funding in this project aligns with the Army's priorities in support of the National Defense Strategy.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> Family of Weapon Sights (FWS)	0.946	2.027	3.213
<p><b>Description:</b> There are three variants in the Family of Weapon Sights: FWS-Individual (FWS-I), FWS-Crew Served (FWS-CS) and FWS-Sniper (FWS-S). These sights enable combat forces to acquire and engage targets with small arms and conduct surveillance and fire control under day/night obscurants, no-light, and adverse weather conditions. The FWS utilizes advancements in thermal and low light level sensors to produce sights operable in-line with a day optic or in stand-alone mode. This RDT&amp;E project integrates smaller pixel thermal detectors/imagers in high definition formats with improved sensitivity, clarity, and range, while simultaneously reducing the size, weight and power consumption for all FWS variants and provides a minimum of a 20% overmatch for each of the weapon platforms they are intended.</p> <p>The FWS-I variant is a weapon-mounted thermal sensor that enables Soldiers to fire quickly and accurately from any carry position and with significantly reduced exposure to enemy fire by providing a wireless, zeroed weapon aimpoint in the Soldier's Enhanced Night Vision Goggle - Binocular (ENVG-B) or Integrated Visual Augmentation System (IVAS). FWS-I requires RDT&amp;E in FY2022 and FY2023 to design and qualify a second vendor in production, because additional capacity is required to meet the increase AAO of 112K.</p> <p>The FWS-CS variant leverages the success of the FWS-I development effort, and will be the primary sight for the MK19, M240B and M2. The FWS-CS system integrates High Definition (HD) Thermal and Day Color imagers, an Integrated Laser Range Finder (ILRF) and ballistic calculator to provide Soldiers with an accurate aimpoint that adjusts automatically for range, ammunition</p>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army		<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L67 / <i>Soldier Night Vision Devices</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<p>characteristics, vertical angle, and weapon cant. The FWS-CS includes a wireless HD Helmet Mounted Display (HMD) that receives weapon sight imagery allowing the Soldier to utilize the weapon sight without requiring them to look through the weapon sights eyepiece. This wireless HMD provides the opportunity for the Soldier to stay in a protected, unexposed posture while still accurately detecting and engaging targets. Additionally, the FWS-CS will integrate into Adaptive Squad Architecture and wirelessly share video and data with the Night Vision Systems (NVS) and the Nett Warrior End User Device (EUD). All wireless communication will be through the Intra Soldier Wireless (ISW) Network.</p> <p>The FWS-S variant utilizes a HD thermal sensor and mounts in-line with the Sniper's direct view optic providing a thermal capability without the need to remove or re-boresight the current direct view optic. The FWS-S provides Snipers a large format display with increased pixel density that enables accurate long range engagements in all battlefield conditions while utilizing the direct view optic's aiming features, extending lethality and providing exceptional observation.</p> <p><b>FY 2024 Plans:</b> Both FWS Individual and FWS Crew Served will continue to conduct operational and airborne testing, to include an Airborne Limited User Test for FWS-CS. In addition, integration efforts between FWS Individual and the fused awareness system.</p> <p><b>FY 2025 Plans:</b> Continue to execute product improvements for the FWS Individual and FWS Sniper, to include ongoing reliability growth efforts and developmental/operational testing. Begin efforts to qualify improved night/day fire control devices, including improved mid-wave thermal sights and integration with Next Generation Fire Control, other sensors and weapon enablers. Continued integration efforts for the FWS Individual with multiple systems, weapons, and enablers.</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Funding increase from FY2024 to FY2025 to cover additional costs associated with FWS Individual and FWS Crew Served product improvements and qualification of an improved variant of the FWS Sniper.</p>				
<p><b>Title:</b> Night Vision Device - Next (NVD-N) (formerly Night Vision Goggle-Next (NVG-N))</p> <p><b>Description:</b> NVD-N systems will replace Soldiers' legacy monocular AN/PVS-14s and bi-ocular AN/PVS-7s increasing the Soldiers' situational awareness, mobility, speed, and effectiveness to support an increased operational tempo. NVD-N provides the capability to identify obstacles and threats at night or in low light conditions with greater clarity, better depth perception, and further recognition range.</p> <p><b>FY 2024 Plans:</b> Continue development and testing of the NVD-N product in support of the Situational Awareness Modernization Strategy.</p> <p><b>FY 2025 Plans:</b></p>		1.935	2.900	8.927

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L67 / <i>Soldier Night Vision Devices</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
Continue development and testing of the NVD-N product in support of the Situational Awareness Strategy.			
<b><i>FY 2024 to FY 2025 Increase/Decrease Statement:</i></b> Increase due to greater test asset quantities and testing scope for development and testing of NVD-N.			
<b><i>Title:</i></b> Laser Target Locator Module (LTLM)	-	1.134	-
<b><i>Description:</i></b> LTLM is a 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 Selective Availability Anti-Spoofing Module (SAASM) GPS receiver, which provides the dismounted observer or Scout a fully digital, handheld system to accurately determine target location and the ability to call for fire during all weather and light conditions.			
<b><i>FY 2024 Plans:</i></b> Funding for FY 2024 will support the completion of testing and qualification of the LTLM upgraded variant.			
<b><i>FY 2024 to FY 2025 Increase/Decrease Statement:</i></b> FY 2025 decrease due to the completion of the Government's test and qualification of the LTLM upgraded variant in FY 2024.			
<b>Accomplishments/Planned Programs Subtotals</b>	2.881	6.061	12.140

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• VT7: <i>Soldier Maneuver Sensors - Adv Dev</i>	26.696	3.729	3.507	-	3.507	3.622	3.660	3.700	3.737	Continuing	Continuing
• K22002: <i>FWS-INDIVIDUAL</i>	156.649	129.807	144.152	-	144.152	93.710	92.622	92.062	92.976	0.000	801.978
• K35110: <i>Small Tactical Optical Rifle Mounted MLRF</i>	11.357	15.484	10.864	-	10.864	2.166	1.562	11.078	11.188	Continuing	Continuing
• B53800: <i>Laser Target Locator Systems</i>	34.229	21.539	21.660	-	21.660	2.755	2.780	21.439	21.654	Continuing	Continuing
• K22003: <i>FWS-CREW SERVED</i>	23.831	42.649	50.044	-	50.044	-	-	45.791	46.249	Continuing	Continuing
• K22004: <i>FWS-SNIPER</i>	18.668	13.178	13.156	-	13.156	12.885	13.149	13.371	13.505	Continuing	Continuing
• BQ5: <i>Visual Augmentation System Advanced Development</i>	68.153	67.935	58.592	-	58.592	44.459	9.222	70.958	45.650	Continuing	Continuing
• BQ6: <i>Visual Augmentation System Eng Dev</i>	66.782	7.973	39.183	-	39.183	45.371	81.675	21.066	47.396	Continuing	Continuing

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L67 / <i>Soldier Night Vision Devices</i>

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

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u> <u>Base</u>	<u>FY 2025</u> <u>OCO</u>	<u>FY 2025</u> <u>Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• K36400: <i>Helmet Mounted Enhanced Vision Devices</i>	358.140	30.153	100.292	-	100.292	-	-	-	-	0.000	488.585

**Remarks**

**D. Acquisition Strategy**

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

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L67 / <i>Soldier Night Vision Devices</i>
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<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
PROGRAM MGMT	MIPR	Various : Various	24.813	0.010	Sep 2023	0.850	Nov 2023	1.037	Nov 2024	-		1.037	Continuing	Continuing	-
<b>Subtotal</b>			24.813	0.010		0.850		1.037		-		1.037	Continuing	Continuing	N/A

<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Family of Weapon Sights (FWS-I/FWS-CS/FWS-S)	C/FFP	Various : Various	3.046	0.946	Dec 2023	1.687	Feb 2024	3.213	Feb 2025	-		3.213	Continuing	Continuing	-
Night Vision Device - Next	C/TBD	TBD : TBD	-	-		0.812	Feb 2024	7.165	Feb 2025	-		7.165	Continuing	Continuing	-
<b>Subtotal</b>			3.046	0.946		2.499		10.378		-		10.378	Continuing	Continuing	N/A

**Remarks**  
In FY 2023, \$60K will be obligated to Operational Test Command and \$283K obligated to C5ISR in December.

<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Matrix Support	MIPR	RTI : Ft Belvoir, VA	30.688	0.593	Aug 2023	0.540	Dec 2023	0.473	Dec 2024	-		0.473	Continuing	Continuing	-
<b>Subtotal</b>			30.688	0.593		0.540		0.473		-		0.473	Continuing	Continuing	N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Government Test Support Activity	MIPR	Army Test and Evaluation Command : Various	68.304	1.332	Aug 2023	2.172	Mar 2024	0.252	Mar 2025	-		0.252	Continuing	Continuing	-
<b>Subtotal</b>			68.304	1.332		2.172		0.252		-		0.252	Continuing	Continuing	N/A



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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2025 Army</b>		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L67 / <i>Soldier Night Vision Devices</i>

Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FWS-I Contract 2nd Source / Design Qualification	[Redacted]				[Redacted]																							
	Ctr 2nd Source/Design Qual				[Redacted]																							
FWS-I and the fused awareness system	[Redacted]				Development				[Redacted]																			
FWS-CS Qualification Testing	[Redacted]				[Redacted]																							
	Qualification				[Redacted]																							
STORM II - Power Data Rail Integration	[Redacted]				Development				[Redacted]																			
	[Redacted]				[Redacted]																							
	Integration				[Redacted]																							
Advanced Sensor Development/Enhancements	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]							
	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]							
Night Vision Device-Next Engineering, Qualification & Go...	[Redacted]				Qualification				[Redacted]																			
Night Vision Device-Next MS B	[Redacted]				1 MS B																							
Night Vision Device-Next MS C	[Redacted]				[Redacted]				2 MS C																			

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L67 / <i>Soldier Night Vision Devices</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FWS-I Contract 2nd Source / Design Qualification	3	2022	2	2023
FWS-I and the fused awareness system	1	2024	2	2026
FWS-CS Qualification Testing	2	2021	4	2023
STORM II - Power Data Rail Integration	1	2024	2	2026
LTLM M-Code GPS Integration	2	2021	3	2023
Advanced Sensor Development/Enhancements	3	2026	4	2029
Night Vision Device-Next Engineering, Qualification & Government Testing	4	2023	2	2026
Night Vision Device-Next MS B	2	2024	2	2024
Night Vision Device-Next MS C	3	2026	3	2026

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>				<b>Project (Number/Name)</b> L70 / <i>Night Vision Dev Ed</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
L70: <i>Night Vision Dev Ed</i>	-	8.209	10.521	7.473	-	7.473	7.514	7.593	7.678	7.755	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

The project supports the 3rd Generation Forward Looking Infrared (3GEN FLIR) B-Kit program, which incorporates the next generation of forward-looking infrared technologies. The 3GEN FLIR program provides a common 3GEN FLIR B-Kit for integration into US Army FLIR sensor systems in accordance with the approved Improved Forward Looking Infrared (I-FLIR) Capability Development Document (CDD). The common 3GEN FLIR B-Kit will integrate with XM30, FALCONS, and future platforms; with potential 3GEN FLIR component utilization opportunities for future reconnaissance and airborne applications. The 3GEN FLIR B-Kit provides Mid Wave Infrared and Long Wave Infrared digital video and the electronic interfaces required to integrate the 3GEN FLIR technology with the host platform sensor. When integrated in platform sensor packages, 3GEN FLIR technology enhances the warfighters' survivability and lethality through increased identification range performance, while enabling the detection of difficult or obscured targets and faster threat detection through automated processes. Executing Army guidance to implement advancements in digital processing and artificial intelligence has positioned 3GEN FLIR as the lead sensor to provide the Army's path forward for AI/ML capabilities for ground platforms. The 3GEN FLIR B-Kit program is key to the maintenance of the Army's FLIR industrial base.

FY 2025 Base funding in the amount of \$7.473 million supports the 3GEN FLIR B-Kit program activities.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> 3GEN FLIR B-Kit Product Improvements & Competition Development	8.209	10.521	7.473
<b>Description:</b> 3GEN FLIR B-Kit Product Improvements, Technical Insertions, and promotion of competition			
<b>FY 2024 Plans:</b> FY 2024 Base Funding supports demonstration of the continued integration of sensor automation and artificial intelligence/machine learning to support Aided Target Detection and Recognition and promote competition for full rate production.			
<b>FY 2025 Plans:</b> FY 2025 Base Funding supports continued development and integration of sensor automation and artificial intelligence/machine learning to support Aided Target Detection and Recognition and promote competition for full rate production.			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Decrease due to program transition from development to continued product improvements & competition development in FY2025.			
<b>Accomplishments/Planned Programs Subtotals</b>	8.209	10.521	7.473

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army	<b>Date:</b> March 2024
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<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L70 / <i>Night Vision Dev Ed</i>
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**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u> <u>Base</u>	<u>FY 2025</u> <u>OCO</u>	<u>FY 2025</u> <u>Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 330: <i>Abrams Tank Improve Prog</i>	58.971	96.240	246.475	-	246.475	366.247	179.373	148.671	140.239	Continuing	Continuing
• CF6: <i>Optionally Manned Fighting Vehicle (OMFV)</i>	519.131	996.653	504.841	-	504.841	363.092	366.931	364.919	368.567	0.000	3,484.134
• KA4511: <i>Improved Forward Looking Infrared (IFLIR) B-Kit</i>	37.914	20.438	68.504	-	68.504	66.989	122.356	122.464	123.686	Continuing	Continuing
• DI5: <i>FALCONS</i>	-	-	10.450	-	10.450	-	-	-	-	0.000	10.450

**Remarks**

**D. Acquisition Strategy**

3GEN FLIR: Materiel Development Decision (MDD) was received from the Army Acquisition Executive (AAE) and the Acquisition Decision Memorandum (ADM) was signed on 22-Dec-2014. Per the ADM, 3GEN FLIR entered the acquisition lifecycle at Milestone B (MS B) on 11-Feb-2016. After a successful MS B decision, competitive EMD contracts were awarded to design, develop, integrate and test the 3GEN FLIR B-Kit prior to production and mitigate the industrial base risk. The host platforms are responsible for integration of the 3GEN FLIR B-Kit. MDA approved 3GEN FLIR MS C on 28-Apr-2023. 3GEN FLIR RDT&E activities will now focus on continued integration and refinement of artificial intelligence/machine learning capabilities per Army guidance, and 2nd source development to promote competition to achieve full rate production.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L70 / <i>Night Vision Dev Ed</i>
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<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Project Management	MIPR	PM TS : Ft. Belvoir, VA	17.417	0.548	Jan 2023	0.522	Jan 2024	0.447	Jan 2025	-		0.447	Continuing	Continuing	-
<b>Subtotal</b>			17.417	0.548		0.522		0.447		-		0.447	Continuing	Continuing	N/A

<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
3GEN FLIR Product Improvements	TBD	Various : Various	-	7.136	Mar 2023	9.625	Jan 2024	6.728	Mar 2025	-		6.728	Continuing	Continuing	-
<b>Subtotal</b>			-	7.136		9.625		6.728		-		6.728	Continuing	Continuing	N/A

<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
3GEN FLIR B-Kit Support	C/TBD	Various : Various	43.664	0.525	Feb 2022	0.374	Feb 2024	0.298	Nov 2024	-		0.298	Continuing	Continuing	-
<b>Subtotal</b>			43.664	0.525		0.374		0.298		-		0.298	Continuing	Continuing	N/A

	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>		61.081	8.209	10.521	7.473	7.473	Continuing	Continuing	N/A

**Remarks**

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2025 Army</b>			<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L70 / <i>Night Vision Dev Ed</i>	

Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
3GEN FLIR B-Kit Development, Test, and Integration																												
3GEN FLIR Incremental Product Improvements																												
3GEN FLIR B-Kit MS C	▲																											

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L70 / <i>Night Vision Dev Ed</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Common Operating Environment, Development	2	2012	4	2018
3GEN FLIR Materiel Development Decision (MDD)	1	2015	1	2015
3GEN FLIR Development Request For Proposal Release Review (DRFPRR)	3	2015	3	2015
3GEN FLIR B-Kit MS B	2	2016	2	2016
3GEN FLIR B-Kit Development, Test, and Integration	2	2016	3	2023
3GEN LRAS3 ECP to Integrate 3GEN FLIR B-Kit: Spec Development & Documentation	1	2018	4	2019
3GEN FLIR Incremental Product Improvements	4	2022	4	2030
3GEN FLIR B-Kit MS C	3	2023	3	2023

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>				<b>Project (Number/Name)</b> L79 / <i>Joint Effects Targeting Systems (JETS)</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
L79: <i>Joint Effects Targeting Systems (JETS)</i>	-	11.401	24.165	20.013	-	20.013	6.499	5.912	5.977	6.037	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

The Joint Effects Targeting System (JETS) is an Army Joint Information Program. JETS addresses the one-man, hand-held precision targeting gap identified by the Fires Center of Excellence (FCoE). JETS is a light-weight, handheld system that will provide the single dismounted observer with a common, enhanced day and night thermal capability to rapidly acquire, accurately locate, positively identify, and precisely designate targets. JETS Target Location and Designation System (TLDS) is able to interface with existing and future Forward Entry Systems (FESs) and will be able to operate in environments where global positioning system (GPS) capabilities are degraded or denied, and will integrate military-code (M-Code) GPS receivers. This project will develop and integrate improved precision targeting components to reduce size, weight, power, and cost of systems for dismounted precision Fires mission. Funding in this project aligns with the Army's priorities in support of the National Defense Strategy.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> JETS II Development	11.401	24.165	20.013
<b>Description:</b> This project performs engineering and manufacturing development of the next generation JETS, transitioning technologies developed in the Precision Targeting and Target Acquisition Development project. The JETS II will be an advanced precision targeting system incorporating improved target acquisition sensors and optics, improved targeting sensors, targeting algorithms, and a M-Code GPS receiver while reducing size, weight, and power requirements. It will integrate JETS into the Adaptive Squad Architecture (ASA) using the Intra Soldier Wireless (ISW) capability.			
<b>FY 2024 Plans:</b> The FY24 resources will continue to support the competitive engineering and manufacturing development of JETS II.			
<b>FY 2025 Plans:</b> The FY 2025 resources will continue to support the competitive engineering, manufacturing development and test and evaluation of JETS II.			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> The FY 2025 decrease reflects a shift from the development, integration, and material costs to build the JETS II prototypes to the contractor testing and evaluation of the JETS II prototypes.			
<b>Accomplishments/Planned Programs Subtotals</b>	11.401	24.165	20.013

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L79 / <i>Joint Effects Targeting Systems (JETS)</i>

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

Line Item	FY 2023	FY 2024	FY 2025	FY 2025	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Cost To	
			Base	OCO	Total					Complete	Total Cost
• VT8: <i>SOLDIER PRECISION TARGETING DEVICES - ADV DEV</i>	1.970	2.011	2.014	-	2.014	2.016	2.037	2.060	2.081	Continuing	Continuing
• K32101: <i>JOINT EFFECTS TARGETING SYSTEM (JETS)</i>	2.576	8.932	9.345	-	9.345	69.134	69.802	69.867	70.560	Continuing	Continuing

**Remarks**

**D. Acquisition Strategy**

The Joint Effects Targeting System (JETS) Target Location Designation System (TLDS) entered the acquisition framework on 25 February 2013 at Milestone (MS) B and the Engineering Manufacturing & Development phase. On 26 May 2016, MS C was approved for entry into the Production and Deployment Phase, Low Rate Initial Production. On 6 March 2022, the Milestone Decision Authority provided an Acquisition Decision Memorandum directing the Product Manager to develop a comprehensive plan to acquire an updated version of JETS, implementing M-Code to be compliant with Public Law 111-383, and insertion of other capability improvements commensurate with user Requirements. The Program Manager awarded two Other Transaction Agreements in September 2023 on a cost plus fixed-fee basis for competitive development of the JETS II integrating M-Code GPS. The development is planned to complete in second quarter fiscal year 2026, with one vendor being selected for production on a best value basis beginning in fiscal year 2026.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army												Date: March 2024			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0604710A / Night Vision Systems - Eng Dev				L79 / Joint Effects Targeting Systems (JETS)							
<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	MIPR	Various : Various	5.653	0.067	Nov 2022	0.400	Dec 2023	0.500	Dec 2024	-		0.500	Continuing	Continuing	Continuing
<b>Subtotal</b>			5.653	0.067		0.400		0.500		-		0.500	Continuing	Continuing	N/A
<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
JETS II	C/CPFF	TBD : TBD	-	-		22.606	Nov 2023	15.988	Nov 2024	-		15.988	Continuing	Continuing	Continuing
JETS II (DRS)	C/CPFF	DRS : Melbourne, FL	-	4.407	Sep 2023	-		-		-		-	0.000	4.407	-
JETS II (ESA)	C/CPFF	Elbit Systems of America (ESA) : Merrimack, NH	-	6.293	Sep 2023	-		-		-		-	0.000	6.293	-
<b>Subtotal</b>			-	10.700		22.606		15.988		-		15.988	Continuing	Continuing	N/A
<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	MIPR	C5ISR (RTI) : Ft. Belvoir, VA	13.867	0.134	Nov 2023	0.250	Dec 2023	0.275	Dec 2024	-		0.275	Continuing	Continuing	-
Science and Engineering Support	SS/CPFF	Johns Hopkins University : Laurel, MD	9.397	0.500	Apr 2023	0.659	Jan 2024	0.750	Jan 2025	-		0.750	Continuing	Continuing	-
<b>Subtotal</b>			23.264	0.634		0.909		1.025		-		1.025	Continuing	Continuing	N/A
<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Testing	MIPR	Various : Various	6.061	-		0.250	Jan 2024	2.500	Jan 2025	-		2.500	Continuing	Continuing	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L79 / <i>Joint Effects Targeting Systems (JETS)</i>
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Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			6.061	-		0.250		2.500		-		2.500	Continuing	Continuing	N/A
<b>Project Cost Totals</b>			34.978	11.401		24.165		20.013		-		20.013	Continuing	Continuing	N/A

**Remarks**  
FY 2025 test and evaluation cost increase due to a ramping up of Government testing of the JETS II prototypes.

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2025 Army</b>		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L79 / <i>Joint Effects Targeting Systems (JETS)</i>

Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
JETS II Development	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
JETS II Government Testing					[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
JETS II Production Decision	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
JETS II Production	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
JETS II Initial Operational Test & Evaluation	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
JETS II SWAP-C	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604710A / <i>Night Vision Systems - Eng Dev</i>	<b>Project (Number/Name)</b> L79 / <i>Joint Effects Targeting Systems (JETS)</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
JETS II Development	4	2023	2	2026
JETS II Government Testing	2	2025	1	2026
JETS II Production Decision	1	2026	1	2026
JETS II Production	3	2026	2	2032
JETS II Initial Operational Test & Evaluation	3	2027	3	2027
JETS II SWAP-C	2	2028	4	2030