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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army **Date:** March 2023

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	13.454	17.030	15.129	-	15.129	16.953	17.358	17.542	17.738	0.000	115.204
BV3: <i>Technical Intel Targeting Access Node (TITAN)</i>	-	5.729	7.057	5.146	-	5.146	6.806	7.001	7.076	7.155	0.000	45.970
DX9: <i>National Integration To Tactical Systems</i>	-	2.796	3.197	3.187	-	3.187	3.214	3.415	3.450	3.489	0.000	22.748
EX7: <i>Air Vigilance System Development</i>	-	4.929	6.776	6.796	-	6.796	6.933	6.942	7.016	7.094	0.000	46.486

A. Mission Description and Budget Item Justification

Tactical Exploitation of National Capabilities (TENCAP) exploits national capabilities to pace evolving threats in support of operations during conflict and competition. TENCAP systems and technologies provide deep sensing to support commanders' situational understanding (patterns of life, threat intentions, etc.), indications & warnings (detection of enemy mobilization and hostile activity), and intelligence support to targeting (order of battle, electronic target folders, target detection, Battle Damage Assessment, etc.). TENCAP systems and technologies support Theater-level fires and effects, TENCAP systems enable integrated Signals Intelligence (SIGINT) / Electronic Warfare (EW) / and Cyberspace operations. TENCAP supports Army modernization priorities including Long Range Precision Fires, Assured Position Navigation and Timing/Space (PNT/S), Future Vertical Lift (FVL), and Air Missile Defense (AMD). In summary, TENCAP is a key enabler to defeating peer competitor Anti-Access / Area-Denial (A2/AD) strategies.

This Program Element includes three separate projects described below.

1. Tactical Intelligence Targeting Access Node (TITAN) (BV3) - This project includes funding for system integration and testing of the TITAN (space) Pre-Prototype that will provide specific Army units with assured access to space-based Intelligence, Surveillance, and Reconnaissance (ISR) sensor data from Commercial and National levels. The follow-on effort to the TITAN (space) Pre-Prototype is testing and integration of the Space Ground Component Kit (SGCK) into the TITAN Program of Record. The SGCK consists of antennas, other RF components, and other capabilities developed as part of the TITAN (space) Pre-Prototype effort.
2. National Integration to Tactical Systems (DX9) - This project enables the Army's Tactical Exploitation of National Capabilities (TENCAP) office to monitor, synchronize, and transition proven, advanced technologies, prototypes and standards, developed by the National Intelligence Community (IC), into Army systems and Programs of Record during the most cost-effective, early stages of development.
3. Air Vigilance (AV) Program of Record (POR) (EX7) - This project provides System Development and Integration funds for the classified POR.

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Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>
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B. Program Change Summary (\$ in Millions)	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024 Base</u>	<u>FY 2024 OCO</u>	<u>FY 2024 Total</u>
Previous President's Budget	13.454	17.030	15.448	-	15.448
Current President's Budget	13.454	17.030	15.129	-	15.129
Total Adjustments	0.000	0.000	-0.319	-	-0.319
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	-0.319	-	-0.319

Change Summary Explanation

Decreased funding to support higher Army priorities.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>				Project (Number/Name) BV3 / <i>Technical Intel Targeting Access Node (TITAN)</i>			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
BV3: <i>Technical Intel Targeting Access Node (TITAN)</i>	-	5.729	7.057	5.146	-	5.146	6.806	7.001	7.076	7.155	0.000	45.970
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

All funding is in support of the ACTIVE COMPONENT.

A. Mission Description and Budget Item Justification

The BV3 project demonstrates and integrates space-to-ground station capabilities in the TITAN Program of Record (POR) vehicles. The integration of these capabilities into the TITAN POR vehicles provides timely assured access to National and Commercial Space-Based Intelligence, Surveillance, and Reconnaissance (ISR) sensor data supporting Warfighting commanders' situational understanding (patterns of life, threat intentions, etc.), indications & warnings (detection of enemy mobilization and hostile activity), and intelligence support to targeting (order of battle, electronic target folders, target detection, Battle Damage Assessment, etc.).

FY2024 base dollars in the amount of \$5.146 million funds integration and demonstration of TITAN (space) Pre-Prototype and integration of the Space Ground Component Kit (SGCK) into the TITAN POR after validation in the TITAN Integration Environment (TIE). Enables continued integration of prototype software and sensor-unique hardware into representative TITAN POR architecture to provide access to National and Commercial Space-based ISR. FY2024 base funds support continued development and integration of next generation commercial and national space SIGINT and GEOINT sub-systems. The SGCK) will follow a Modular Open Systems Approach (MOSA) to support seamless integration of future space capability into the TITAN POR.

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

	FY 2022	FY 2023	FY 2024
Title: BV3 / Tactical Intelligence Targeting Access Node (TITAN) Prototype System	5.729	7.057	5.146
Description: The Tactical Intelligence Targeting Access Node (TITAN) (space) Pre-Prototypes is a Key Enabler of Army Modernization priorities that will provide the following capability to the Army:			
<ol style="list-style-type: none"> 1. Timely, assured intelligence for Long Range Precision Fires (LRPF) and maneuver in contested and Anti-Access / Area-Denial (A2/AD) environments. 2. Assured access to ISR sensor data collected at Commercial and National levels. 3. Software analytics capability to enable the intelligence cycle with increased speed, precision, and accuracy. 4. Automated/Assisted Sensor-to-Shooter (S2S) workflows with increased speed, scalability, and accuracy to support LRPF in an A2/AD environment. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>	Project (Number/Name) BV3 / <i>Technical Intel Targeting Access Node (TITAN)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
<p>5. Modern and consolidated ground station for National and Commercial sensors. Successful development and deployment of the TITAN (space) Pre-Prototypes pave the way for final development of the Space Ground Component Kit (SGCK) that will be integrated into and provide these same capabilities for the TITAN POR.</p> <p>FY 2023 Plans: Finalize TITAN (space) Pre-Prototype integration and support capability demonstrations. Integrate new technologies and processing capabilities into the TITAN Program of Record (POR) through the Space Ground Component Kit (SGCK) subsystems including access to additional space sensor constellations, improving assured access of space sensor data, ingest and processing of commercial and government remote sensing data, and integration of newly-developed antenna to meet Army mobility and collection requirements in the TITAN POR.</p> <p>FY 2024 Plans: Funds integration and demonstration of TITAN (space) Pre-Prototype and integration of the SGCK into the TITAN POR after validation in the TITAN Integration Environment (TIE). Enables continued integration of prototype software and sensor-unique hardware into representative TITAN POR architecture to provide access to National and Commercial Space-based ISR. FY2024 base funds support continued development and integration of next generation commercial and national space SIGINT and GEOINT sub-systems. The SGCK will follow a Modular Open Systems Approach (MOSA) to support seamless integration of future space capability into the TITAN POR.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: The \$1.911 million decrease between FY23 (\$7.057 million) and FY24 (\$5.146 million) reflects improved transition process and efficiencies accomplished during prior year integration into TITAN POR.</p>			
Accomplishments/Planned Programs Subtotals	5.729	7.057	5.146

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024	FY 2024	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Cost To	Total Cost
			Base	OCO	Total					Complete	
• 0603766A: <i>Tactical Electronic Surveillance System - Adv Dev</i>	113.365	72.314	65.567	-	65.567	38.537	29.007	29.019	39.343	Continuing	Continuing

Remarks
BV3 integration activities are conducted in concert with development activities funded by PE 0603766A BX9.

D. Acquisition Strategy
The TITAN (space) Pre-Prototype requirement was validated by the TENCAP General Officer Steering Group (TGOSG) in April 2019. In order to maximize agility and innovation in acquisition, TENCAP worked with the Defense Innovation Unit (DIU) to establish an Other Transaction Authority (OTA) agreement to develop the TITAN

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>	Project (Number/Name) BV3 / <i>Technical Intel Targeting Access Node (TITAN)</i>
<p>(space) Pre-Prototype and follow-on SGCK capabilities. The TITAN (space) Pre-Prototype provides a modernized, deployable, ground station capable of rapidly and semi-autonomously receiving, processing, exploiting, fusing, and disseminating space-based sensor data to provide improved situational awareness and direct tactical support to Army commanders at echelon. The TITAN (space) Pre-Prototype reduces S2S latency to allow timely intelligence support to the commander. The TITAN (space) Pre-prototype uses an agile software development approach, and maximizes non-proprietary / modular open system architectures (MOSA) to rapidly update and ingest data streams from emerging commercial vendors and national data sources. This OTA was preceded by Soldier touchpoints to inform this acquisition. Soldier engagement was used throughout the development and demonstration of the TITAN (space) Pre-Prototype. The capabilities successfully demonstrated in the TITAN (space) Pre-Prototype are being integrated into the TITAN POR through the SGCK.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0605766A / National Capabilities Integr ation (MIP)				BV3 / Technical Intel Targeting Access Node (TITAN)							
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
TITAN (space) Prototype Engineering Services	C/CPPF	TBD : TBD	-	0.329	Jan 2022	0.385	Jan 2023	0.303	Jan 2024	-		0.303	0.000	1.017	-
Subtotal			-	0.329		0.385		0.303		-		0.303	0.000	1.017	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
TITAN (space) Pre-Prototype	C/FFP	Northrup Grumman : Aurora, CA	-	4.500	Jan 2022	5.742	Jan 2023	4.030	Feb 2024	-		4.030	0.000	14.272	-
Subtotal			-	4.500		5.742		4.030		-		4.030	0.000	14.272	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
TITAN (space) Pre-Prototype Development	Allot	Army TENCAP : Alexandria, VA	-	0.500	Jan 2022	0.500	Jan 2023	0.500	Feb 2024	-		0.500	0.000	1.500	-
Subtotal			-	0.500		0.500		0.500		-		0.500	0.000	1.500	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Test and Exercises for TITAN (space) Pre-Prototype Development	C/FFP	Multiple : Multiple	-	0.400	Jan 2022	0.430	Jan 2023	0.313	Jan 2024	-		0.313	0.000	1.143	-
Subtotal			-	0.400		0.430		0.313		-		0.313	0.000	1.143	N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>	Project (Number/Name) BV3 / <i>Technical Intel Targeting Access Node (TITAN)</i>

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028										
	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							
Risk Reduction w/Legacy Ground Systems	[Redacted]																																		
TITAN (space) Pre-Prototype Development	[Redacted]																																		
TITAN (space) Pre-Prototype Factory Acceptance Test #1			▲ 1																																
TITAN (space) Pre-Prototype Factory Acceptance Test #2				▲ 2																															
TTITAN (space) Pre-Prototype Delivery #1				▲ 3																															
TTITAN (space) Pre-Prototype Delivery #2					▲ 4																														
TITAN (space) Pre-Prototypes 1 & 2 Demonstration and Ass...																																			
Integrate Space Ground Components Kits																																			
Integrate Emerging Capabilities into SGCKs																																			
TITAN P3I Efforts																																			

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>	Project (Number/Name) BV3 / <i>Technical Intel Targeting Access Node (TITAN)</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Risk Reduction w/Legacy Ground Systems	1	2020	4	2025
TITAN (space) Pre-Prototype Development	4	2020	1	2024
TITAN (space) Pre-Prototype Factory Acceptance Test #1	3	2022	3	2022
TITAN (space) Pre-Prototype Factory Acceptance Test #2	4	2022	4	2022
TTITAN (space) Pre-Prototype Delivery #1	4	2022	4	2022
TTITAN (space) Pre-Prototype Delivery #2	1	2023	1	2023
TITAN (space) Pre-Prototypes 1 & 2 Demonstration and Assessment	1	2023	4	2025
Integrate Space Ground Components Kits	2	2023	4	2027
Integrate Emerging Capabilities into SGCKs	3	2022	4	2027
TITAN P3I Efforts	1	2023	4	2028

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>				Project (Number/Name) DX9 / <i>National Integration To Tactical Systems</i>			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
DX9: <i>National Integration To Tactical Systems</i>	-	2.796	3.197	3.187	-	3.187	3.214	3.415	3.450	3.489	0.000	22.748
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

All funding is in support of the ACTIVE COMPONENT.

A. Mission Description and Budget Item Justification

TENCAP exploits national capabilities to pace evolving threats in support of operations during conflict and competition. TENCAP systems and technologies provide deep sensing to support commanders' situational understanding (patterns of life, threat intentions, etc.), indications & warnings (detection of enemy mobilization and hostile activity), and intelligence support to targeting (order of battle, electronic target folders, target detection, Battle Damage Assessment, etc.). TENCAP systems and technologies support Theater-level fires and effects, TENCAP systems enable integrated Signals Intelligence (SIGINT) / Electronic Warfare (EW) / and Cyberspace operations. TENCAP supports Army modernization priorities including Long Range Precision Fires, Assured Position Navigation and Timing/Space (PNT/S), Future Vertical Lift (FVL), and Air Missile Defense (AMD). In summary, TENCAP is a key enabler to defeating peer competitor Anti-Access / Area-Denial (A2/AD) strategies.

Funding for this project allows the Army's Tactical Exploitation of National Capabilities (TENCAP) office to monitor, synchronize the transition, and integrate new, updated, and emerging National Intelligence Community (IC) technologies, capabilities, and standards into Army Programs of Record during early stages of development when costs are lowest. The project helps the Army to: (1) maintain operational relevance of Army programs and address changes in technology and the threat, (2) ensure Army programs maintain interoperability with and access to the National IC community architecture and systems as they evolve, and (3) advance the Army's ability to conduct analysis and tasking, collection, processing, exploitation, dissemination (TCPED) of intelligence data.

FY 2024 Base funding in the amount of \$3.187 million provides integration of validated National IC capabilities and prioritized by the TENCAP General Officer Steering Group (TGOSG) into Army Programs of Record. The funded efforts include system development and integration of National sensors, architectures, and capabilities.

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

	FY 2022	FY 2023	FY 2024
Title: National Integration to Tactical Systems	2.296	3.197	3.187
Description: National Integration provides for enhancements developed by Army TENCAP's BA 6.4 Project 907 along with the integration and transition of new, updated and emerging National Intelligence Community technologies and capabilities into Program of Records (POR)s. This effort develops and integrates national intelligence community software that informs, influences and enhances MULTI-INT sensor systems, by targeting modern digital communications systems employed by near-peer nation state armies.			
FY 2023 Plans:			

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>	Project (Number/Name) DX9 / <i>National Integration To Tactical Systems</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
<p>Continues system development and integration of National asset capabilities into Army programs as directed by the Tactical Exploitation of National Capabilities (TENCAP) General Officers' Steering Group (GOSG), with system development and integration of antenna capability. FY2023 plans include Integrating the latest specialized capability advances and collected data into the open, government-owned software, and enabling Signal Intelligence (SIGINT), Electronic Warfare, and Cyber capabilities into Programs of Record (POR)s.</p> <p>FY 2024 Plans: Continue following the direction and priorities, established by the Tactical Exploitation of National Capabilities (TENCAP) General Officers' Steering Group (GOSG), to develop and integrate National asset capabilities into Army programs. FY2024 plans include Integrating the latest specialized capability advances and collected data into the open, government-owned software, and enabling Signal Intelligence (SIGINT), Electronic Warfare, and Cyber capabilities into Programs of Record (POR)s.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: FY2024 level of effort anticipated to remain stable.</p> <p>Title: TENCAP Radio Frequency Exploitation (TRFE)</p> <p>Description: Highly specialized capability software that informs, influences and enhances MULTI-INT sensor systems, by targeting modern digital communications systems employed by near-peer nation state armies. Assists with Battlespace Radio Frequency (RF) Characterization for modern communication environments with the intent to synchronize Signal Intelligence (SIGINT), Cyber and Electronic Warfare operations. Utilizes commercial industry components and architectures to minimize hardware costs, risk and maximizes scalability/modularity.</p>			
Accomplishments/Planned Programs Subtotals	2.796	3.197	3.187

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• 0603766A: <i>Tactical Electronic Surveillance System - Adv Dev</i>	113.365	72.314	65.567	-	65.567	38.537	29.007	29.019	39.343	Continuing	Continuing
• OMA - 122011 OMA: <i>Contractor Logistics Support and Other Weapon Support, OMA 122011</i>	-	-	-	-	-	-	-	-	-		
• OMA - 122021 OMA: <i>Contractor Logistics Support and Other Weapon, OMA 122021 Support</i>	11.360	9.186	11.640	-	11.640	11.704	11.731	11.862	11.998	Continuing	Continuing

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

<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u> <u>Base</u>	<u>FY 2024</u> <u>OCO</u>	<u>FY 2024</u> <u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
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Remarks

A portion of FY24 Base OMA funding (\$2.426 million) provides support for the CORE TENCAP program funded by lines 907 and DX9. The larger portion of the FY24 Base OMA funding (\$9.214 million) funds sustainment of deployed CORIAN Counter UAS systems.

D. Acquisition Strategy

The 'National Integration to Tactical Systems' funds provide for transition and integration of National IC advanced technologies and prototypes leveraged by the Army's TENCAP program office. The Army TENCAP acquisition strategy is driven by an annual TENCAP General Officer Steering Group (TGOSG). The TGOSG reviews, validates, prioritizes, and guides Army TENCAP efforts, according to the Army and Defense strategies. Based on this TGOSG guidance, Army TENCAP invests RDTE in Intelligence Community (IC) developments during the more cost-effective advanced development phase to ensure Army requirements are met with minimal redundancy with Army investments. Army TENCAP then transitions these advanced development efforts through system development and integration into Army Programs of Record (POR). This strategy ensures these leveraged investments remain viable through multiple budget cycles, significantly increasing successful transition to recipient Army PORs. Army TENCAP facilitates the continued access to National IC 'joint' efforts and compatibility with those National standards and software baselines for those Army PORs that benefit from these leveraged National IC technologies. This results in cost savings through cost sharing, and Army participation in collaborative Intelligence. Funds will be used for integration efforts identified and vetted through the Army TENCAP annual TGOSG.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0605766A / National Capabilities Integration (MIP)				DX9 / National Integration To Tactical Systems							
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
National Integration Engineers	MIPR	Army Geospatial Center : Alexandria, VA 22304	-	0.120	Jan 2022	0.150	Jan 2023	0.413	Feb 2024	-		0.413	0.000	0.683	Continuing
Subtotal			-	0.120		0.150		0.413		-		0.413	0.000	0.683	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
TENCAP Radio Frequency Exploitation (TRFE)	MIPR	Classified : Classified	4.496	0.462	Jan 2021	0.823	Jan 2023	-		-		-	0.000	5.781	Continuing
National Integration	MIPR	Multiple : Multiple	-	1.691	Jan 2022	1.504	Jan 2023	2.134	Jan 2024	-		2.134	0.000	5.329	-
Subtotal			4.496	2.153		2.327		2.134		-		2.134	0.000	11.110	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
National Integration Program Management	Allot	Army TENCAP : Alexandria, VA	-	0.373	Jan 2022	0.360	Jan 2023	0.400	Feb 2024	-		0.400	0.000	1.133	-
Subtotal			-	0.373		0.360		0.400		-		0.400	0.000	1.133	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
TRFE	MIPR	Classified : Classified	0.394	-		0.180		-		-		-	0.000	0.574	Continuing
National Integration	MIPR	Multiple : Multiple	-	0.150	Jan 2022	0.180	Jan 2023	0.240	Jan 2024	-		0.240	0.000	0.570	Continuing
Subtotal			0.394	0.150		0.360		0.240		-		0.240	0.000	1.144	N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>	Project (Number/Name) DX9 / <i>National Integration To Tactical Systems</i>

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
National Integration System Development & Integration																												
TGOSG Annual Meeting FY24 Direction					1																							
TGOSG Annual Meeting FY25 Direction					2																							
TGOSG Annual Meeting FY26 Direction					3																							
TGOSG Annual Meeting FY27 Direction					4																							
TGOSG Annual Meeting FY28 Direction					5																							
TGOSG Annual Meeting FY29 Direction					6																							
TGOSG Annual Meeting FY30 Direction					7																							

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>	Project (Number/Name) DX9 / <i>National Integration To Tactical Systems</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
National Integration System Development & Integration	1	2022	4	2028
TGOSG Annual Meeting FY24 Direction	4	2022	4	2022
TGOSG Annual Meeting FY25 Direction	4	2023	4	2023
TGOSG Annual Meeting FY26 Direction	4	2024	4	2024
TGOSG Annual Meeting FY27 Direction	4	2025	4	2025
TGOSG Annual Meeting FY28 Direction	4	2026	4	2026
TGOSG Annual Meeting FY29 Direction	4	2027	4	2027
TGOSG Annual Meeting FY30 Direction	4	2028	4	2028

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>				Project (Number/Name) EX7 / <i>Air Vigilance System Development</i>			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
<i>EX7: Air Vigilance System Development</i>	-	4.929	6.776	6.796	-	6.796	6.933	6.942	7.016	7.094	0.000	46.486
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

All funding is in support of the ACTIVE COMPONENT.

A. Mission Description and Budget Item Justification

Operational details are classified. The Air Vigilance system is a software-based capability that collects critical intelligence data on emerging threat aerial systems. The collected data provides early warning of enemy operations in restricted airspace to ensure force protection. An Air Vigilance system is comprised of a server unit configured and connected with either a single or multiple sensors.

FY2024 Base funding in the amount of \$6.796 million provides for the development and integration of Pre-Planned Product Improvements (P3I) to meet and pace an evolving threat. The P3I consist of system development and integration of the latest software and hardware configurations to gain greater processing power, keep pace with emerging enemy changes, and ensure interoperability between System Capability Drops (CD). These funds also provide for continued development and integration of the CD 4 requirements into a proof-of-concept mobile system.

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

	FY 2022	FY 2023	FY 2024
Title: Air Vigilance System Development and Integration	4.929	6.776	6.796
Description: Software and hardware engineering, development and integration efforts.			
FY 2023 Plans: Continues to provide for software development and integration to ingest latest collected sensor data into the common baseline and enhance system capabilities to meet newly identified threats and continues development and integration of the CD 4 requirements into two proof-of-concept mobile systems.			
FY 2024 Plans: Continue development and integration of Pre-Planned Product Improvements (P3I) to meet and pace an evolving threat. The P3I consist of system development and integration of the latest software and hardware configurations to gain greater processing power, keep pace with emerging enemy changes, and ensure interoperability between System Capability Drops (CD). These funds also provide for continued development and integration of the CD 4 requirements into a proof-of-concept mobile variant. The			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army	Date: March 2023
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>	Project (Number/Name) EX7 / <i>Air Vigilance System Development</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
original plan was to develop two proof-of-concept mobile variants, but to reduce costs, the program is developing only one mobile variant.			
<i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> FY2024 level of effort is anticipated to remain stable.			
Accomplishments/Planned Programs Subtotals	4.929	6.776	6.796

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• 0603766A: <i>Tactical Electronic Surveillance System - Adv Dev</i>	113.365	72.314	65.567	-	65.567	38.537	29.007	29.019	39.343	Continuing	Continuing
• W60001: <i>AIR VIGILANCE (AV)</i>	13.486	5.688	6.641	-	6.641	9.937	9.974	9.979	9.060	Continuing	Continuing

Remarks
The Air Vigilance product team leverages \$4.467 million from line 0603766A to fund advanced software development.

D. Acquisition Strategy
Air Vigilance (AV) is an Acquisition Category (ACAT) III program of record (POR) that originated from a Quick Reaction Capability (QRC) developed and fielded cooperatively with the Intelligence Community (IC) through the efforts and mission of the Army's Tactical Exploitation of National Capabilities (TENCAP) office. The QRC was transitioned into an Army POR by the AAE in May 2013 and assigned to Army Program Executive Office - Intelligence Electronic Warfare and Sensors (PEO IEWS), the chartered acquisition authority for management and execution of the Army's TENCAP mission and Milestone Decision Authority (MDA) for the AV POR. The Army TENCAP continues to leverage the Mission Partner software development to keep pace with the threat by ingesting the latest sensor collects into the common Intelligence Community (IC) data library. The AV POR has fielded systems IAW the approved Basis of Issue Plan (BOIP) and with software and system capabilities that meet its latest validated Capability Drop (CD) requirements. The AV POR will continue to evolve meeting future validated Capability Drop requirements and maintaining its effectiveness against emerging threats.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)								
2040 / 5				PE 0605766A / National Capabilities Integration (MIP)				EX7 / Air Vigilance System Development								
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	
System Engineers and Technical Assistance (SETA)	C/CPAF	TBD - Competitive contract to be awarded in Mar 2023. Option to be exercised in Mar 2024. : Alexandria, VA 22315	2.072	0.900	Jan 2022	1.420	Mar 2023	1.412	Mar 2024	-		1.412	0.000	5.804	Continuing	
Subtotal			2.072	0.900		1.420		1.412		-		1.412	0.000	5.804	N/A	
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	
Air Vigilance software and hardware updates and integration	Option/CPAF	CACI : Various	8.178	3.163	Jan 2022	4.362	Mar 2023	4.342	Mar 2024	-		4.342	0.000	20.045	Continuing	
Subtotal			8.178	3.163		4.362		4.342		-		4.342	0.000	20.045	N/A	
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	
PM Costs, Travel, Facilities	Allot	Army TENCAP : Alexandria, VA	3.324	0.736	Jan 2022	0.814	Mar 2023	0.821	Mar 2024	-		0.821	0.000	5.695	Continuing	
Subtotal			3.324	0.736		0.814		0.821		-		0.821	0.000	5.695	N/A	
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	
Air Vigilance System Testing and Exercises	Option/CPAF	CACI : Various	0.564	0.130	Jan 2022	0.180	Mar 2023	0.221	Mar 2024	-		0.221	0.000	1.095	Continuing	

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>	Project (Number/Name) EX7 / <i>Air Vigilance System Development</i>

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				
	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	
Air Vigilance System Development Capability Drop (CD3)	[Redacted]																												
Full Deployment - Current RDP s/w Baseline (DEC22)	[Redacted]								2 FD	[Redacted]																			
E3I GSA FEDSIM Contract #1	[Redacted]																												
Air Vigilance Future Software and Hardware Capability	[Redacted]																												
CD 4 Authority to Proceed Decision	[Redacted]				1	[Redacted]																							
Air Vigilance Capability Drop System Development (CD4)	[Redacted]								[Redacted]																				
GSA FEDSIM Contract Award #2	[Redacted]								3 New Competitive Award	[Redacted]																			
GSA FEDSIM Contract #2	[Redacted]																												
CD 4 Delivery	[Redacted]																4	[Redacted]											
CD 4 Operational Assessment	[Redacted]																[Redacted]												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A / <i>National Capabilities Integration (MIP)</i>	Project (Number/Name) EX7 / <i>Air Vigilance System Development</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Air Vigilance System Development Capability Drop (CD3)	2	2016	4	2028
Air Vigilance CD #3 National Assessment Group Test	3	2018	3	2018
Full Deployment - Current RDP s/w Baseline (DEC22)	1	2024	1	2024
TRFE GSA FEDSIM Bridge Contract	2	2018	3	2019
E3I GSA FEDSIM Contract #1 Contract Award	2	2019	2	2019
E3I GSA FEDSIM Contract #1	2	2019	2	2024
Air Vigilance Future Software and Hardware Capability	2	2022	4	2028
CD 4 Authority to Proceed Decision	1	2023	1	2023
Air Vigilance Capability Drop System Development (CD4)	1	2023	4	2025
GSA FEDSIM Contract Award #2	2	2024	2	2024
GSA FEDSIM Contract #2	2	2024	2	2029
CD 4 Delivery	1	2026	1	2026
CD 4 Operational Assessment	1	2026	1	2027