Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army											Date: March 2024	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 Program Element (Number/Name) PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*							
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	-	72.364	65.567	90.265	-	90.265	63.649	48.625	53.954	49.333	Continuing	Continuing
907: *Tactical Exploitation Of National Capabilities*	-	14.158	17.719	52.997	-	52.997	54.500	39.136	34.490	29.675	Continuing	Continuing
BX9: *Tactical Intel Targeting Access Node Adv Develop*	-	22.767	20.872	17.856	-	17.856	7.227	7.480	17.433	17.606	Continuing	Continuing
CC5: *Low Earth Orbit (LEO) / Intel Surv Recon (ISR)*	-	35.439	26.976	19.412	-	19.412	1.922	2.009	2.031	2.052	Continuing	Continuing

Note

All funding is in support of the ACTIVE COMPONENT.

A. Mission Description and Budget Item Justification

Tactical Exploitation of National Capabilities (TENCAP) exploits national intelligence 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) / Geospatial Intelligence (GEOINT) / Electronic Warfare (EW) / and Cyberspace operations. TENCAP supports Army modernization priorities including Long Range Precision Fires, Assured Position Navigation and Timing/Space (APNT/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.

Tactical Exploitation of National Capabilities (TENCAP) accomplishes the Army's Tactical Electronic Surveillance System Advance Development by leveraging National Intelligence Community (IC) capabilities through cross-agency engineering to evaluate, enhance, prototype, and transition Intelligence, Surveillance and Reconnaissance (ISR) technologies/capabilities from the IC into Army systems and architectures. This Program Element includes three projects:

1) TENCAP Core project (907).
2) Tactical Intelligence Targeting Access Node (TITAN) (space) advanced development project (BX9).
3) Low Earth Orbit ISR (LEO ISR) development project (CC5).

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army	Date: March 2024
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0603766A *I Tactical Electronic Surveillance System - Adv Dev*

B. Program Change Summary ($ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	72.314	65.567	38.537	-	38.537
Current President's Budget	72.364	65.567	90.265	-	90.265
Total Adjustments	0.050	0.000	51.728	-	51.728
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.050	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	51.728	-	51.728

Change Summary Explanation

Increased funding due to DoD ISR Kill Chain Program Decision Memorandum direction to integrate US Space Force Space-based ISR capability and for High Altitude Platform development (HAP)/Deep Sensing (HAP /DS).

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army											Date: March 2024	
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*				Project (Number/Name) 907 / *Tactical Exploitation Of National Capabilities*			
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**
907: *Tactical Exploitation Of National Capabilities*	-	14.158	17.719	52.997	-	52.997	54.500	39.136	34.490	29.675	Continuing	Continuing
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 (APNT/S), and Future Vertical Lift (FVL). In summary, TENCAP is a key enabler to defeating peer competitor Anti-Access / Area-Denial (A2/AD) strategies.

The Tactical Exploitation of National Capabilities (TENCAP) office serves as the Army's centralized lead to perform National Intelligence cross-agency engineering to evaluate, enhance, prototype, and transition Intelligence, Surveillance and Reconnaissance (ISR) technologies/capabilities from the National Intelligence Community (IC) into Army systems and architectures.
TENCAP programs perform two vital functions for the Army's Warfighters: (1) ensures assured access to current and future National and Commercial sensors and supporting tactical architectures; and (2) exploits and influences new developments that focus on improving the Analysis and Tasking, Collection, Processing, Exploitation, Dissemination (TCPED) of intelligence data.

FY2025 Base funding in the amount of $52.997 million enables systems engineering and collaborative development and prototyping on multiple National Intelligence Community (IC) advanced software and prototype developments that leverage upcoming National IC investments for Army use. This collaborative environment ensures continuous Army interoperability with National IC assets and architectures, exploits advances in commercial imagery and signal technologies, and develops prototypes that directly support the Army Warfighter. In FY25, TENCAP will begin integrating Space Force's new Space-Based ISR into the Tactical Intelligence Targeting Access Node (TITAN) Program of Record.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: TENCAP Cross-agency Core Engineering activities	10.578	11.862	11.802
Description: Funds cross-agency core engineering activities using organic and matrix engineering subject matter experts (SMEs). By utilizing these SMEs, TENCAP is able to collaborate, develop and exploit emerging multi-intelligence based			

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** 907 / *Tactical Exploitation Of National Capabilities*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
technologies to satisfy/accelerate Army Intelligence, Surveillance, Reconnaissance (ISR), Mission Command and Force Protection requirements. ***FY 2024 Plans:*** Incorporate Army requirements into the earliest, most cost-effective stages of National developments; prototype capabilities to ensure Army access to sensors and multi-intelligence based capabilities; monitor National Agencies' emerging technologies and systems; exploit advances in national and commercial overhead capabilities. ***FY 2025 Plans:*** Incorporate Army requirements into the earliest, most cost-effective stages of National developments; prototype capabilities to ensure Army access to sensors and multi-intelligence based capabilities; monitor National Agencies' and US Space Force (USSF) emerging technologies and systems; exploit advances in national and commercial overhead capabilities. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Funding change is consistent with the planned lifecycle of this effort.			
Title: Integrate US Space Force Space-based ISR capability. ***Description:*** Funds the Army to integrate a classified US Space Force Capability into Army tactical ground stations in order to meet the objectives of the DoD ISR Kill Chain Program Decision Memorandum. ***FY 2025 Plans:*** In collaboration with USSF and classified mission partners, study and develop the architecture, prototype the software and prepare for hardware acquisition to demonstrate integration of a classified USSF Space-based ISR Capability into Army tactical ground stations. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase due to DoD ISR Kill Chain Program Decision Memorandum direction to integrate US Space Force Space-based ISR capability with $10M increase in FY25.	-	-	10.000
Title: Air Vigilance - Advanced Development ***Description:*** Enhanced intelligence, force protection, and indications and warning capabilities under Army TENCAP program to pace the proliferation and rapid advances in threat and technology. ***FY 2024 Plans:***	2.500	4.768	30.106

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** 907 / *Tactical Exploitation Of National Capabilities*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Exploit National investments and advances in Signal Intelligence (SIGINT) to ensure the Army's ability to identify and counter the rapidly evolving threat. Integrate advanced signals software into other Army prototype systems. ***FY 2025 Plans:*** Exploit National investments and advances in Signal Intelligence (SIGINT) to ensure the Army's ability to identify and counter the rapidly evolving threat. Integrate advanced signals software into other Army prototype systems. FY23-24 increase of $2.100M for integration into other Army SIGINT programs and architecture and $.168M as inflation increase for total of $2.268M. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** FY25 $25.388 increase will integrate advanced signals software development into other Classified Army prototype systems.			
Title: TENCAP Radio Frequency Exploitation (TRFE) ***Description:*** Prototype capability software that informs, influences and enhances Multi-Discipline sensor systems within PEO IEW&S such as Air Vigilance (AV), to pace the threat by targeting modern digital communications systems employed by near-peer nation state militaries. Assists with Joint All-Domain Operations Radio Frequency (RF) Characterization for modern communication environments with the intent to synchronize Signal Intelligence (SIGINT), Electronic Warfare, and Cyber operations. Utilizes commercial industry components and architectures to minimize hardware costs, risk and maximizes scalability/modularity. ***FY 2024 Plans:*** FY24 funds will leverage National investments and advances in Signal Intelligence (SIGINT), Electronic Warfare and Cyber capabilities for use and advancement of Army Warfighter capabilities in a variety of form factors and pace the threat. ***FY 2025 Plans:*** FY25 funds will leverage National investments and advances in Signal Intelligence (SIGINT), Electronic Warfare and Cyber capabilities for use and advancement of Army and Joint Warfighter capabilities in a variety of form factors and pace the threat.	1.080	1.089	1.089
Accomplishments/Planned Programs Subtotals	14.158	17.719	52.997

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• 0605766A: *National Capabilities Integration (MIP)*	16.790	15.129	16.565	-	16.565	16.960	17.139	17.333	17.507	0.000	117.423

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** 907 / *Tactical Exploitation Of National Capabilities*

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• OMA - 122021: *Contractor Logistics Support and Other Weapon Support*	11.401	11.640	11.998	-	11.998	11.731	11.862	11.998	-	Continuing	Continuing

Remarks

FY25 Base OMA funding provides support to Army TENCAP capabilities and programs.

D. Acquisition Strategy

The Army Tactical Exploitation of National Capabilities (TENCAP) Core mission is Congressionally mandated. The Secretary of the Army chartered this organization to leverage National Intelligence Community (IC) capabilities for use by the tactical Army. TENCAP subject matter experts, in conjunction with Intelligence Community partners, conduct engineering, prototyping, testing and demonstrations of the Army's ability to receive and exploit next-generation National and commercial space-based intelligence, surveillance and reconnaissance (ISR) data through Army Intelligence collection systems.

End state: This is an ongoing requirement to ensure that the Army's ability to exploit National and Commercial space-based ISR, to close the deep-sensing gap in Multi-Domain operations, and to enable rapid targeting of threats.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** 907 / *Tactical Exploitation Of National Capabilities*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TENCAP Intelligence Engineers (SETA)	C/CPFF	Intrepid : Alexandria, VA	31.846	1.500	Jan 2023	1.500	Feb 2024	1.758	Feb 2025	-		1.758	0.000	36.604	Continuing
TENCAP Intelligence Engineers(Matrix Gov)	MIPR	Army Geospatial Cener (AGC) : Alexandria, VA	13.557	1.300	Oct 2022	1.600	Jan 2024	2.142	Jan 2025	-		2.142	0.000	18.599	-
		Subtotal	45.403	2.800		3.100		3.900		-		3.900	0.000	55.203	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TENCAP core mission activities	Various	Multiple : Multiple	41.681	5.544	Feb 2023	2.616	Jan 2024	5.161	Feb 2025	-		5.161	0.000	55.002	Continuing
Air Vigilance advanced software development	MIPR	Classified : MIPR	26.751	1.800	Jan 2023	4.768	Feb 2024	30.106	Feb 2025	-		30.106	0.000	63.425	Continuing
TENCAP Engineering (Contractor)	C/TBD	TBD : TBD	-	-		2.500	Feb 2024	1.342	Feb 2025	-		1.342	0.000	3.842	-
TENCAP Radio Frequency Exploitation (TRFE)	MIPR	Classified : Classified	11.181	0.850	Jan 2023	1.089	Feb 2024	1.089	Feb 2025	-		1.089	0.000	14.209	-
Space Datalink	FFRDC	MITRE : Boston, MA	-	-		0.125		0.204	Dec 2024	-		0.204	0.000	0.329	-
Integrate USSF ISR Capability	MIPR	Classified : Classified	-	-		-		8.011	Mar 2025	-		8.011	0.000	8.011	-
		Subtotal	79.613	8.194		11.098		45.913		-		45.913	0.000	144.818	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TENCAP Prgm Mgmt-Dir Gov,travel,etc.	Allot	Army TENCAP : Multiple Locations	24.700	1.739	Oct 2022	1.707	Jan 2024	1.028	Jan 2025	-		1.028	0.000	29.174	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	Project (Number/Name) 907 / *Tactical Exploitation Of National Capabilities*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TENCAP Secured Facilities and IT support	MIPR	Army Geospatial Center (AGC) : Alexandria, VA	5.302	1.025	Nov 2022	1.210	Feb 2024	1.256	Feb 2025	-		1.256	0.000	8.793	Continuing
		Subtotal	30.002	2.764		2.917		2.284		-		2.284	0.000	37.967	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TENCAP Lab Tests, Exercises, Simulations	MIPR	Multiple : Multiple	3.431	0.400	Jan 2023	0.604	Dec 2023	0.900	Feb 2025	-		0.900	0.000	5.335	Continuing
		Subtotal	3.431	0.400		0.604		0.900		-		0.900	0.000	5.335	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
Project Cost Totals	158.449	14.158		17.719		52.997		-		52.997	0.000	243.323	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** 907 / *Tactical Exploitation Of National Capabilities*

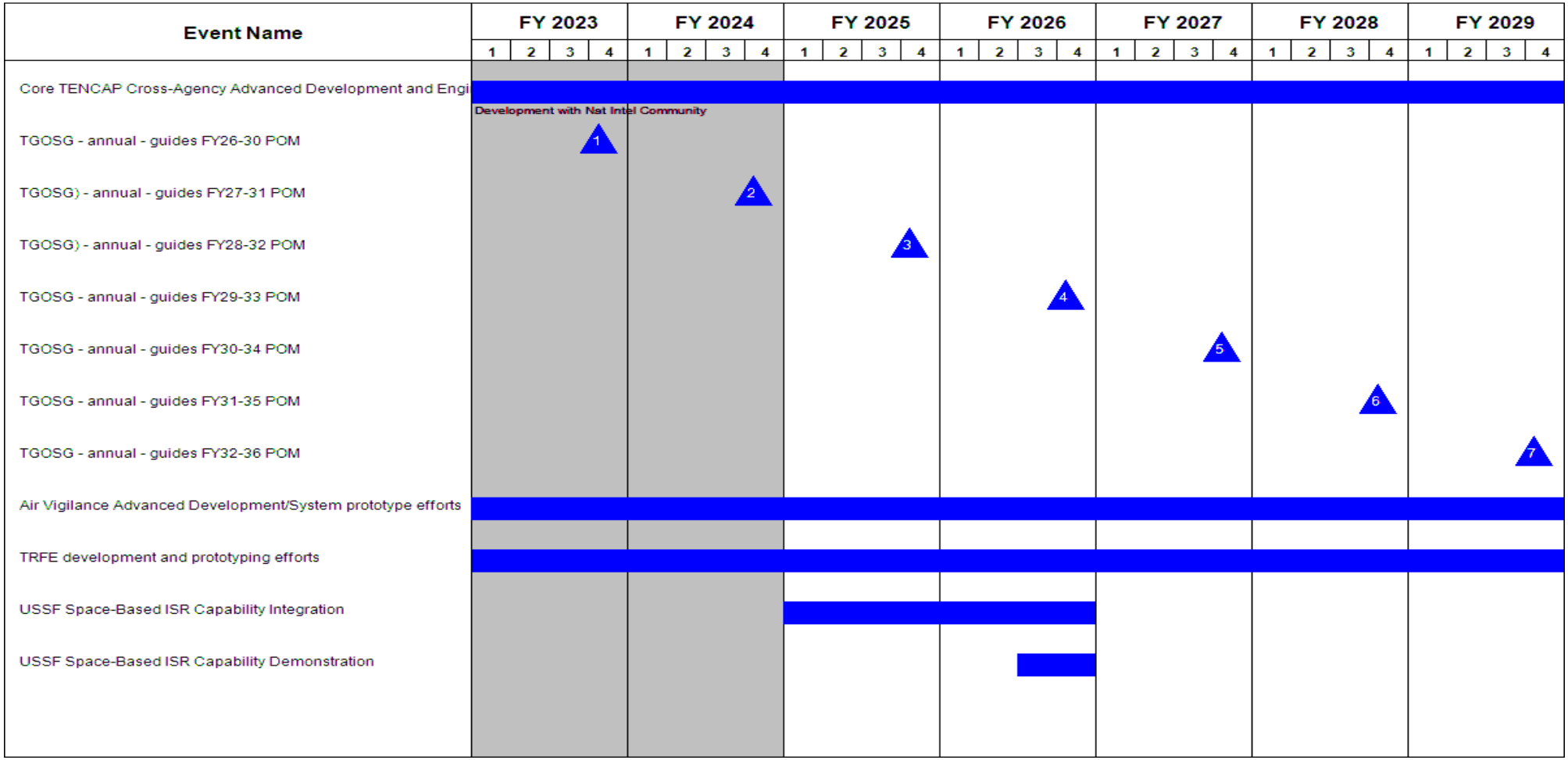

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** 907 / *Tactical Exploitation Of National Capabilities*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Core TENCAP Cross-Agency Advanced Development and Engineering	1	2018	4	2029
TGOSG - annual - guides FY23-27 POM	2	2021	2	2021
TGOSG - annual - guides FY24-28 POM	4	2021	4	2021
TGOSG - annual - guides FY25-29 POM	4	2022	4	2022
TGOSG - annual - guides FY26-30 POM	4	2023	4	2023
TGOSG) - annual - guides FY27-31 POM	4	2024	4	2024
TGOSG) - annual - guides FY28-32 POM	4	2025	4	2025
TGOSG - annual - guides FY29-33 POM	4	2026	4	2026
TGOSG - annual - guides FY30-34 POM	4	2027	4	2027
TGOSG - annual - guides FY31-35 POM	4	2028	4	2028
TGOSG - annual - guides FY32-36 POM	4	2029	4	2029
Air Vigilance Advanced Development/System prototype efforts	3	2013	4	2029
TRFE development and prototyping efforts	1	2018	4	2029
MDSS (realigned to PE 0604036A, Proj BY9 in FY22)	1	2021	4	2021
LEO ISR (realigned to Proj CC5 in FY22)	1	2021	4	2021
USSF Space-Based ISR Capability Integration	1	2025	4	2026
USSF Space-Based ISR Capability Demonstration	3	2026	4	2026

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	Project (Number/Name) BX9 / *Tactical Intel Targeting Access Node Adv Develop*	

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
BX9: *Tactical Intel Targeting Access Node Adv Develop*	-	22.767	20.872	17.856	-	17.856	7.227	7.480	17.433	17.606	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

All funding is in support of the ACTIVE COMPONENT.

A. Mission Description and Budget Item Justification

This project funds development and prototyping of space-to-ground station capabilities to provide timely assured access to National and Commercial Space-Based Intelligence, Surveillance, and Reconnaissance (ISR) sensor data supporting 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.).

Funding for TITAN Advance Development funding will also prototype software analytic capabilities to increase the speed, precision and accuracy of the intelligence cycle through Automated/Assisted Sensor-to-Shooter (S2S) workflows. These capabilities will be integrated into the TITAN Ground Station Program of Record (POR).

FY2025 base funding in the amount of $17.856 million enables the TENCAP program to dedicate appropriate engineering support to improve the TITAN Surrogates, TITAN Pre-Prototypes, and Space Ground Component Kits (SGCK) and ensure they continues to leverage legacy and emergent National Reconnaissance (NRO) Overhead Systems (NOS) and Commercial sensors in collaboration with required systems to receive required products through planned IC architectural changes over time. The SGCK is a component of the TITAN POR that provides TITAN access to space capabilities. The SGCK consists of a mission critical small form- factor antenna, specialized software, Automated Target Recognition tools, and enhanced interoperability with the fires architecture to support the Army's Long Range Precision Fires (LRPF) priority. The SGCK, originally developed by TENCAP, was integrated into the TITAN POR in FY23 and provides, rapid availability of National Reconnaissance Office (NRO) Overhead Systems (NOS) Geospatial Intelligence (GEOINT) and Signal Intelligence (SIGINT) data from Theater, National and Commercial sources. The TITAN Surrogates and TITAN Pre-Prototypes are systems that provide risk reduction and lessons learned to improve the TITAN POR.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: Tactical Intelligence Targeting Access Node (TITAN) Adv Development Prototype System	22.767	20.872	9.689
Description: Development and delivery of Space Ground Component Kits (SGCKs) to TITAN Program of Record, integration of new sensor and analytic capabilities into TITAN Pre-Prototypes and SGCKs.			
FY 2024 Plans: Improve TITAN Surrogates, TITAN (space) Pre-Prototypes, and Space Ground Component Kits (SGCK) through Pre-Planned Program Improvements (P3I) to ensure they continue to leverage legacy and emergent NOS and Commercial sensors in			

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** BX9 / *Tactical Intel Targeting Access Node Adv Develop*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
collaboration with required systems to receive required products through planned IC architectural changes over time. This will be accomplished by integrating planned Commercial and IC space-based sensors. Also, funding will be used to sustain TITAN Surrogates, TITAN (space) Pre-prototypes 1 and 2 delivered to units for experimentation, and SGCKs 1 and 2. ***FY 2025 Plans:*** Improve TITAN (space) Pre-Prototypes, TITAN Variant, and Space Ground Component Kits (SGCK) through Pre-Planned Program Improvements (P3I) to ensure they continue to leverage legacy and emergent NOS and Commercial sensors in collaboration with required systems to receive required products through planned IC architectural changes over time. This will be accomplished by integrating planned Commercial and IC space-based sensors. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease from FY24 to FY25 ($3.052M) is due to development and delivery of TITAN Pre-Prototypes 1, 2, and Variant to the Multi-Domain Task Forces. Decrease ($8.167M) moved to TITAN Pre-Prototypes (TPP) Sustainment and Engineering Support, Exercises and Demonstrations accomplishment. Increase of $.036M due to economic assumptions.			
Title: TITAN Pre-Prototypes (TPP) Sustainment and Engineering Support, Exercises and Demonstrations ***Description:*** Operations and sustainment of existing TITAN Pre-Prototypes and TITAN Variant to meet exercise and demonstration requirements. ***FY 2025 Plans:*** Sustainment and engineering support to TPP 1 & 2 and the TITAN variant delivered to the Multi-Domain Task Force (MDTF) units for experimentation and demonstration. This will enable continued learning for the TITAN PoR through exercise participation, soldier touchpoints, Soldier Informed Development (SID) and maturation of prototype. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase from FY24 to FY25 for $8.167M moved from TITAN Adv Development and Prototyping accomplishment.	-	-	8.167
Accomplishments/Planned Programs Subtotals	22.767	20.872	17.856

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• 0605766A: *National Capabilities Integration (MIP)*	16.790	15.129	16.565	-	16.565	16.960	17.139	17.333	17.507	0.000	117.423

Remarks

BX9 development activities are conducted in concert with integration funded in PE 0605766A BV3.

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** BX9 / *Tactical Intel Targeting Access Node Adv Develop*

D. Acquisition Strategy

The TITAN (space) Pre-Prototype requirement was validated by the TENCAP General Officer Steering Group (TGOSG). 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 (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 tasking, receiving, processing, exploiting, fusing, and disseminating space-based sensor data to provide networked situational awareness and direct tactical support to Army commanders at echelon. The TITAN (space) Pre-Prototype continues to reduce Sensor-to-Shooter (S2S) latency to allow timely intelligence support to the commander. The TITAN (space) Pre-Prototype uses an agile acquisition strategy and will continue to maximize non-proprietary / modular open system architectures (MOSA), to enable easy upgrade of software/ firmware, analytics/algorithms, and ingest additional data streams as commercial vendors and national data become available. This OTA was preceded by Soldier touchpoints to inform this acquisition, and Soldier engagement is planned throughout the development and demonstration of the TITAN (space) Pre-Prototype. The capabilities successfully demonstrated in the TITAN (space) Pre-Prototype are used to develop the SGCK that is integrated into the TITAN POR and will be improved and updated as required to ensure continued effectivity throughout planned National Overhead System Architecture changes. The capabilities and interfaces will be improved and updated as required to ensure continued effectivity throughout planned National Overhead System Architecture changes.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	Project (Number/Name) BX9 / *Tactical Intel Targeting Access Node Adv Develop*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TITAN Engineering Services	MIPR	Army Geospatial Center (AGC) : Alexandria, VA	1.501	1.500	Jan 2023	1.369	Jan 2024	1.733	Jan 2025	-		1.733	0.000	6.103	-
		Subtotal	1.501	1.500		1.369		1.733		-		1.733	0.000	6.103	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TITAN (space) Pre-Prototype Development	C/CPFF	Northrup Grumman : Aurora, CA	15.504	18.102	Nov 2022	11.334	Feb 2024	7.758	Feb 2025	-		7.758	0.000	52.698	-
		Subtotal	15.504	18.102		11.334		7.758		-		7.758	0.000	52.698	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TITAN (space) Pre-Prototype Operations and Support, Exercises and Demonstrations	MIPR	Army TENCAP : Alexandria, VA	2.001	2.150	Oct 2022	7.242	Feb 2024	8.167	Feb 2025	-		8.167	0.000	19.560	-
		Subtotal	2.001	2.150		7.242		8.167		-		8.167	0.000	19.560	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TITAN (space) Pre-Prototype Test and Exercises	MIPR	Multiple : Miltiple	1.001	1.015	Jan 2023	0.927	Jan 2024	0.198	Feb 2025	-		0.198	0.000	3.141	-
		Subtotal	1.001	1.015		0.927		0.198		-		0.198	0.000	3.141	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	Project (Number/Name) BX9 / *Tactical Intel Targeting Access Node Adv Develop*	

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	20.007	22.767		20.872		17.856		-		17.856	0.000	81.502	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** BX9 / *Tactical Intel Targeting Access Node Adv Develop*

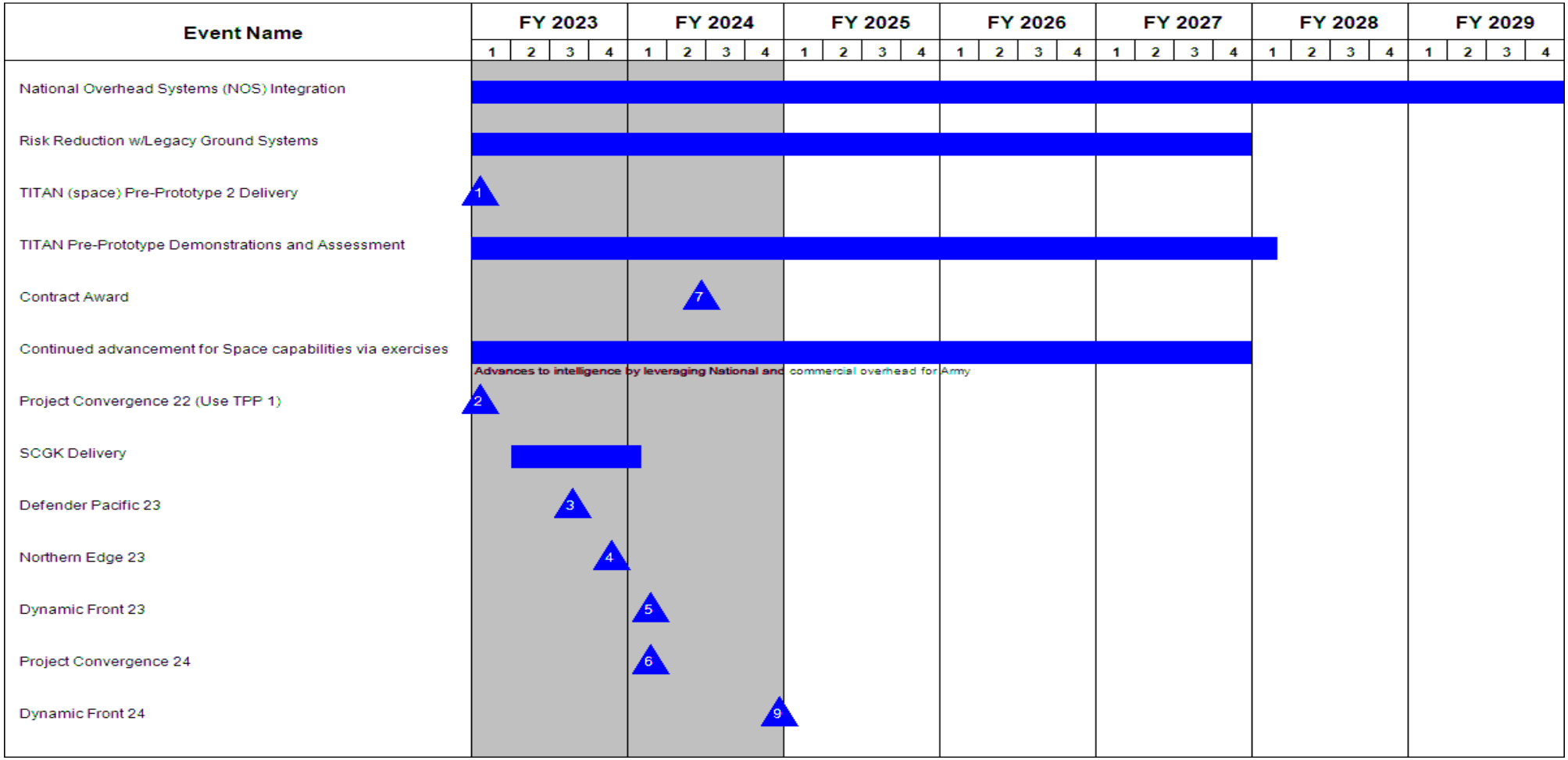

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** BX9 / *Tactical Intel Targeting Access Node Adv Develop*

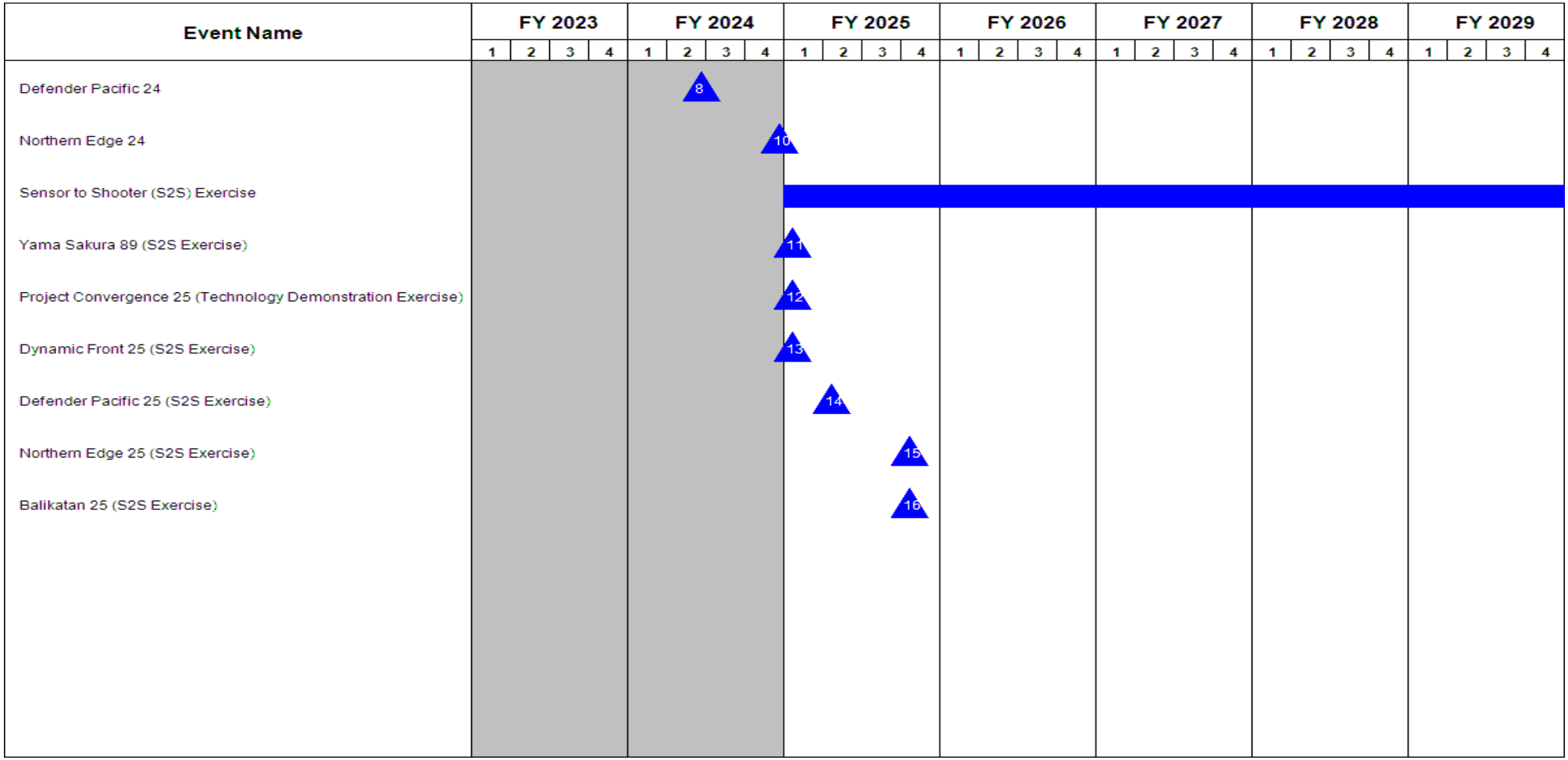

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** BX9 / *Tactical Intel Targeting Access Node Adv Develop*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
National Overhead Systems (NOS) Integration	1	2021	4	2029
Risk Reduction w/Legacy Ground Systems	1	2020	4	2027
TITAN (space) Pre-Production Development	4	2020	4	2022
TITAN (space) Pre-Prototype 1 Delivery	4	2022	4	2022
TITAN (space) Pre-Prototype 2 Delivery	1	2023	1	2023
TITAN Pre-Prototype Demonstrations and Assessment	4	2022	1	2028
Contract Award	2	2024	2	2024
Continued advancement for Space capabilities via exercises	1	2022	4	2027
Defender Pacific 22	3	2022	3	2022
Northern Edge 22	3	2022	3	2022
Dynamic Front 22	4	2022	4	2022
Project Convergence 22 (Use TPP 1)	1	2023	1	2023
SCGK Delivery	2	2023	1	2024
Defender Pacific 23	3	2023	3	2023
Northern Edge 23	4	2023	4	2023
Dynamic Front 23	1	2024	1	2024
Project Convergence 24	1	2024	1	2024
Dynamic Front 24	4	2024	4	2024
Defender Pacific 24	2	2024	2	2024
Northern Edge 24	4	2024	4	2024
Sensor to Shooter (S2S) Exercise	1	2025	1	2030
Yama Sakura 89 (S2S Exercise)	1	2025	1	2025

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** BX9 / *Tactical Intel Targeting Access Node Adv Develop*

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Project Convergence 25 (Technology Demonstration Exercise)	1	2025	1	2025
Dynamic Front 25 (S2S Exercise)	1	2025	1	2025
Defender Pacific 25 (S2S Exercise)	2	2025	2	2025
Northern Edge 25 (S2S Exercise)	4	2025	4	2025
Balikatan 25 (S2S Exercise)	4	2025	4	2025

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	Project (Number/Name) CC5 / *Low Earth Orbit (LEO) / Intel Surv Recon (ISR)*	

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
CC5: *Low Earth Orbit (LEO) / Intel Surv Recon (ISR)*	-	35.439	26.976	19.412	-	19.412	1.922	2.009	2.031	2.052	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

All funding is in support of the ACTIVE COMPONENT.

A. Mission Description and Budget Item Justification

Low Earth Orbit (LEO) Intelligence, Surveillance and Reconnaissance (ISR) directly supports the Army Assured Position Navigation and Timing/Space (APNT/S) and Long Range Precision Fires (LRPF) modernization priorities.

The LEO ISR effort will provide prototyping, development, and experimentation of High Altitude and Tactical Space Layer (TSL) sensors (including electro optical, synthetic aperture radar, radio frequency, and hyperspectral) and space-based Alternative Positioning, Navigation, and Timing (ALTPNT) systems, which are designed to provide wide-area, responsive, all domain sensing and alternative signal sources required for beyond-line-of-sight (BLOS) targeting and force maneuver. The BLOS sensing will significantly reduce Sensor-to-Shooter (S2S) timelines and reliance on current, at-risk signal sources. Follow-on, persistent, prototype, tactical sensor and alternative signal capabilities will be integrated with the Army Tactical Intelligence Targeting Access Node (TITAN) ground station and theater gateways. The prototype sensor capabilities will provide direct tasking, assured access, and freedom of maneuver directly supporting live-fire, S2S demonstrations and assessments.

FY2025 Base funding in the amount of $19.412 million provides prototyping, experimentation, and risk reduction activities to space-based sensor and ALTPNT prototype systems, supporting wide-area, responsive, and deep-area sensing and force maneuver. It will enable ground stations to dynamically task, receive and disseminate data to directly support live-fire S2S demonstrations and assessments.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: CC5 / Low Earth Orbit (LEO) Intel Surv Recon (ISR)	35.439	26.976	19.412
Description: The LEO ISR effort provides prototyping, development and experimentation of Tactical Space Layer (TSL) prototype sensors (including electro-optical, synthetic aperture radar, and radio frequency). These sensors are designed to provide wide-area, responsive, all domain sensing required for beyond-line-of-sight (BLOS) targeting and force maneuver, and will significantly reduce Sensor-to-Shooter (S2S) timelines. Follow-on persistent prototype tactical sensor capabilities will be integrated with the Army TITAN ground station and theater gateways, which will provide direct tasking and assured access directly supporting live-fire S2S demonstrations and assessments.			
FY 2024 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** CC5 / *Low Earth Orbit (LEO) / Intel Surv Recon (ISR)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Funding provides for follow-on development, experimentation and support of prototype High Altitude and Tactical Space Layer sensor test beds (electro optical, synthetic aperture radar, radio frequency, and hyperspectral) and space-based Alternative Positioning, Navigation, and Timing (ALTPNT) systems, which will be integrated with the Army TITAN ground station and theater gateways to provide direct tasking and assured access directly supporting live-fire S2S demonstrations and assessments and Project Convergence events. ***FY 2025 Plans:*** FY2025 Base funding in the amount of $19.412 million provides prototyping, experimentation, and risk reduction activities to space-based sensor and ALTPNT prototype systems, supporting wide-area, responsive, and all domain sensing and force maneuver. It will enable ground stations to dynamically task, receive and disseminate data to directly support live-fire S2S demonstrations and assessments. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease of $7.603 due to completion of Tactical Space Layer sensor prototyping. FY25 increase $.039M due to economic assumptions.			
Accomplishments/Planned Programs Subtotals	35.439	26.976	19.412

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• 0604035A: *Low Earth Orbit (LEO) Satellite Capability*	34.213	38.851	21.935	-	21.935	17.350	17.522	17.775	21.082	Continuing	Continuing

Remarks

Development by Project CC5 "LEO ISR" are in conjunction and complement efforts funded by Project BX7 "LEO Satellite Capability." ref. PE 0604035A.BX7

D. Acquisition Strategy

The LEO ISR effort supports work with the Intelligence Community (IC), our Mission Partner, and the Space Development Agency on the prototyping, development, experimentation and support of High Altitude and Tactical Space Layer (TSL) prototype sensors (including electro optical, synthetic aperture radar, radio frequency, and hyperspectral), and Alternative Positioning, Navigation, and Timing (ALTPNT) systems. These sensors are designed to provide wide-area, responsive, all domain sensing required for BLOS targeting and force maneuver, significantly reducing S2S timelines. Follow-on, persistent, prototype tactical sensor capabilities (FY 2024-2025) will be integrated with the Army TITAN ground station and theater gateways, which will provide direct tasking, assured access, and freedom of maneuver directly supporting live-fire S2S demonstrations and assessments. Existing Mission Partner contracts and Aviation & Missile Technology Consortium (AMTC) Other Transaction Authority (OTAs) will be used for prototype development, engineering services and test and evaluation support.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	Project (Number/Name) CC5 / *Low Earth Orbit (LEO) / Intel Surv Recon (ISR)*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LEO Prototype Development and Engineering Services Support	C/CPFF	A-PNT /S : Multiple Locations	5.000	4.000	Jun 2023	3.000	Jun 2024	2.500	Jun 2025	-		2.500	0.000	14.500	-
		Subtotal	5.000	4.000		3.000		2.500		-		2.500	0.000	14.500	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LEO Development (Classified)	MIPR	TBD : TBD	58.598	26.939	Jan 2023	20.576	Jan 2024	14.612	Jan 2025	-		14.612	0.000	120.725	-
		Subtotal	58.598	26.939		20.576		14.612		-		14.612	0.000	120.725	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LEO Program MGMT	Various	APNT CFT/S : Huntsville, AL	3.500	2.500	Jun 2023	1.900	Jun 2024	1.000	Jun 2025	-		1.000	0.000	8.900	-
		Subtotal	3.500	2.500		1.900		1.000		-		1.000	0.000	8.900	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LEO Prototype Tests and Evaluations	Various	Multiple : Multiple	8.000	2.000	Jan 2023	1.500	Jan 2024	1.300	Jan 2025	-		1.300	0.000	12.800	-
		Subtotal	8.000	2.000		1.500		1.300		-		1.300	0.000	12.800	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
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	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	75.098	35.439		26.976		19.412		-		19.412	0.000	156.925	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** CC5 / *Low Earth Orbit (LEO) / Intel Surv Recon (ISR)*

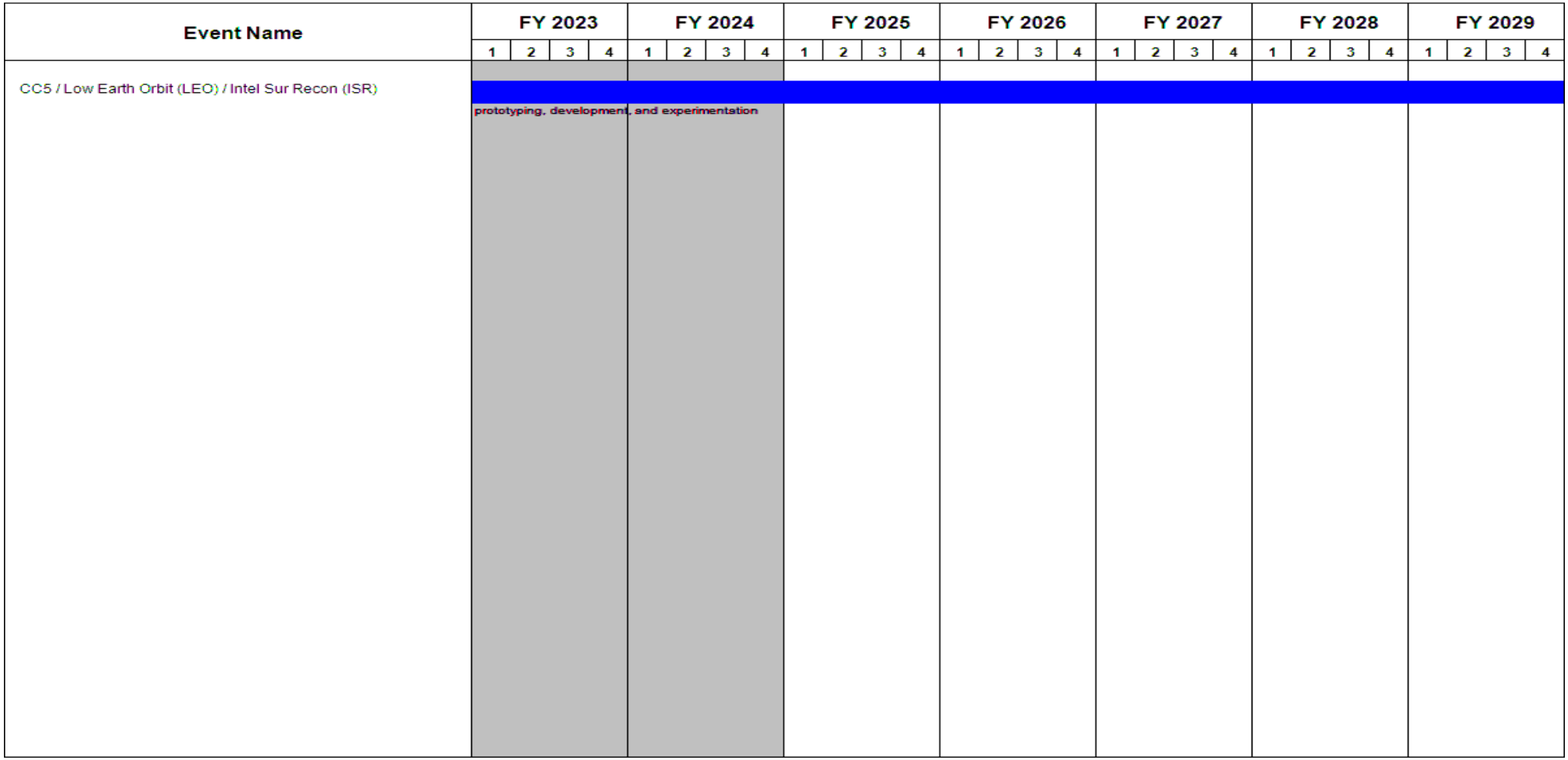

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** CC5 / *Low Earth Orbit (LEO) / Intel Surv Recon (ISR)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Sensor-to-Shooter Campaign of Learning	1	2022	4	2022
CC5 / Low Earth Orbit (LEO) / Intel Sur Recon (ISR)	1	2022	4	2029