Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Army											Date: May 2021	
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 2020**	**FY 2021**	**FY 2022 Base**	**FY 2022 OCO**	**FY 2022 Total**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**Cost To Complete**	**Total Cost**
Total Program Element	-	37.490	182.400	113.365	-	113.365	-	-	-	-	-	-
907: *Tactical Exploitation Of National Capabilities*	-	37.490	182.400	18.264	-	18.264	-	-	-	-	-	-
BX9: *Tactical Intel Targeting Access Node Adv Develop*	-	-	-	20.003	-	20.003	-	-	-	-	-	-
CC5: *Low Earth Orbit (LEO) / Intel Surv Recon (ISR)*	-	-	-	75.098	-	75.098	-	-	-	-	-	-

Note

Change to TENCAP FY2021 to FY2022 funds reflect successful initiation of 3 major efforts -LEO, TITAN Prototype and MDSS - in FY2021 under Project 907 TENCAP, transition and continue in separate Project BX9 'TITAN Prototype', Project CC5 'LEO', and to PE 0604036A Project BY9 for 'MDSS' Program.

Projects BX9 'TITAN Prototype', and Project CC5 'LEO' are not new starts in FY2022; they continue work funded under Project 907 'TENCAP' in FY2021.

MDSS 0604036A is not a New Start in FY2022. MDSS received an initial $39.625 million in PE 0603766A in FY 2021 and transitions to 0604036A in FY 2022.

All funding is in support of the ACTIVE COMPONENT.

A. Mission Description and Budget Item Justification

Tactical Exploitation of National Capabilities (TENCAP) accomplishes the Army's Tactical Electronic Surveillance System Advance Development by leveraging the 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. This effort includes both the TENCAP (907) core mission, as well as two major prototyping, development and experimentation efforts: the Tactical Intelligence Targeting Access Node (TITAN) (BX9) prototype, and the Low Earth Orbit (LEO) (CC5) effort.

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Army					Date: May 2021
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 2020**	**FY 2021**	**FY 2022 Base**	**FY 2022 OCO**	**FY 2022 Total**
Previous President's Budget	37.490	194.775	105.297	-	105.297
Current President's Budget	37.490	182.400	113.365	-	113.365
Total Adjustments	0.000	-12.375	8.068	-	8.068
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-12.375			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	8.068	-	8.068

Change Summary Explanation

Projects BX9 and CC5 are not new starts in FY2022; they continue work initiated in Project 907 in FY2021.
MDSS 0604036A is not a New Start in FY2022. MDSS received an initial $39.625 million in PE 0603766A in FY2021 and transitions to 0604036A in FY2022.
$-12.375 million reflects Appropriations Committee mark to MDSS portion in Project 907 FY2021.
$8.068 internal Army realignments to priority requirements.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
907: *Tactical Exploitation Of National Capabilities*	-	37.490	182.400	18.264	-	18.264	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

All funding is in support of the ACTIVE COMPONENT.

A. Mission Description and Budget Item Justification

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 and Feedback (TCPEDF) of intelligence data. These functions support the National Defense Strategy as key enablers of the Joint All Domain Operations and the Army's Multi Domain Operations. TENCAP systems provide deep sensing during the competition phase contributing to enables Joint All-Domain Operations: TENCAP systems and technologies provide deep sensing in competition contributing to situational understanding (patterns of life, threat intentions, etc.) and intelligence support to targeting (order of battle, electronic target folders, etc.). TENCAP systems and technologies also address several Large Scale Combat Operations (LSCO) Gaps, including Deep Multi-Domain Sensing, analysis and Processing, Exploitation, and Dissemination (PED) for Indications and Warning (I&W) and Anti-access area-denial (A2AD) targeting.

FY2022 Base funding in the amount of $18.264M provides: (1) TENCAP systems engineering and collaborative development on multiple validated National Intelligence Community (IC) advanced software and prototype developments that leverage National IC investments for Army use and ensure continuous Army interoperability with National IC assets and architectures; (2) TENCAP Radio Frequency Exploitation; and (3) advanced development of capabilities for Air Vigilance (AV) Army Program of Record.

*Note: Project LEO that started under Project 907 in FY2021 realigned/moved to Project CC5 in FY2022. Project TITAN Prototype that started under Project 907 in FY2021 realigned/moved to Project BX9 in FY2022. Program MDSS that started in 0603766A under Project 907 in FY2021 transitioned to PE 0604036A Project BY9 in FY2022.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: TENCAP Cross-agency Core Engineering activities	14.605	10.845	14.729	-	14.729

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Description: By utilizing organic and matrix engineering subject matter experts, TENCAP collaborates, develops and exploits emerging multi-intelligence based technologies to satisfy/accelerate Army Intelligence, Surveillance, Reconnaissance (ISR), Mission Command and Force Protection requirements. ***FY 2021 Plans:*** Will work to incorporate Army requirements into earliest stages of National developments; Ensure Army access to sensors and multi-intelligence based capabilities; Monitor emerging technologies and systems; Exploit advances in commercial imagery and signal technologies; Develop prototypes that improve Army intelligence products. Approximately 50% of the core TENCAP resources will be in the development and integration of TITAN Space prototype. ***FY 2022 Base Plans:*** Continues to incorporate Army requirements into earliest stages of National developments; Ensure Army access to sensors and multi-intelligence based capabilities; Monitor emerging technologies and systems; Exploit advances in commercial imagery and signal technologies; Develop prototypes that improve Army intelligence products. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Increased engagement with and exploitation of National Intelligence Community capabilities to leverage Intelligence Community (IC) investments to support Army modernization priorities.					
Title: Air Vigilance - Advanced Development ***Description:*** Enhance intelligence, force protection, and indications and warning capabilities under Army TENCAP program to pace the proliferation and rapid advances in threat and technology. ***FY 2021 Plans:*** Will continue to develop advanced signal and software enhancements for Air Vigilance (AV) Army Program of Record that support the programs Capability Drops. ***FY 2022 Base Plans:*** Continues development of advanced signal and software enhancements for Air Vigilance (AV) Army Program of Record that support the programs Capability Drops. ***FY 2021 to FY 2022 Increase/Decrease Statement:***	5.479	4.034	2.500	-	2.500

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Decrease in funding represents a shift based on program maturation and preparation for system development/ demonstration and integration.					
Title: Advanced Miniaturized Data Acquisition System(AMDAS)/ AMDAS Dissemination Vehicle (ADV) ***Description:*** Continue advanced engineering and development efforts to ensure continued interoperability and effectiveness of Army Corp-level TENCAP subsystems that provide national data to the tactical warfighter via intelligence community partners classified national systems. Will become subsystem to Tactical Intelligence Targeting Access Node (TITAN) prototype. ***FY 2021 Plans:*** AMDAS Next: Will continue the development of TENCAP new prototype subsystem antenna, which will include modeling and simulation along with early developmental testing. Continued work on advance sensor development, and design ground processor, to ensure alignment with evolving national architectural enhancements as the National Technical Means (NTM) capabilities progress. Will become subsystem to TITAN Space prototype. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** This effort will be funded from Project BX9 TITAN starting in FY2022.	14.559	9.002	-	-	-
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), and Terrestrial Layer System (TLS) by targeting modern digital communications systems employed by near-peer nation state armies. 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 2021 Plans:*** Continue to develop the MULTI-INT TRFE cognitive software based SIGINT-Enabled Electronic Warfare and Cyber Attack prototype capability focused on countering Peer State and modern communication targets and threats. ***FY 2022 Base Plans:***	2.847	2.178	1.035	-	1.035

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
As a follow on to TENCAP Radio Frequency Exploitation (TRFE) prototype, develops the open, government-owned software framework enabling Signal Intelligence (SIGINT), Electronic Warfare and Cyber capabilities. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Decrease in funding represents changes from prototype development to software architecture development.					
Title: Tactical Intelligence Targeting Access Node (TITAN) Space Prototype System ***Description:*** Tactical Intelligence Targeting Access Node (TITAN) prototype system will provide timely assured intelligence for long range precision fires and maneuver in contested and Anti-access area-denial (A2AD) environments; Assured access to Space Intelligence, Surveillance, and Recognizance (ISR): National, Army and Commercial; Software Analytics capability to enable the intelligence cycle with increased speed, precision and accuracy Automated/Assisted Sensor-to-Shooter workflows: speed, scalability, accuracy to support Long Range Precision Fires (LRPF) in an A2AD environment; Modern and consolidated ground station for space and select national commercial theater sensors. TITAN is aligned with its own project BX9 effective FY2022. ***FY 2021 Plans:*** Continue the development and integration of the TITAN space prototype system that will provide rapid availability of National Overhead Systems (NOS) GEOINT and SIGINT capability. Continue to develop and integrate with the Remote Ground Terminal (RGT) and LEO constellation, the downlink, ingest and processing of commercial imagery. Continue the development and integration of automated target recognition along with integrating the fires architecture to support Army's #1 priority, Long Range Precision Fires (LRPF). ***FY 2021 to FY 2022 Increase/Decrease Statement:*** TITAN Prototype is transitioned to Project BX9 effective FY2022.	-	30.000	-	-	-
Title: Multi-Domain Sensing System (MDSS) ***Description:*** The Multi Domain Sensor System (MDSS) will provide multiple sensing capabilities by developing and prototyping survivable sensor capabilities on higher altitude platforms that can perform effective stand-off operations. They include Electronic Intelligence (ELINT), Communications Intelligence (COMINT), Synthetic Aperture Radar (SAR), Moving Target Indicator (MTI), Cyber/EW, Air-Launched Effects (ALE) and Aircraft Survivability sensors.	-	39.625	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
MDSS is aligned with its own PE 060403 Project BY9 effective FY2022. ***FY 2021 Plans:*** Funding supports MDSS prototype efforts ***FY 2021 to FY 2022 Increase/Decrease Statement:*** MDSS is aligned with its own PE 0604036A Project BY9 effective FY2022.					
Title: Low Earth Orbit Satellite Capability ***Description:*** The Low Earth Orbit (LEO) effort will provide prototyping, development and experimentation of the Tactical Space Layer (TSL) sensors (electro optical, synthetic aperture radar, and radio frequency) which are designed to provide wide-area, responsive deep area sensing required for beyond line of sight (BLOS) targeting and force maneuver, significantly reducing Sensor to Shooter (S2S) timelines. Follow-on persistent prototype tactical sensor capabilities will be integrated with the Army Tactical Intelligence Targeting Access Node (TITAN) ground station which will provide direct tasking and assured access directly supporting live-fire Sensor-to-Shooter (S2S) demonstrations and assessments. ***FY 2021 Plans:*** Provides for follow-on persistent prototype, development, and experimentation of tactical sensor capabilities which will be integrated with the Army Tactical Intelligence Targeting Access Node (TITAN) ground station which will provide direct tasking and assured access directly supporting live-fire S2S demonstrations and assessments. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** LEO is transitioned to Project CC5 effective FY2022.	-	86.716	-	-	-
Accomplishments/Planned Programs Subtotals	37.490	182.400	18.264	-	18.264

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• 0605766A: *National Capabilities Integration (MIP)*	7.835	7.670	14.454	-	14.454	-	-	-	-	-	-
• OMA - 122021: *Contractor Logistics Support and Other Weapon Support*	-	-	0.000	11.360	11.360	-	-	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost

Remarks

D. Acquisition Strategy

The Army Tactical Exploitation of National Capabilities (TENCAP) mission is a Congressionally-mandated and chartered enduring requirement to leverage National Intelligence capabilities useful to the tactical Army. The Army TENCAP acquisition strategy is driven by an annual TENCAP General Officer Steering Group (TGOSG), co-chaired by the Army G-2, Army G-8, Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology [ASA (ALT)], and includes representatives from the Army G-3, Army G-6, Army Futures Command Intelligence-Capability Development and Integration Directorate, Army Training and Doctrine Command (TRADOC), and the Program Executive Office for Intelligence, Electronic Warfare and Sensors (PEO IEW&S). The TENCAP General Officers Steering Group (GOSG) reviews, validates, prioritizes, and guides Army TENCAP efforts, according to Army and Defense strategy. Based on the TGOSG guidance, Army TENCAP invests BA 6.4 RDTE in Intelligence Community (IC) developments during the more cost-effective advanced development phase to ensure Army requirements are met with minimal redundancy to Army investments. Army TENCAP then uses BA 6.5 RDTE to manage the transition of 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. With acquisition discipline and oversight provided by PEO IEW&S, Army TENCAP executes the TGOSG approved efforts through use of multiple contracts and agreements with the military, National Intelligence agencies, labs, industry partners and academia for the full duration required to complete development and transition these national capabilities into enduring Army programs.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army		Date: May 2021
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 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TENCAP Intelligence Engineers (SETA)	Option/ CPFF	Perspecta : Alexandria, VA	25.746	3.100	Jan 2020	1.500	Jan 2021	1.500	Jan 2022	-		1.500	0.000	31.846	Continuing
TENCAP Intelligence Engineers(Matrix Gov)	MIPR	Army Geospatial Cener (AGC) : Alexandria, VA	8.557	2.300	Jan 2020	1.200	Jan 2021	1.500	Oct 2022	-		1.500	0.000	13.557	Continuing
TENCAP Intelligence Engineers (SETA) for TITAN Space prototype development (in Proj BX9 in FY22)	Option/ CPFF	Perspecta : Alexandria, VA	-	-		1.307	Jan 2021	-		-		-	0.000	1.307	Continuing
TENCAP Intelligence Engineers (Matrix Gov) for TITAN Space prototype dev (in Proj BX9 in FY22)	MIPR	Army Geospatial Center (AGC) : Alexandria, VA	-	-		0.900	Mar 2021	-		-		-	0.000	0.900	-
SETA Support MDSS (realigns to PE 0604036A, Proj BY9 in FY22)	C/CPFF	DHPC : Woodbridge, NJ	-	-		1.500	Mar 2021	-		-		-	0.000	1.500	-
SETA Support LEO (realigns to Proj CC5 in FY22)	C/FFP	A-PNT / TENCAP : Multiple locations	-	-		5.000	Jan 2021	-		-		-	0.000	5.000	-
		Subtotal	34.303	5.400		11.407		3.000		-		3.000	0.000	54.110	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TENCAP Core (Focus) Areas	Various	Multiple : Multiple	21.652	5.980	Feb 2020	5.920	Feb 2021	8.129	Feb 2022	-		8.129	0.000	41.681	Continuing
Air Vigilance	MIPR	Classified : MIPR	14.738	5.479	Jan 2020	4.034	Jan 2021	2.500	Jan 2021	-		2.500	0.000	26.751	Continuing
AMDAS/ADV (capability transitions to TITAN Prototype)	MIPR	Classified : MIPR	32.450	12.959	Jan 2020	8.918	Jan 2021	-		-		-	0.000	54.327	Continuing
TRFE	MIPR	Classified : MIPR	5.121	2.847	Jan 2020	2.178	Jan 2021	1.035	Jan 2022	-		1.035	0.000	11.181	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
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*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TITAN Prototype Development	C/FFP	Northrup Grumman : Aurora, CO	-	-		24.102	Jan 2021	-		-		-	0.000	24.102	Continuing
MDSS (legacy) Sensor Improvements (LRR) (realigns to PE 0604036A, Proj BY9 in FY22)	SS/FFP	Northrup Grumman : Baltimore, MD	-	-		12.125	Feb 2021	-		-		-	0.000	12.125	-
MDSS Flyoff Contracts (realigns to PE 0604036A, Proj BY9 in FY22)	TBD	TBD : TBD	-	-		9.000	Jun 2021	-		-		-	0.000	9.000	-
MDSS Sensor Development Contract (realigns to PE 0604036A, Proj BY9 in FY22)	SS/FFP	Northrup Grumman : Baltimore, MD	-	-		15.000	Apr 2021	-		-		-	0.000	15.000	-
LEO Contracts (realigns to Proj CC5 in FY22)	MIPR	Various OTAs and CCDC Organizations : Multiple Locations	-	-		70.400	Jan 2021	-		-		-	0.000	70.400	-
		Subtotal	73.961	27.265		151.677		11.664		-		11.664	0.000	264.567	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TENCAP Prgm Mgmt-Dir Gov,travel,etc.	Allot	Army TENCAP : Alexandria, VA	15.989	3.900	Jan 2020	2.311	Jan 2021	2.500	Jan 2022	-		2.500	0.000	24.700	Continuing
TENCAP Secured Facilities	MIPR	Army Geospatial Center (AGC) : Alexandria, VA	3.577	0.500	Jan 2020	0.525	Jan 2021	0.700	Jan 2022	-		0.700	0.000	5.302	Continuing
TENCAP Prgm Mgmt - TITAN Space prototype development (realigns to Proj BX9 in FY22)	Allot	Army TENCAP : Alexandria, VA	-	-		1.800	Jan 2021	-		-		-	0.000	1.800	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
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 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prog Mgmt- MDSS (realigns to PE 0604036A, Proj BY9 in FY22)	MIPR	PM SAI : Aberdeen, MD	-	-		2.000	Mar 2021	-		-		-	0.000	2.000	-
LEO Prog Mgmt (realigns to Proj CC5 in FY22)	C/CPFF	T2S, Inc. : Huntsville, AL	-	-		3.400	Oct 2020	-		-		-	0.000	3.400	-
		Subtotal	19.566	4.400		10.036		3.200		-		3.200	0.000	37.202	N/A

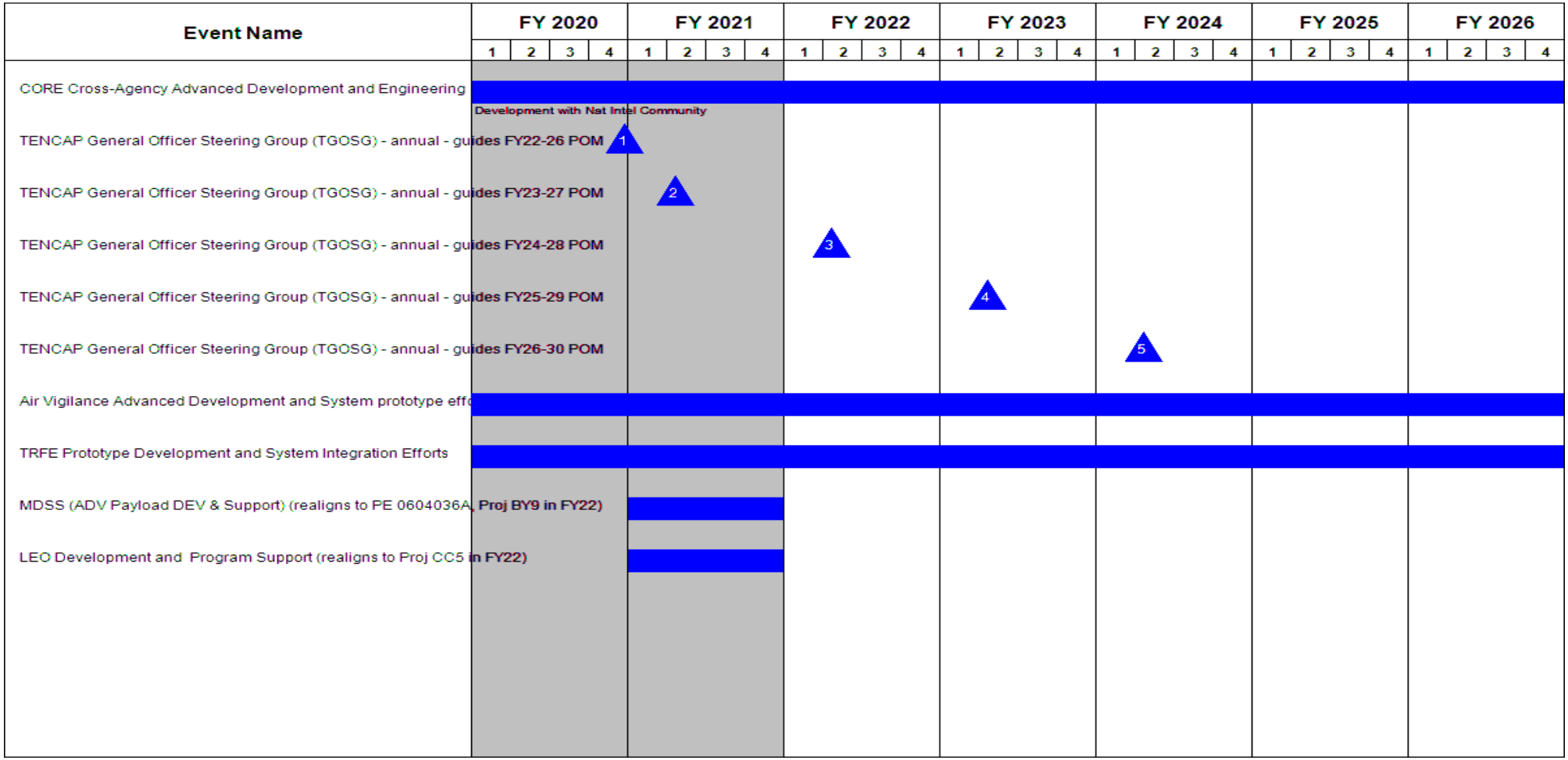
Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TENCAP Lab Tests, Exercises, Simulations	MIPR	Multiple : Multiple	2.206	0.425	Jan 2020	0.400	Jan 2021	0.400	Jan 2022	-		0.400	0.000	3.431	Continuing
Test and Exercises - TITAN Space prototype development (realigns to Proj BX9 in FY22)	MIPR	Multiple : Multiple	-	-		0.880	Jan 2021	-		-		-	0.000	0.880	-
LEO Tests (realigns to Proj CC5 in FY22)	MIPR	A-PNT / TENCAP : Multiple Locations	-	-		8.000	Mar 2021	-		-		-	0.000	8.000	-
		Subtotal	2.206	0.425		9.280		0.400		-		0.400	0.000	12.311	N/A

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	130.036	37.490		182.400		18.264		-		18.264	0.000	368.190	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
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*



Note

MDSS is aligned with its own PE 0604036A Project BY9 effective FY2022.

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army		Date: May 2021
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 Cross-Agency Advanced Development and Engineering	1	2018	4	2026
TENCAP General Officer Steering Group (TGOSG) - annual - guides FY20-24 POM	2	2018	2	2018
TENCAP General Officer Steering Group (TGOSG) - annual - guides FY21-25 POM	2	2019	2	2019
TENCAP General Officer Steering Group (TGOSG) - annual - guides FY22-26 POM	4	2020	4	2020
TENCAP General Officer Steering Group (TGOSG) - annual - guides FY23-27 POM	2	2021	2	2021
TENCAP General Officer Steering Group (TGOSG) - annual - guides FY24-28 POM	2	2022	2	2022
TENCAP General Officer Steering Group (TGOSG) - annual - guides FY25-29 POM	2	2023	2	2023
TENCAP General Officer Steering Group (TGOSG) - annual - guides FY26-30 POM	2	2024	2	2024
Air Vigilance Advanced Development and System prototype efforts	3	2013	4	2026
TRFE Prototype Development and System Integration Efforts	1	2018	4	2026
MDSS (ADV Payload DEV & Support) (realigns to PE 0604036A, Proj BY9 in FY22)	1	2021	4	2021
LEO Development and Program Support (realigns to Proj CC5 in FY22)	1	2021	4	2021

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
BX9: *Tactical Intel Targeting Access Node Adv Develop*	-	-	-	20.003	-	20.003	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Project BX9 is not a new start in FY2022; BX9 continues work funded by Project 907 in FY2021, and realigns into Project BX9 in FY2022.

All funding is in support of the ACTIVE COMPONENT.

A. Mission Description and Budget Item Justification

Tactical Intelligence Targeting Access Node (TITAN) Advanced Development will develop and prototype ground station capabilities that will provide timely assured intelligence for long range precision fires, maneuver and improved situational awareness in contested and Anti-access area-denial (A2AD) environments through assured access to Space Intelligence, Surveillance, and Recognizance (ISR): National and Commercial. TITAN Advanced Development will also develop and prototype Software Analytics capabilities to enable the intelligence cycle with increased speed, precision and accuracy through Automated/Assisted Sensor-to-Shooter workflows. These developments will improve speed, scalability, and accuracy to support Long Range Precision Fires (LRPF) in an A2AD environment. TITAN is a modern and consolidated ground station for space and select aerial sensors.

FY2022 base funding in the amount of $20.003 million provides for the continued development of the TITAN prototype system that will provide rapid availability of National Overhead Systems (NOS) Geospatial Intelligence (GEOINT) and signal intelligence (SIGINT) capabilities; continued development of the Remote Ground Terminal (RGT); and continued development and refinement of automated/assisted target recognition along with enhanced interoperability into the fires architecture.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Tactical Intelligence Targeting Access Node (TITAN) Adv Development Prototype System	-	-	20.003	-	20.003
Description: Tactical Intelligence Targeting Access Node (TITAN) prototype system will provide timely assured intelligence for long range precision fires and maneuver in contested and Anti-access area-denial (A2AD) environments; Assured access to Space Intelligence, Surveillance, and Recognizance (ISR): National, Army and Commercial; Software Analytics capability to enable the intelligence cycle with increased speed, precision and accuracy Automated/Assisted Sensor-to-Shooter workflows: speed, scalability, accuracy to support Long Rang Precision Fires (LRPF) in an A2AD environment; Modern and consolidated ground station for space and select national commercial theater sensors.					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
TITAN is aligned with its own project BX9 effective FY2022. ***FY 2022 Base Plans:*** Continue the development of the Tactical Intelligence Targeting Access Node (TITAN) prototype system that will provide rapid availability of National Reconnaissance Office (NRO) Overhead Systems (NOS) Geospatial Intelligence (GEOINT) and Signal Intelligence (SIGINT) capabilities. Continue to develop the Remote Ground Terminal (RGT) to include emerging Low Earth Orbit (LEO) constellations, improved downlink, ingest and processing of commercial and government remote sensing data. Continue the development and refinement of automated/assisted target recognition along with enhanced interoperability into the fires architecture to support Army's #1 priority, Long Range Precision Fires (LRPF). ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Funding realigns from Project 907 to BX9 in FY2022					
Accomplishments/Planned Programs Subtotals	-	-	20.003	-	20.003

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• 0605766A: *National Capabilities Integration (MIP)*	7.835	7.670	14.454	-	14.454	-	-	-	-	-	-

Remarks

D. Acquisition Strategy

The TITAN prototype requirement was validated by the TENCAP General Officer Steering Group in April 2019. In order to maximize agility and innovation in acquisition, TENCAP is working with the Defense Innovation Unit to establish an Other Transaction Authority (OTA) agreement to develop the TITAN prototype. The TITAN prototype will provide 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 Prototype will reduce sensor to shooter latency to provide timely intelligence support to the commander. The TITAN prototype will use an agile acquisition strategy, and will maximize non-proprietary / open system architectures to enable easy upgrade of software/firmware, analytics/algorithms, and ingest additional data streams as commercial vendors and national data become available. This OTA has been preceded by Soldier touchpoints to inform this acquisition, and Soldier engagement is planned throughout the development and demonstration of the prototype.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
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 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TITAN Engineering Services	MIPR	Perspecta : Alexandria, VA	0.001	-		-		1.500	Jan 2022	-		1.500	0.000	1.501	-
		Subtotal	0.001	-		-		1.500		-		1.500	0.000	1.501	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TITAN Prototype Development	C/FFP	Northrup Grumman : Aurora, CA	0.001	-		-		15.503	Jul 2020	-		15.503	0.000	15.504	-
		Subtotal	0.001	-		-		15.503		-		15.503	0.000	15.504	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TITAN Prototype Program Management	MIPR	Army TENCAP : Alexandria, VA	0.001	-		-		2.000	Jan 2022	-		2.000	0.000	2.001	-
		Subtotal	0.001	-		-		2.000		-		2.000	0.000	2.001	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TITAN Test and Exercises	TBD	Multiple : Miltiple	0.001	-		-		1.000	Jan 2022	-		1.000	0.000	1.001	-
		Subtotal	0.001	-		-		1.000		-		1.000	0.000	1.001	N/A

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.004	-		0.000		20.003		-		20.003	0.000	20.007	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
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*

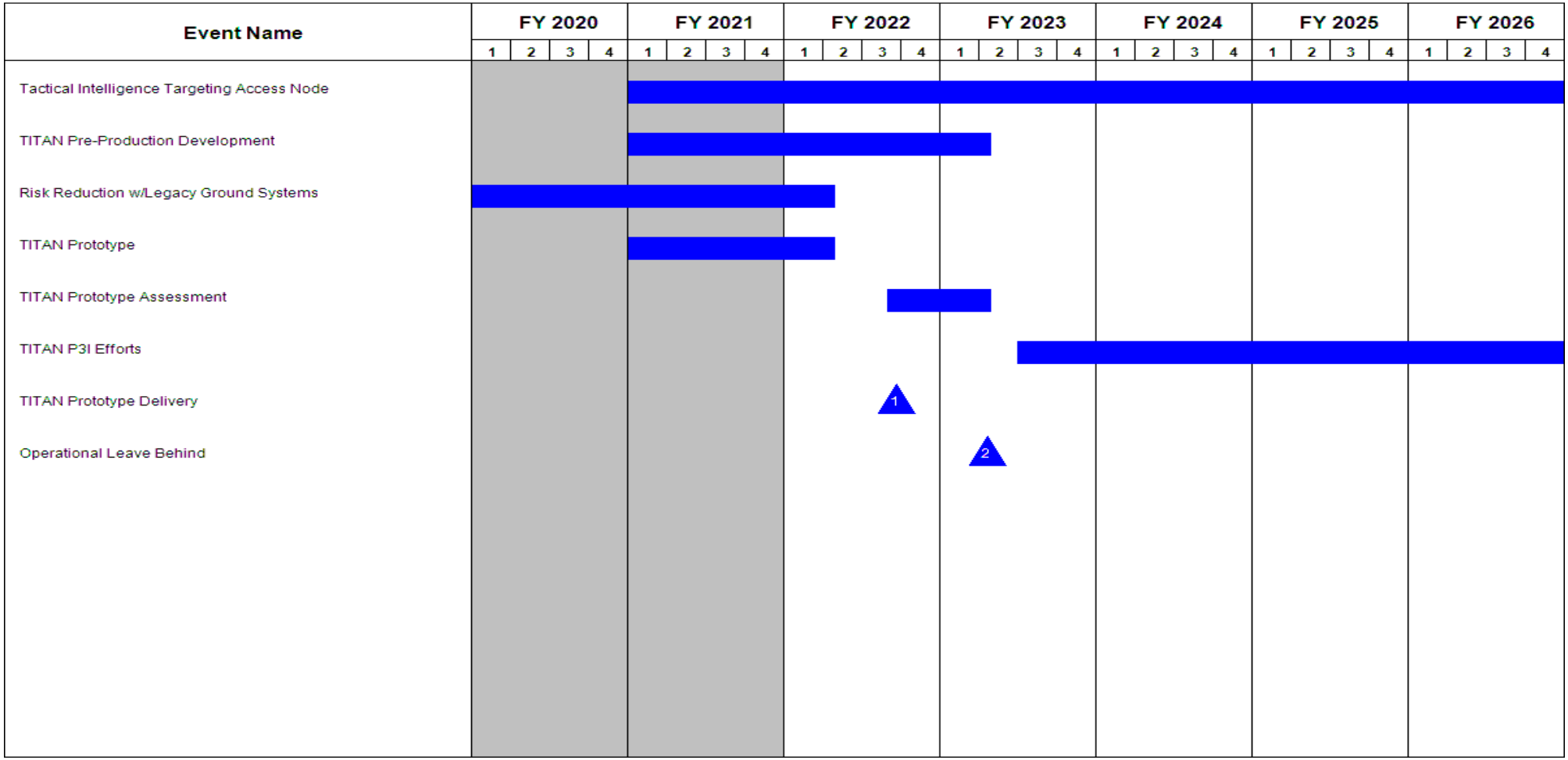


Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** BX9 / *Tactical Intel Targeting Access Node Adv Develop*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Tactical Intelligence Targeting Access Node	1	2021	4	2026
TITAN Pre-Production Development	1	2021	2	2023
Risk Reduction w/Legacy Ground Systems	1	2020	2	2022
TITAN Prototype	1	2021	2	2022
TITAN Prototype Assessment	3	2022	2	2023
TITAN P3I Efforts	3	2023	4	2026
TITAN Prototype Delivery	3	2022	3	2022
Operational Leave Behind	2	2023	2	2023

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
CC5: *Low Earth Orbit (LEO) / Intel Surv Recon (ISR)*	-	-	-	75.098	-	75.098	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Project CC5 is not a new start in FY2022; CC5 continues work funded by Project 907 in FY2021 which is restructured into Project CC5 in FY2022.

All funding is in support of the ACTIVE COMPONENT.

A. Mission Description and Budget Item Justification

The Low Earth Orbit (LEO) effort will provide prototyping, development and experimentation of High Altitude sensors and Tactical Space Layer (TSL) sensors (electro optical, synthetic aperture radar, and radio frequency) which are designed to provide wide-area, responsive deep area sensing required for beyond line of sight (BLOS) targeting and force maneuver, significantly reducing Sensor to Shooter (S2S) timelines. Follow-on persistent prototype tactical sensor capabilities will be integrated with the Army Tactical Intelligence Targeting Access Node (TITAN) ground station and theater gateways which will provide direct tasking and assured access directly supporting live-fire Sensor-to-Shooter (S2S) demonstrations and assessments.

FY2022 Base funding in the amount of $75.098 million provides prototyping, experimentation, and risk reduction activities to satellite prototypes, 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.

All funding is in support of the Active Component.

Note: LEO funding transitions from Project 907 to Project CC5 in FY2022.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: CC5 / Low Earth Orbit (LEO) Intel Surv Recon (ISR)	-	-	75.098	-	75.098
Description: The Low Earth Orbit (LEO) effort will provide prototyping, development and experimentation of High Altitude sensors and Tactical Space Layer (TSL) sensors (electro optical, synthetic aperture radar, and radio frequency) which are designed to provide wide-area, responsive deep area sensing required for beyond line of sight (BLOS) targeting and force maneuver, significantly reducing Sensor to Shooter (S2S) timelines. Follow-on persistent prototype tactical sensor capabilities will be integrated with the Army Tactical Intelligence					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Targeting Access Node (TITAN) ground station and theater gateways which will provide direct tasking and assured access directly supporting live-fire Sensor-to-Shooter (S2S) demonstrations and assessments. ***FY 2022 Base Plans:*** Provides for follow-on prototype, development, and experimentation of High Altitude and tactical space layer which will be integrated with the Army Tactical Intelligence Targeting Access Node (TITAN) ground station and theater gateways to provide direct tasking and assured access directly supporting live-fire Sensor to Shooter (S2S) demonstrations and assessments. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Project transitions from PE 0603766A Project 907 to Project CC5 in FY2022.					
Accomplishments/Planned Programs Subtotals	-	-	75.098	-	75.098

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The Low Earth Orbit (LEO) effort supports work with the Intelligence Community (IC) and our Mission Partner on the prototyping, development, and experimentation of High Altitude and Tactical Space Layer (TSL) sensors (electro optical, synthetic aperture radar, and radio frequency) designed to provide wide-area, responsive deep area sensing required for beyond line of sight (BLOS) targeting and force maneuver, significantly reducing Sensor to Shooter (S2S) timelines. Follow-on persistent prototype tactical sensor capabilities will be integrated with the Army Tactical Intelligence Targeting Access Node (TITAN) ground station and theater gateways which will provide direct tasking and assured access 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 2022 Army			Date: May 2021
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 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LEO Prototype Development and Engineering Services Support	C/FFP	A-PNT / TENCAP : Multiple Locations	-	-		-		5.000	Oct 2021	-		5.000	0.000	5.000	-
		Subtotal	-	-		-		5.000		-		5.000	0.000	5.000	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LEO Development (Classified)	MIPR	TBD : TBD	-	-		-		58.598	Jan 2022	-		58.598	0.000	58.598	-
		Subtotal	-	-		-		58.598		-		58.598	0.000	58.598	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LEO Program MGMT	TBD	APNT CFT : Huntsville, AL	-	-		-		3.500	Oct 2021	-		3.500	0.000	3.500	-
		Subtotal	-	-		-		3.500		-		3.500	0.000	3.500	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LEO Prototype Tests and Evaluations	TBD	Multiple : Multiple	-	-		-		8.000	Jan 2022	-		8.000	0.000	8.000	-
		Subtotal	-	-		-		8.000		-		8.000	0.000	8.000	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
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)*	

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-		0.000		75.098		-		75.098	0.000	75.098	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
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)*

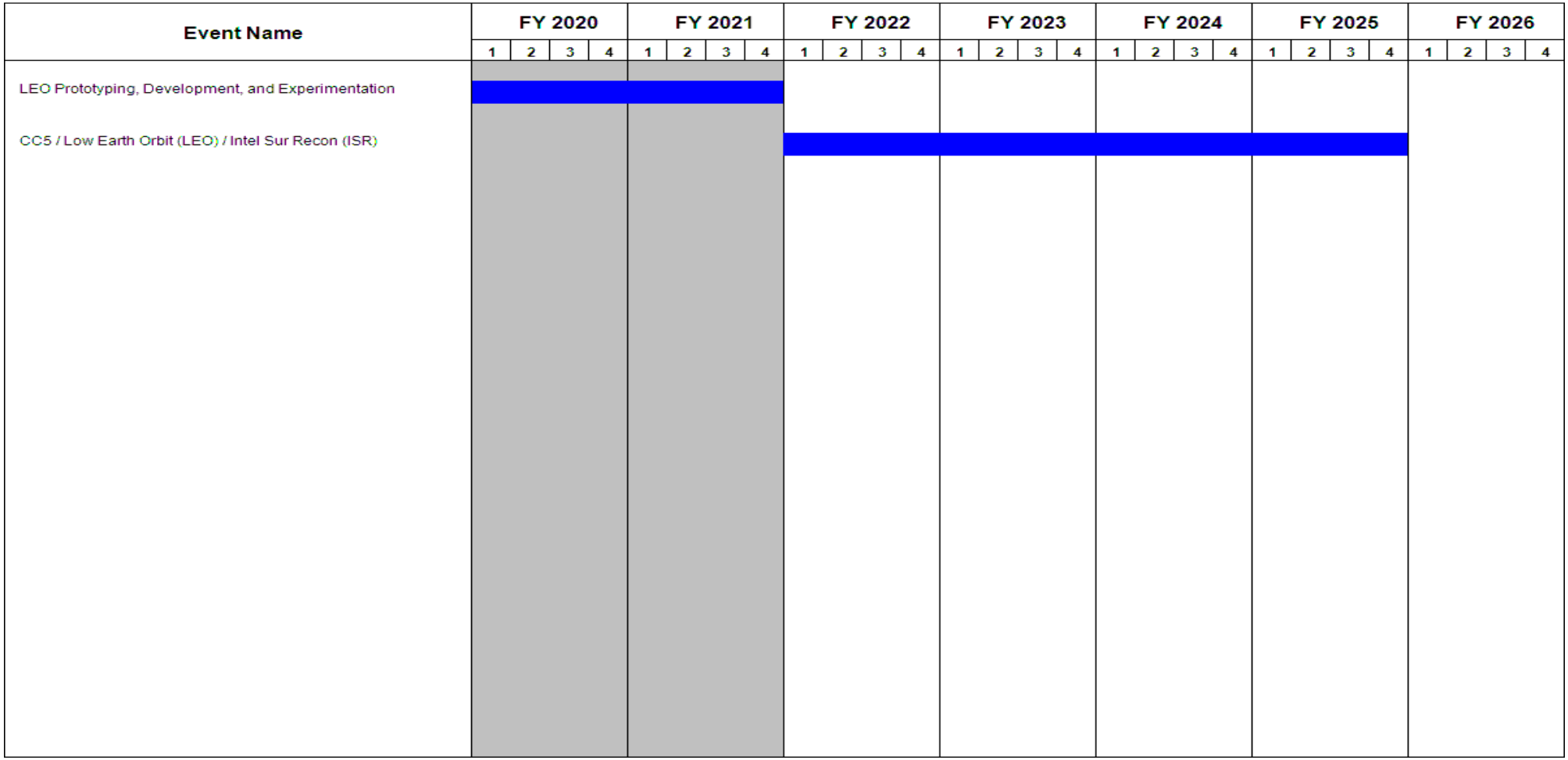


Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603766A / *Tactical Electronic Surveillance System - Adv Dev*	**Project (Number/Name)** CC5 / *Low Earth Orbit (LEO) / Intel Surv Recon (ISR)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
LEO Prototyping, Development, and Experimentation	1	2020	4	2021
CC5 / Low Earth Orbit (LEO) / Intel Sur Recon (ISR)	1	2022	4	2025