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

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0607865A / <i>Patriot Product Improvement</i>
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	125.851	152.312	177.197	-	177.197	138.120	138.287	139.762	141.321	Continuing	Continuing
DV8: <i>Patriot Product Improvement</i>	-	125.851	152.312	177.197	-	177.197	138.120	138.287	139.762	141.321	Continuing	Continuing

A. Mission Description and Budget Item Justification

This funding line is a key enabler of the Army Modernization Priorities in support of the PATRIOT surface to air missile system. PATRIOT is an integral part of the Integrated Air and Missile Defense (IAMD) Architecture and enables the incremental fielding of the IAMD Battle Command System (IBCS) capability for Army Air and Missile Defense Battalions.

The PATRIOT Product Improvement Program (PIP) provides for the upgrade of the PATRIOT System and the IAMD system through software improvements and individual materiel changes and upgrades to current force and IAMD-connected PATRIOT system components (interceptors, ground system equipment, launcher, and current radar) to address operational lessons-learned and necessary system performance improvements to include enhancements that support joint force interoperability and enable convergence with IBCS to ensure overmatch capability. As software and hardware improvements are developed, there is a continuing need for system level modeling, simulation, integration and testing. Modeling and Simulation (M&S) allow for performance assessment against emerging threats in a manner that is not practical to demonstrate with live fire flight tests alone due to cost, target availability, and range constraints. Flight testing is periodically required for validation of the modeling and simulation as well as satisfying Army Test and Evaluation Command/ Director, Operational Test and Evaluation (ATEC/DOTE) requirements of segment improvements.

This effort supports work with national agencies to evaluate, assess, and develop means to mitigate threat trends and specific threat developments potentially impacting system performance including effective detection, tracking, discrimination, and engagement. Specific improvements may be developed and fielded under this task if warranted. The effort maintains the Mission Tailoring Database, responding to immediate tactical concerns. Database updates are fielded between major software upgrades as necessary.

The PIP line also supports the identification, analysis, design, and test of materiel solutions to counter cyber security and electronic warfare shortcomings to all elements of the Lower Tier Battle Space.

FY 2024 base dollars in the amount of \$177.197 million support the continuance of critical software improvements for current force PATRIOT and Army IAMD, including Software Improvement for Threat Evolution, PAC-3 Seeker Software Improvement, Upper Tier Debris Mitigation, THAAD/PATRIOT Interoperability, Advanced Electronic Counter Measures (AECM), Combat ID enhancements, Tasks 2, 6, and 7 activities, program integration, modeling and simulation, acquisition of test assets and targets, Mobile Flight Mission Simulator (MFMS), PDB-8.1 and Patriot Component Software Build (PCSB) software, development and integration activities for Pacific Defense Initiative, Integrated Fires Architecture Fire Control Development, convergence with the IBCS and government and contractor support.

FY 2024 Pacific Defense Initiative dollars in the amount of \$46.545 million provides for development and integration activities.

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B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	125.932	152.312	140.999	-	140.999
Current President's Budget	125.851	152.312	177.197	-	177.197
Total Adjustments	-0.081	0.000	36.198	-	36.198
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.081	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	36.198	-	36.198

Change Summary Explanation

The increase in FY 2024 Base dollars is in support of the increases in PATRIOT Product Improvement and the Pacific Defense Initiative, which was not in the previous PB's estimate.

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Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0607865A / <i>Patriot Product Improvement</i>				Project (Number/Name) DV8 / <i>Patriot Product Improvement</i>			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
DV8: <i>Patriot Product Improvement</i>	-	125.851	152.312	177.197	-	177.197	138.120	138.287	139.762	141.321	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The PATRIOT system includes a family of hardware, software, interceptors (PAC-2, Guidance Enhanced Missiles, PAC-3 and PAC-3 Missile Segment Enhancement) and Ground Support Equipment. PATRIOT system components (interceptors, launcher, and radar) are integrated with current force PATRIOT and Army Integrated Air and Missile Defense (IAMD) components, including IBCS. As PATRIOT system components software and hardware improvements are developed, there is a continuing need for system level modeling, simulation, integration and testing. Modeling and Simulation (M&S) allow for performance assessment against specific threats in a manner that is not practical to demonstrate with live fire flight tests alone due to cost, target availability, and range constraints. Flight testing is periodically required for M&S validation as well as satisfying ATEC/DOTE requirements of segment improvements.

-PATRIOT system components software and hardware improvements for threat evolution: Performs necessary analysis and development efforts to maintain PATRIOT system (interceptors, ground support equipment, and current radar) effectiveness against evolving threat technologies and capabilities, support convergence with the IBCS, and complete PATRIOT Component Software Builds (PCSB). This effort identifies evolving threats and threat characteristics that present a challenge to PATRIOT's current capabilities and develops initial concepts to maintain system effectiveness including detection, tracking, discrimination, and engagement relative to these threats. Additionally, evolving threat information is used to develop, integrate, and assess evolving lethality models in high-fidelity interceptor simulations supporting system level assessment of hit-to-kill and warhead interceptor performance.

-Advanced Electronic Counter Measures (AECM): This task investigates the implications of advanced technology Digital Radio Frequency Memory available on airborne platforms that enables new ECM techniques which could adversely degrade Air and Missile Defense System effectiveness. AECM efforts support PATRIOT system interceptors, ground support equipment, and current radar.

-Task 2: Implements improved ground system and interceptor capabilities (PATRIOT Advanced Capability-2/Guidance Enhanced Missiles, PATRIOT Advanced Capability-3, and Missile Segment Enhancement) to counter emerging Tactical Ballistic Missile threats.

-Task 6: Software improvements enhance ground support equipment and current radar discrimination of higher altitude Tactical Ballistic Missile Re-entry Vehicles (RVs) from associated objects to support the full engagement capabilities of the interceptor. Longer-range detection, track, and improved high-altitude discrimination are required to achieve the required lethality performance against the RV and to mitigate and reduce missile wastage against separation debris. This task leverages the signal processing capabilities of the Radar Digital Processor, and supports the high altitude engagements required by the PATRIOT Advanced Capability-3 (PAC-3) and PAC-3 Missile Segment Enhancement (MSE) missiles.

-Task 7: Performs analysis on existing and evolving Tactical Ballistic Missile (TBM) countermeasures to determine the effects on PATRIOT system effectiveness. Develops hardware and software concepts to address countermeasure effects to ensure the PATRIOT system maintains its effectiveness. Develops detailed system requirements to implement concepts; design/code/test software implementation leveraging Radar Digital Processor, Modernized Adjunct Processor, Enhanced Weapons Control Computer - Emulator and Flight Solution Computer-Redesign processing capabilities. Implements simulation-based concepts to define trade space and establish system requirements.

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Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607865A / <i>Patriot Product Improvement</i>	Project (Number/Name) DV8 / <i>Patriot Product Improvement</i>
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- Combat ID Enhancements: Develop and implement improvements to the Radar Digital Processor-Capability Combat ID capabilities and additional Non-Cooperative Target Recognition techniques to further mitigate misclassification and fratricide risk, and to provide the Warfighter with improved situational awareness. This effort mitigates detection, tracking, and engagement errors on friendly targets.
- Upper-Tier Debris Mitigation (UTDM): Implements algorithms to mitigate system impacts of debris from Upper Tier intercepts associated with operating in the Ballistic Missile Defense System (BMDS) environment. Debris from Upper Tier intercepts can cause significant radar loading effects and the potential for erroneous engagements and missile wastage on debris.
- THAAD/PATRIOT Interoperability: Implements improvements to THAAD/PATRIOT Interoperability and addresses Joint Defense Network deficiencies that impact Tactical Ballistic Missile battle management and force/engagement operations. Efforts will be concentrated on joint, collaborative force operations (defense design and planning) and enhanced Tactical Digital Information Link - Joint interoperability.
- PAC-3 Seeker Software Improvements: Perform PAC-3 MSE Software improvements to address evolving and newly fielded Electronic Attack threats providing analysis, engineering, prototyping, testing, and tactical software implementation of improvements.
- Program Integration MSE Lockheed Martin Missile and Fire Control (LMMFC): This task support interceptor flight mission analysis, test missile preparation, flight mission interceptor integration, and range safety tasks allowing execution of required PATRIOT flight test activities.
- Mobile Flight Mission Simulator (MFMS) is a real-time system exerciser integrated with tactical ground hardware to simulate signals into the radar. The MFMS is part of the simulation and testing infrastructure required to support fielded PATRIOT.
- Development and Integration Activities in support of the Pacific Defense Initiative.
- Integrated Fires Architecture Fire Control Development: Perform Integrated Fire Architecture Fire Control Development improvements to address evolving and newly fielded threats providing analysis, engineering, prototyping, testing, and tactical software implementation of improvements.
- US Government and contractor support for PIP efforts supporting system interceptors, ground support equipment, and current radar provide studies and support to ensure the system and its components continue to evolve to defeat emerging threats.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
<p>Title: PATRIOT Product Improvement</p> <p>Description: Patriot Product improvement line provides continuous improvement to current force PATRIOT and Army IAMD to keep pace with and counter evolving and emerging threats.</p> <p>FY 2023 Plans:</p> <ul style="list-style-type: none"> -Continue Software Improvement for Threat Evolution and AEEM to address emerging threats and convergence with IBCS -Continue Combat ID enhancements to reduce fratricide potential -Continue Tasks 2, 6, and 7 activities to develop hardware and software to maintain PATRIOT system effectiveness in the field -Continue program development through system level modeling, simulation, integration and test support to address emerging threats and convergence with IBCS -Continue test program to include utilization of targets/threat simulators, flight simulator and modeling efforts to maintain system effectiveness -Continue test activities to support the TEMP 	125.851	146.753	177.197

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
<ul style="list-style-type: none"> -Continue supporting Integrated Fires Testing -Continue Ballistic Missile Defense System (BMDS) Integration Testing -Continue PATRIOT program M&S laboratory infrastructure maintenance as well as the conduct of M&S for hardware/software capability improvements -U.S. Government and contractor support to ensure force effectiveness is maintained to keep pace with evolving and emerging threats -Continue IBCS convergence and PCSB effort -Continue PAC-3 Seeker Software Improvements to counter Electronic Attack Threats -Continue system integration activities, test and analysis, and threat analysis and modeling -Continue MSS-2 laboratory support for high fidelity seeker data collection, modeling and analysis <p>FY 2024 Plans:</p> <ul style="list-style-type: none"> -Continue Software Improvement for Threat Evolution and AECM to address emerging threats and convergence with IBCS -Continue Combat ID enhancements to reduce fratricide potential -Continue Tasks 2, 6, and 7 activities to develop hardware and software to maintain PATRIOT system effectiveness in the field -Continue program development through system level modeling, simulation, integration and test support to address emerging threats and convergence with IBCS -Continue test program to include utilization of targets/threat simulators, flight simulator and modeling efforts to maintain system effectiveness -Continue supporting Integrated Fires Testing -Development and integration in support of the Pacific Defense Initiative -Continue Ballistic Missile Defense System (BMDS) Integration Testing -Continue PATRIOT program M&S laboratory infrastructure maintenance as well as the conduct of M&S for hardware/software capability improvements -U.S. Government and contractor support to ensure force effectiveness is maintained to keep pace with evolving and emerging threats -Continue IBCS convergence and PCSB effort -Continue PAC-3 Seeker Software Improvements to counter Electronic Attack Threats -Continue system integration activities, test and analysis, and threat analysis and modeling -Continue MSS-2 laboratory support for high fidelity seeker data collection, modeling and analysis <p>FY 2023 to FY 2024 Increase/Decrease Statement: The \$24.885 increase in funding provides for development and integration in support of the Pacific Defense Initiative.</p>				
Title: SBIR/STTR Transfer		-	5.559	-

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
Description: SBIR/STTR			
FY 2023 Plans: SBIR/STTR Transfer			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638.			
Accomplishments/Planned Programs Subtotals	125.851	152.312	177.197

C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2024</u>	<u>FY 2024</u>	<u>FY 2024</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Complete</u>	<u>Total Cost</u>
• C50700: Patriot Mods	287.479	253.689	212.247	-	212.247	179.513	573.119	502.009	208.218	Continuing	Continuing

Remarks
The improvements/enhancements developed through the PATRIOT Product Improvement Program (PIP) are interrelated with the hardware kits that are procured and installed under the Missile Procurement, Army (MIPA) appropriation's PATRIOT Mods program and maximizes PAC-3 MSE capabilities.

D. Acquisition Strategy
The design objective of the PATRIOT system was to provide a baseline system capable of modification to cope with continuing threat evolution. This program minimizes technological risks and provides a means of enhancing system capability through planned upgrades of deployed systems. The PATRIOT Product Improvement Program upgrades the PATRIOT system and the Army IAMD system to address operational lessons learned, enhancements to joint force interoperability and communications, and other system performance improvements including detection, tracking, discrimination, and engagement to provide overmatch capability against the emerging threat. Upgrades are implemented through individual hardware and software materiel changes and fielded incrementally. This program encompasses several changes which will require the use of a variety of acquisition methods to develop, test, procure and field. Future hardware and software capabilities will be incorporated into Patriot Component Software Build (PCSB) releases and continue convergence efforts with IBCS. Developing, fabricating, and testing hit to kill surface to air missile and associated ground support equipment provides essential increases in battle space, accuracy, lethality and firepower to counter and destroy evolving air defense threats. These state-of-the-art capabilities and enhancements require ongoing demonstration through a series of flight tests and modeling and simulation activities to add survivability and resiliency in a denied environment. The PATRIOT system is a component of an integrated fires development effort that includes survivability, resiliency, and effectiveness improvements against advanced threats from near-peer adversaries. This effort includes integration with an evolving common fires mission command, common development tools and processes, and annual test and evaluation to provide data to support program assessments and progress toward closure of performance gaps.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army **Date:** March 2023

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Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Government Program Management	MIPR	RSA, AL : RSA, AL	18.472	5.474	Jan 2022	4.515	Jan 2023	4.515	Jan 2024	-		4.515	Continuing	Continuing	-
U.S. Contracts	Various	Multiple : Multiple	11.500	1.770	Feb 2022	1.770	Feb 2023	1.770	Feb 2024	-		1.770	Continuing	Continuing	-
SBIR/STTR Transfer	TBD	Government : Government	-	-		5.559		-		-		-	0.000	5.559	-
Subtotal			29.972	7.244		11.844		6.285		-		6.285	Continuing	Continuing	N/A

Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Software Improvement for Threat Evolution	Various	Multiple : Multiple	72.026	6.109	Jan 2022	6.529	Jan 2023	8.374	Jan 2024	-		8.374	Continuing	Continuing	-
Advanced Electronic Counter Measures (AECM)	Various	Multiple : Multiple	117.187	7.286	Jan 2022	13.643	Jan 2023	14.808	Jan 2024	-		14.808	Continuing	Continuing	-
Task 2 Non-Ballistic Tactical Ballistic Missile (TBM)	Various	Multiple : Multiple	54.639	6.262	Feb 2022	6.885	Feb 2023	6.515	Feb 2024	-		6.515	Continuing	Continuing	-
Task 6 Discrimination Improvements	Various	Multiple : Multiple	53.639	4.779	Feb 2022	3.807	Feb 2023	4.072	Feb 2024	-		4.072	Continuing	Continuing	-
Task 7 TBM Countermeasures / Effectors	Various	Multiple : Multiple	56.200	8.276	Feb 2022	16.923	Feb 2023	13.541	Feb 2024	-		13.541	Continuing	Continuing	-
Assured PNT	Various	Multiple : Multiple	18.679	2.200		2.400	Jan 2023	4.524	Feb 2024	-		4.524	Continuing	Continuing	-
Combat ID Enhancements	Various	Multiple : Multiple	63.564	2.662	Feb 2022	10.807	Feb 2023	11.088	Feb 2024	-		11.088	Continuing	Continuing	-
Tactical Telemetry Ground Station	Various	Multiple : Multiple	0.250	-		2.000	Feb 2023	1.600	Feb 2024	-		1.600	Continuing	Continuing	-
PAC-3 Seeker SW Improvement	Various	Multiple : Multiple	34.889	2.649	Feb 2022	2.000	Feb 2023	6.408	Feb 2024	-		6.408	Continuing	Continuing	-
CDCC and OGAs	MIPR	RSA : RSA	0.800	0.836	Oct 2021	0.850	Oct 2022	0.850	Oct 2023	-		0.850	Continuing	Continuing	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army **Date:** March 2023

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Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Integration MSE LMMFC	Various	LMMFC : Dallas, TX	21.262	12.035	Feb 2022	7.442	Feb 2023	8.130	Feb 2024	-		8.130	Continuing	Continuing	-
MSE/PAC-3 Raytheon	Various	Raytheon : Watham, Massachusetts	7.900	4.600	Feb 2022	2.500	Feb 2023	2.710	Feb 2024	-		2.710	Continuing	Continuing	-
SETA Contracts	Various	Multiple : Multiple	2.800	2.900	Feb 2022	0.918	Feb 2023	1.010	Feb 2024	-		1.010	Continuing	Continuing	-
Development and Integration for the Pacific Defense Initiative	TBD	Various : Various	-	-		-		20.000	Feb 2024	-		20.000	0.000	20.000	-
Development and Integration for the Pacific Defense Initiative PCSB 1.0	TBD	Various : Various	-	-		-		26.340	Feb 2024	-		26.340	0.000	26.340	-
Subtotal			503.835	60.594		76.704		129.970		-		129.970	Continuing	Continuing	N/A

Remarks
The contract method type Sole Source/Various is Fixed Price Level of Effort which includes Cost Plus Fixed Fee for material, ODC, and travel.

Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
CCDC and Other Govt Agencies	MIPR	RDEC and OGA'S : RSA, AL	13.051	7.695	Jan 2022	5.255	Jan 2023	3.370	Jan 2024	-		3.370	Continuing	Continuing	-
Targets/Threat Simulation	MIPR	Various : Huntsville, AL	26.396	22.485	Jan 2022	32.397	Jan 2023	19.664	Jan 2024	-		19.664	Continuing	Continuing	-
Modeling and Simulation	MIPR	Various : Huntsville, AL	3.022	3.700	Jan 2022	3.700	Jan 2023	3.283	Jan 2024	-		3.283	Continuing	Continuing	-
Contractor T&E	Various	Multiple : Various	8.328	7.818	Jan 2022	5.655	Jan 2023	3.355	Jan 2024	-		3.355	Continuing	Continuing	-
Other T&E	MIPR	Various : WSMR, NM	4.600	5.978	Jan 2022	10.843	Feb 2023	1.590	Feb 2024	-		1.590	Continuing	Continuing	-
Mobile Flight Mission Simulator	SS/FPIF	Raytheon : Massachusetts	1.000	1.427	Feb 2022	1.166	Feb 2023	4.400	Feb 2024	-		4.400	Continuing	Continuing	-
PDB-8.1/PCSB	MIPR	Various : WSMR, NM	8.215	8.910	Nov 2021	4.748	Nov 2022	5.280	Nov 2023	-		5.280	Continuing	Continuing	-

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607865A / Patriot Product Improvement	Project (Number/Name) DV8 / Patriot Product Improvement	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Software Build	[Redacted]																											
Advanced Electronic Counter Measures (AECM)	[Redacted]																											
Software Improvement for Threat Evolution	[Redacted]																											
Combat ID Enhancements	[Redacted]																											
Task 2 Non-Ballistic Tactical Ballistic Missile (TBM)	[Redacted]																											
Task 6 Discrimination Improvements	[Redacted]																											
Task 7 TBM Countermeasures / Effectors	[Redacted]																											
Assured PNT	[Redacted]																											
PAC-3 Seeker Software Improvements	[Redacted]																											
PATRIOT System Testing, Integration and Evaluation	[Redacted]																											
Program Development, Integration, and Support	[Redacted]																											
Testing, Targets, Modeling and Simulation	[Redacted]																											
Developmental/Operational Flight Testing	[Redacted]																											

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army		Date: March 2023
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Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Follow-On Flight Testing																												
PDB 8.1 Material Release																												
PCSB V 1.0 Material Release																												
PCSB v 2.0 Material Release																												
PDB 8.1/PCSB Fieldings																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Software Build	4	2005	4	2028
Advanced Electronic Counter Measures (AECM)	1	2014	4	2028
Software Improvement for Threat Evolution	1	2014	4	2028
Combat ID Enhancements	1	2014	4	2028
Task 2 Non-Ballistic Tactical Ballistic Missile (TBM)	1	2015	4	2028
Task 6 Discrimination Improvements	1	2014	4	2028
Task 7 TBM Countermeasures / Effectors	1	2015	4	2028
Assured PNT	1	2020	4	2027
PAC-3 Seeker Software Improvements	2	2020	4	2028
PATRIOT System Testing, Integration and Evaluation	1	2016	4	2028
Program Development, Integration, and Support	1	2016	4	2028
Testing, Targets, Modeling and Simulation	1	2016	4	2028
Developmental/Operational Flight Testing	3	2020	4	2028
Follow-On Flight Testing	4	2022	4	2028
PDB 8.1 Material Release	4	2023	4	2023
PCSB V 1.0 Material Release	3	2025	3	2025
PCSB v 2.0 Material Release	3	2028	3	2028
PDB 8.1/PCSB Fieldings	4	2023	4	2028