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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Army **Date:** April 2022

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)</i>					R-1 Program Element (Number/Name) PE 0605231A / <i>Precision Strike Missile (PrSM)</i>							
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	-	188.452	259.506	-	259.506	237.566	237.323	237.394	239.702	0.000	1,399.943
CO3: <i>Precision Strike Missile (PrSM)</i>	-	-	188.452	259.506	-	259.506	237.566	237.323	237.394	239.702	0.000	1,399.943

A. Mission Description and Budget Item Justification

This funding line is directly aligned to the Army Long Range Precision Fires Modernization Priority.

Precision Strike Missile (PrSM) is the Army's next generation surface-to-surface missile that replaces and improves upon Army Tactical Missile System (ATACMS) capabilities. The mission of PrSM is to attack/neutralize/suppress/destroy targets using missile delivered indirect precision fires. PrSM will provide Joint Force Commanders with a 24/7, all-weather capability to attack critical and time sensitive area and point targets including threat air defense, missile launchers, command and control centers, assembly/staging areas and high payoff targets at all depths of the multi-domain battlefield. PrSM will counter the enemy's ability to conduct combat maneuver and air defense operations.

PrSM requirements include: max range of greater than 400 kilometers (km), specified lethality against the designated target set, a Launch Pod Missile Container (LPMC) that holds two missiles, survivability in a threat environment, and compatibility with the existing launcher platforms (M270A2 Multiple Launch Rocket System (MLRS) and M142 High Mobility Artillery Rocket System (HIMARS)). PrSM will meet cluster and insensitive munition requirements and is designed with an open system architecture that provides the capability for future growth to counter new and emerging threats. Increment 2 of PrSM will include the ability to attack mobile or relocatable ground and maritime targets. Future PrSM increments will provide increased lethality against hardened targets and extend range capability.

FY 2023 base dollars (\$259.506 million) supports continuation of PrSM Increment 1 Engineering and Manufacturing Development (EMD) and efforts to develop an Increment 2 prototype.

Increment 1 EMD activities include system level ground, safety and flight testing. PrSM will also conduct missile software testing, along with integration with the Advanced Field Artillery Tactical Data System (AFATDS). On-going PrSM model and simulation efforts will serve to validate and verify system requirements. EMD design and test efforts support a robust and thorough flight test schedule.

Increment 2 activities include transitioning the Land-Based Anti-Ship Missile (LBASM) seeker from the Science and Technology sector to the PrSM product office. LBASM/PrSM development and integration efforts will culminate in FY24/25 with PrSM Increment 2 prototype flight testing.

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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	0.000	188.452	0.000	-	0.000
Current President's Budget	0.000	188.452	259.506	-	259.506
Total Adjustments	0.000	0.000	259.506	-	259.506
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	259.506	-	259.506

Change Summary Explanation

FY 2022 President's Budget submission did not include out-year funding.

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Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605231A / Precision Strike Missile (PrSM)				Project (Number/Name) CO3 / Precision Strike Missile (PrSM)			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
CO3: Precision Strike Missile (PrSM)	-	-	188.452	259.506	-	259.506	237.566	237.323	237.394	239.702	0.000	1,399.943
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Precision Strike Missile (PrSM) is the Army's next generation surface-to-surface missile that replaces and improves upon Army Tactical Missile System (ATACMS) capabilities. The mission of PrSM is to attack/neutralize/suppress/destroy targets using missile delivered indirect precision fires. PrSM will provide Joint Force Commanders with a 24/7, all-weather capability to attack critical and time sensitive area and point targets including threat air defense, missile launchers, command and control centers, assembly/staging areas and high payoff targets at all depths of the multi-domain battlefield. PrSM will counter the enemy's ability to conduct combat maneuver and air defense operations.

PrSM requirements include: max range of greater than 400 kilometers (km), specified lethality against the designated target set, a Launch Pod Missile Container (LPMC) that holds two missiles, survivability in a threat environment, and compatibility with the existing launcher platforms (M270A2 Multiple Launch Rocket System (MLRS) and M142 High Mobility Artillery Rocket System (HIMARS)). PrSM will meet cluster and insensitive munition requirements and is designed with an open system architecture that provides the capability for future growth to counter new and emerging threats. Increment 2 of PrSM will include the ability to attack mobile or relocatable ground and maritime targets. Future PrSM increments will provide increased lethality against hardened targets and extend range capability.

FY 2023 base dollars (\$259.506 million) supports continuation of PrSM Increment 1 Engineering and Manufacturing Development (EMD) and efforts to develop an Increment 2 prototype.

Increment 1 EMD activities include system level ground, safety and flight testing. PrSM will also conduct missile software testing, along with integration with the Advanced Field Artillery Tactical Data System (AFATDS). On-going PrSM model and simulation efforts will serve to validate and verify system requirements. EMD design and test efforts support a robust and thorough flight test schedule.

Increment 2 activities include transitioning the Land-Based Anti-Ship Missile (LBASM) seeker from the Science and Technology sector to the PrSM product office. LBASM/PrSM development and integration efforts will culminate in FY24/25 with PrSM Increment 2 prototype flight testing.

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

	FY 2021	FY 2022	FY 2023
Title: Increment 1: Engineering and Manufacturing Development (EMD)	-	132.347	170.946
Description: EMD activities to develop the Army's next generation missile capability that doubles volume of fire, meets range requirements by exceeding 400km, provides required lethality for both point and area targets, ensures survivability, meets cluster munition policy requirements, and provides an open system approach. PrSM provides field artillery units with a deep-strike			

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2021	FY 2022	FY 2023
<p>capability while supporting Brigade, Division, Corps, Army, Theater, Joint and Coalition forces in full, limited or expeditionary operations.</p> <p>FY 2022 Plans: Continue EMD efforts awarded in FY 2021. Subsequent to receipt of hardware items procured in FY 2021 for system level qualification the contractor will build test articles for delivery to the Government to conduct system level ground and safety production qualification testing. Assemble (12) flight test articles and representative targets in support of FY 2023 Production Qualification flight tests. Finalize integration of Government missile/ launcher fire control system software and hardware interfaces utilizing an Engineering Release of AFATDS to assess ballistic algorithms and world-wide conditions in preparation for FY 2023 HIMARS Software Integration Testing (SIT), Limited User Test (LUT), and Early Operational Capability (EOC) fielding. Continued Government Survivability testing and analysis to ensure that missile capabilities remain survivable against emerging threat systems.</p> <p>FY 2023 Plans: The PrSM program will continue executing Increment 1 EMD with system qualification and ground and flight tests to support production of EOC missile deliveries planned for deployment at the end of FY23. Government developed launcher software and testing efforts will integrate the tactical software solution into AFATDS. PrSM will continue investment in M-Code A-PNT compliance efforts. PrSM will execute six Pre-EOC flight tests focused on system level hardware / software integration, performance and safety. The capstone event will be a Limited User Test (LUT) (2 missiles flight) in 4QFY23. Upon successful performance of the LUT, PrSM will staff an Urgent Materiel Release (UMR) in support of fielding an EOC capability in FY23.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: \$38.6M increase from FY22-23 is due to increased software development and testing costs required to support a 4QFY23 fielding of a PrSM capability. Within PM STORM, A-PNT is a common interest for both the PrSM and Guided Multiple Launch Rocket System (GMLRS) programs, and is a shared effort between the two. A-PNT efforts were funded in FY 2022 by the GMLRS program.</p>				
<p>Title: Increment 2 Integration</p> <p>Description: Activities to integrate Science and Technology (S&T) efforts into PrSM Increment 1 will result in an Increment 2 missile.</p> <p>FY 2022 Plans: FY 2022 funding supports refactoring the Land Based Anti-Ship seeker technology developed by the Combat Capabilities Development Command Aviation & Missile Center (CCDC AvMC) into the Precision Strike Missile (PrSM) program to facilitate PrSM Increment 2 Prototype flight testing activities in FY 2024. These efforts are long lead activities (i.e. hardware and laboratory</p>		-	49.227	88.560

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
assets), Development, and Demonstration (D&D) activities that support the integration of CCDC AvMC sensor technology into the PrSM program to provide a PrSM Increment 2 capability. D&D activities include program development and plans, engineering development including a System Requirements Review, integration and test, and risk reduction activities. FY 2023 Plans: FY 2023 funding supports the continued long lead and D&D activities necessary to transition the seeker technology into the PrSM program. This includes continued CCDC AvMC engineering support to PrSM, conduct of an Initial Design Review (IDR), and Development Verification Testing (DVT) of hardware in PrSM form factor. FY 2022 to FY 2023 Increase/Decrease Statement: \$39.3M increase is due to increased D&D activities to produce a prototype PrSM Increment 2 missile in support of prototype flight testing.			
Title: FY 2022 SBIR/STTR Transfer Description: FY 2022 Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) FY 2022 Plans: Funding transferred in accordance with Title 15 USC 7638 FY 2022 to FY 2023 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC 7638	-	6.878	-
Accomplishments/Planned Programs Subtotals	-	188.452	259.506

C. Other Program Funding Summary (\$ in Millions)												
<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u> <u>Base</u>	<u>FY 2023</u> <u>OCO</u>	<u>FY 2023</u> <u>Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>	
• 0607134A: <i>Long Range Precision Fires (LRPF)</i>	100.146	-	0.000	-	0.000	-	-	-	-	-	Continuing	Continuing
• C29600: <i>PRECISION STRIKE MISSILE (PRSM)</i>	59.929	166.130	213.172	-	213.172	339.302	408.505	439.882	436.358	0.000	2,063.278	

Remarks

D. Acquisition Strategy
PrSM received Milestone A approval in 2017. The program awarded two OTA Technology Maturation and Risk reduction (TMRR) contracts to compete PrSM's initial design, development, prototyping, and risk-reduction. In 2017, the program was designated as ACAT 1-B. In 2018, Army leaders directed PrSM to accelerate the

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program to provide an Early Operational Capability (EOC) by FY 2023. The program awarded an Enhanced TMRR (E-TMRR) contract to reduce risk, conduct prototype flight-testing and conduct several Engineering and Manufacturing Development (EMD) activities to accelerate development. In FY 2020, one contractor experienced a rocket motor failure and chose to opt out of the program. In 2020, Army senior leaders approved program acceleration using a single vendor. The program is executing E-TMRR as a sole-source effort to demonstrate threshold program requirements. The contractor has conducted six (6) successful flight tests to date, and is conducting subassembly qualification tests while establishing a pilot production line.

The program received Milestone B approval in FY 2021 and awarded an EMD and initial EOC contract. The program is executing to begin delivering EOC missiles in FY 2023.

PrSM is also working with DEVCOM to plan for the integration of a multi-mode seeker to integrate into the baseline missile. The PrSM Increment 2 capability plans to deliver EOC missiles in FY 2027.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army **Date:** April 2022

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605231A / Precision Strike Missile (PrSM)	Project (Number/Name) CO3 / Precision Strike Missile (PrSM)
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Management Services (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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	Various : RSA, AL	-	-		5.442	Apr 2022	5.507	Apr 2023	-		5.507	0.000	10.949	-
FY 2022 SBIR/STTR Transfer	TBD	Various : Various	-	-		6.878		-		-		-	0.000	6.878	-
Subtotal			-	-		12.320		5.507		-		5.507	0.000	17.827	N/A

Remarks
RSA - Redstone Arsenal, Alabama

Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
PrSM Increment 1 EMD - 1 Vendor (Lockheed Martin)	SS/FFP	LMMFCS : Grand Prairie, TX	-	-		114.068	Jan 2022	125.735	Jan 2023	-		125.735	0.000	239.803	-
PrSM Increment 2 - 1 Vendor (Lockheed Martin)	SS/CPIF	LMMFCS : Grand Prairie, TX	-	-		20.825	Oct 2021	47.790	Oct 2022	-		47.790	0.000	68.615	-
PrSM Increment 2 Seeker Integration	MIPR	CCDC AvMC : RSA, AL	-	-		22.134	Dec 2021	25.830	Dec 2022	-		25.830	0.000	47.964	-
Development Engineering Support	MIPR	AMCOM/CCDC AvMC : RSA, AL	-	-		5.134	Nov 2021	5.557	Nov 2022	-		5.557	0.000	10.691	-
Increment 1 - Software Development	MIPR	S3I : RSA, AL	-	-		-		10.354	Feb 2023	-		10.354	0.000	10.354	-
Increment 2 - Software Development	MIPR	S3I : RSA, AL	-	-		-		7.247	Feb 2023	-		7.247	0.000	7.247	-
A-PNT	MIPR	CCDC AvMC : RSA, AL	-	-		-		11.500	Dec 2022	-		11.500	0.000	11.500	-
Software Development	MIPR	S3I : RSA, AL	-	-		5.252	Feb 2022	-		-		-	0.000	5.252	-
Subtotal			-	-		167.413		234.013		-		234.013	0.000	401.426	N/A

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Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			

Remarks
AMCOM - Aviation and Missile Command; A-PNT - Assured-Position, Navigation and Timing; CCDC AvMC - Combat Capabilities Development Center Aviation & Missile Command; LMMFCS - Lockheed Martin Missiles and Fire Control System; RSA - Redstone Arsenal, Alabama; S3I - Systems Simulation, Software and Integration; TX - Texas

Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
Quality, Safety, SETA Support, and Analysis	SS/T&M	Various; Competitive SETA Contract Award in Aug 2021 : RSA, AL	-	-		4.169	Dec 2021	2.554	Dec 2022	-		2.554	0.000	6.723	-
Subtotal			-	-		4.169		2.554		-		2.554	0.000	6.723	N/A

Remarks
RSA - Redstone Arsenal, AL; SETA - Systems Engineering and Technical Assistance

Test and Evaluation (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
Increment 1 - Test Support	MIPR	WSMR; RTC : WSMR, NM; RSA, AL	-	-		-		13.645	Dec 2022	-		13.645	0.000	13.645	-
Increment 2 - Test Support	MIPR	WSMR; RTC : WSMR, NM; RSA, AL	-	-		-		3.787	Dec 2022	-		3.787	0.000	3.787	-
Test Support	MIPR	WSMR; RTC : WSMR, NM; RSA, AL	-	-		4.550	Dec 2021	-		-		-	0.000	4.550	-
Subtotal			-	-		4.550		17.432		-		17.432	0.000	21.982	N/A

Remarks
RTC - Redstone Test Center; RSA - Redstone Arsenal, Alabama; WSMR, NM - White Sands Missile Range, New Mexico

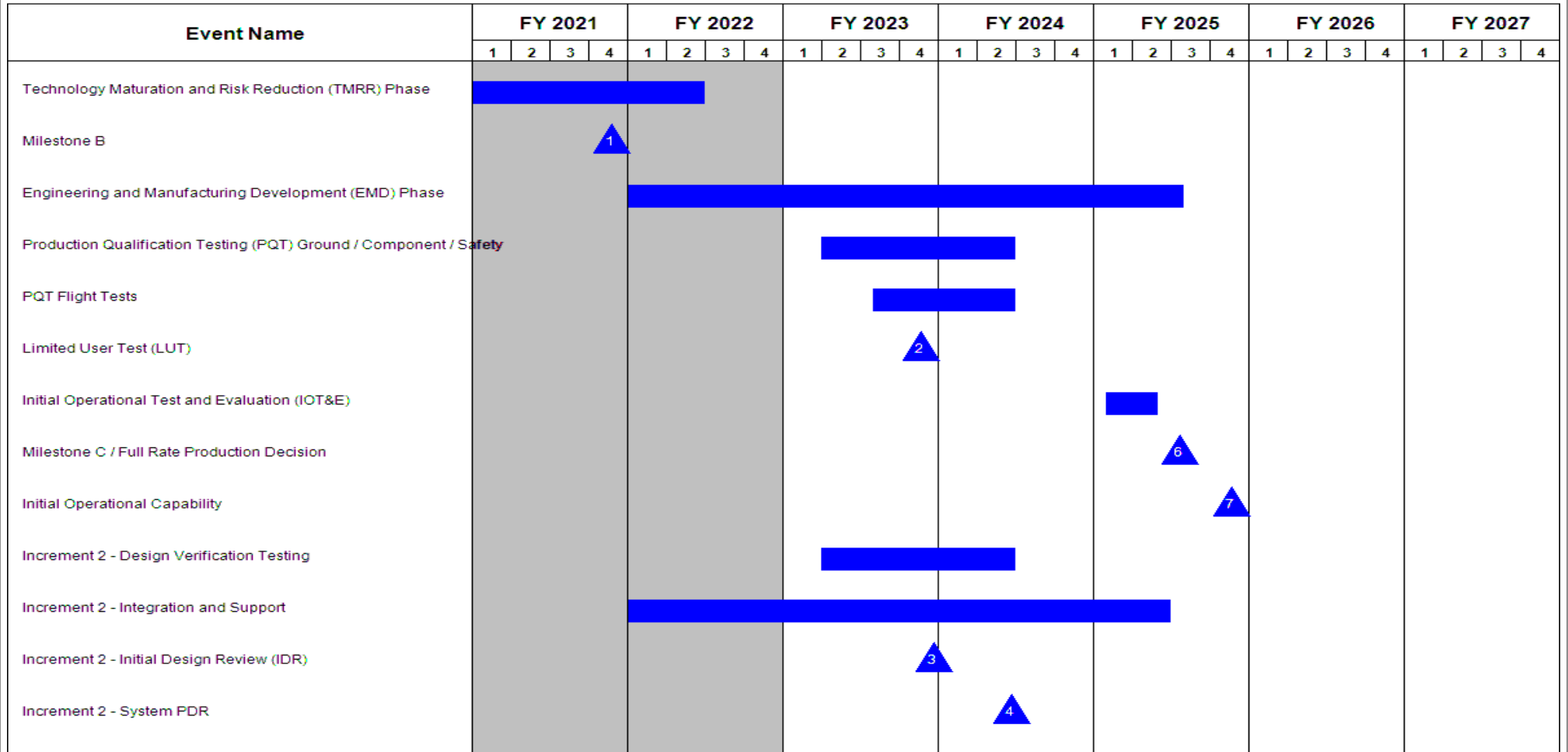
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army							Date: April 2022				
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605231A / <i>Precision Strike Missile (PrSM)</i>			Project (Number/Name) CO3 / <i>Precision Strike Missile (PrSM)</i>				
	Prior Years	FY 2021	FY 2022		FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals	-	-	188.452		259.506	-	259.506	0.000	447.958	N/A	

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605231A / Precision Strike Missile (PrSM)	Project (Number/Name) CO3 / Precision Strike Missile (PrSM)



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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Army		Date: April 2022
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Event Name	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027							
	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				
Increment 2 - Seeker Design Update													5																			
Increment 2 - Prototype Flight Test													[Bar]																			
Increment 2 - System Design Update																					8											
Increment 2 - ATEC User Demo																									9							
Increment 2 - EOC 1 Capability																													10			

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605231A / <i>Precision Strike Missile (PrSM)</i>	Project (Number/Name) CO3 / <i>Precision Strike Missile (PrSM)</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Technology Maturation and Risk Reduction (TMRR) Phase	1	2020	2	2022
Milestone B	4	2021	4	2021
Engineering and Manufacturing Development (EMD) Phase	1	2022	3	2025
Production Qualification Testing (PQT) Ground / Component / Safety	2	2023	2	2024
PQT Flight Tests	3	2023	2	2024
Limited User Test (LUT)	4	2023	4	2023
Initial Operational Test and Evaluation (IOT&E)	1	2025	2	2025
Milestone C / Full Rate Production Decision	3	2025	3	2025
Initial Operational Capability	4	2025	4	2025
Increment 2 - Design Verification Testing	2	2023	2	2024
Increment 2 - Integration and Support	1	2022	2	2025
Increment 2 - Initial Design Review (IDR)	4	2023	4	2023
Increment 2 - System PDR	2	2024	2	2024
Increment 2 - Seeker Design Update	4	2024	4	2024
Increment 2 - Prototype Flight Test	4	2024	1	2026
Increment 2 - System Design Update	2	2026	2	2026
Increment 2 - ATEC User Demo	1	2027	1	2027
Increment 2 - EOC 1 Capability	4	2027	4	2027