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

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0607134A / <i>Long Range Precision Fires (LRPF)</i>
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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	-	100.146	-	-	-	-	0.000	0.000	0.000	0.000	Continuing	Continuing
ES1: <i>Long Range Precision Fires (LRPF)</i>	-	100.146	-	-	-	-	-	-	-	-	Continuing	Continuing

**Program MDAP/MAIS Code:** 494

**Note**

Starting in Fiscal Year (FY) 2022 all funds for this program were restructured from PE 0607134A to PE 0605231A. PE 0605231A is a continuation of the existing PrSM program.

**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 the PrSM system 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 approach 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 to 650km. There is no funding for FY 2022.

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<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0607134A / <i>Long Range Precision Fires (LRPF)</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b><u>FY 2021</u></b>	<b><u>FY 2022</u></b>	<b><u>FY 2023 Base</u></b>	<b><u>FY 2023 OCO</u></b>	<b><u>FY 2023 Total</u></b>
Previous President's Budget	100.146	0.000	0.000	-	0.000
Current President's Budget	100.146	0.000	0.000	-	0.000
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army										<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 2040 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0607134A / Long Range Precision Fires (LRPF)				<b>Project (Number/Name)</b> ES1 / Long Range Precision Fires (LRPF)			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
ES1: Long Range Precision Fires (LRPF)	-	100.146	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

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

	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<b>Title:</b> Enhanced Technology Maturation and Risk Reduction (E-TMRR)	32.276	-	-
<b>Description:</b> E-TMRR 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 architecture. PrSM provides field artillery units with a deep-strike capability while supporting Brigade, Division, Corps, Army, Theater, Joint and Coalition forces in full, limited or expeditionary operations.			
<b>Title:</b> Engineering and Manufacturing Development (EMD)	49.870	-	-
<b>Description:</b> 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 architecture. PrSM provides field artillery units with a deep-strike capability while supporting Brigade, Division, Corps, Army, Theater, Joint and Coalition forces in full, limited or expeditionary operations.			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0607134A / Long Range Precision Fires (LRPF)	<b>Project (Number/Name)</b> ES1 / Long Range Precision Fires (LRPF)

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<b>Title:</b> Increment 2	18.000	-	-
<b>Description:</b> Activities to procure long lead Increment 1 test hardware for PrSM Increment 2 for prototype development.			
<b>Accomplishments/Planned Programs Subtotals</b>	100.146	-	-

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• 0605231A: Precision Strike Missile (PrSM)	-	188.452	259.506	-	259.506	237.566	237.323	237.394	239.702	0.000	1,399.943
• C29600: PRECISION STRIKE MISSILE (PRSM)	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 follows the Major Capability Acquisition pathway. A 6 NOV 2013 Materiel Development Decision Acquisition Decision Memorandum designated PrSM as a Pre-Major Defense Acquisition Program. An AoA supporting the MS A decision was completed by U.S. Army Training and Doctrine Command (TRADOC) Analysis Center White Sands Missile Range (TRAC-WSMR), with an Office of the Secretary of Defense (OSD) letter of sufficiency issued in SEP 2015. In 4Q FY 2016, the Army awarded 9-month risk reduction, trade study and initial design development agreements to two contractors. The effort resulted in development of initial baseline designs presented during final technical reviews that resulted in a seamless transition into the Technology Maturation and Risk Reduction (TMRR) phase. Subsequent to MS A, on 31 MAR 2017, the Army awarded competitive Other Transaction Agreements to two contractors with planned down-select following the conclusion of system level prototype flight testing in FY 2020. On 16 NOV 2017, the DAE delegated the position of Milestone Decision Authority to the Army Acquisition Executive (AAE) and reclassified the program from ACAT 1D to ACAT 1B.

In FY 2018, the Army in response to immediate near-peer threats and the requirement to engage targets with a precision guided missile at ranges beyond 400km the Army directed acceleration of PrSM Early Operational Capability (EOC) with planned fielding in FY 2023. The PrSM acquisition approach was updated to include follow on competitive TMRR effort, Enhanced TMRR (E-TMRR). A successful system level prototype flight test was the entry criteria for award of the E-TMRR agreement.

In FY 2019 both contractors completed a Preliminary Design Review (PDR), conducted component level Design Verification Testing (DVT) on PrSM sub-assemblies prior to system level prototype flight tests. During DVT, one PrSM contractor experienced a catastrophic rocket motor failure. In FY 2020 The Army decided not to fund the contractor's additional cost growth and the contractor chose not to fund internally. The period of performance expired on this effort in 20 MAR 2020, leaving only one contractor to continue development activities. The remaining contractor conducted prototype flights in 1-3QFY2020 and was solely awarded E-TMRR on 12 JUN 2020 through MAR 2022 (2QFY 2022).

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0607134A / <i>Long Range Precision Fires (LRPF)</i>	<b>Project (Number/Name)</b> ES1 / <i>Long Range Precision Fires (LRPF)</i>

During E-TMRR the contractor continues to finalize the tactical design, built missiles and conducted four Engineering Development Test (EDT) flight tests, began and is expected to complete subsystem qualification, and established a production capability for EOC missiles. On 3 FEB 2021 Army Futures Command, Commanding General signed a Directed Requirement for initial missile quantities to support a PrSM EOC. FY21-24 MIPA funds will initially support fielding of the EOC and then transition to Full Rate Production and achieve Initial Operational Capability in FY 2025. EOC production begins in FY 2021 with fielding occurring in FY 2023.

In April 2021, the PrSM program entered into a Memorandum of Understanding (MOU) for cooperative development participation between Department of Defense of Australia and the Department of Defense of the United States of America for the exchange of information pertaining to, and conducting joint research and development efforts and testing of PrSM Increment 2 and further development of current PrSM capabilities.

On 4 June 2021, the Joint Requirements Oversight Council validated the PrSM Capabilities Development Document (CDD). The PrSM program will develop nascent capability and support Army demonstration and test initiatives to increase integrated offensive and defensive capability across warfighter functions and multiple domains. Development, integration, and testing of PrSM systems solutions, including test planning to support an annual PEO MS-led Multi-Domain Operations test/demonstration event beginning in FY23, to include biennial Survivability Resiliency/Cyber-Electromagnetic Activities exercises with an event planned in FY22.

Milestone B approval occurred on 27 SEP 2021 and the EMD contract was awarded on 30 SEP 2021. The EMD Phase began in 1QFY2022 and includes assembly of PQT flight test articles in parallel with completion of ground and system qualification, tactical software integration on the HIMARS and M270A2 launchers and production planning efforts. The program will also refine critical missile survivability assessments to ensure the selected EMD design will successfully meet PrSM's kinetic, electro-magnetic spectrum, cyber, environmental, nuclear requirements.

The PrSM acquisition approach is incremental. The modular system Improvements will occur via technology insertions that increase the capabilities of the base missile. Increment 2 will transition from S&T to the Program Office after the design is fully integrated into the PrSM Increment 1 form factor and upon successful completion of initial flight-testing.

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

<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0607134A / Long Range Precision Fires (LRPF)	<b>Project (Number/Name)</b> ES1 / Long Range Precision Fires (LRPF)
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<b>Management Services (\$ in Millions)</b>				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	10.908	5.169	Feb 2021	-		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			10.908	5.169		-		-		-		-	Continuing	Continuing	N/A

**Remarks**  
RSA - Redstone Arsenal, Alabama

<b>Product Development (\$ in Millions)</b>				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 TMRR - 2 Vendors* (Raytheon and Lockheed Martin)	C/Various	LMMFCS / RMS : Grand Prairie, TX / Tucson, AZ	233.459	-		-		-		-		-	0.000	233.459	-
PrSM Increment 1 E-TMRR - 1 Vendor (Lockheed Martin)	C/CS	LMMFCS : Grand Prairie, TX	96.036	12.210	Mar 2021	-		-		-		-	0.000	108.246	-
PrSM Increment 1 EMD - 1 Vendor (Lockheed Martin)	SS/FPIS	LMMFCS : Grand Prairie, TX	-	46.262	May 2021	-		-		-		-	Continuing	Continuing	Continuing
PrSM Increment 2 - 1 Vendor (Lockheed Martin)	TBD	LMMFCS : Grand Prairie, TX	-	18.000	Aug 2021	-		-		-		-	Continuing	Continuing	Continuing
Development Engineering Support	MIPR	AMCOM/CCDC AvMC/S3I : RSA, AL	16.739	1.554	Jan 2021	-		-		-		-	Continuing	Continuing	Continuing
A-PNT	MIPR	CCDC AvMC : RSA, AL	7.000	-		-		-		-		-	0.000	7.000	-
Software Development	MIPR	S3I : RSA, AL	2.876	2.805	Feb 2021	-		-		-		-	Continuing	Continuing	Continuing
FY20 Rescission	TBD	N/A : N/A	30.000	-		-		-		-		-	0.000	30.000	-
<b>Subtotal</b>			386.110	80.831		-		-		-		-	Continuing	Continuing	N/A

**Remarks**  
\*Lockheed Martin awarded E-TMRR in 1QFY2020 after successful flight test.

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

<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0607134A / Long Range Precision Fires (LRPF)	<b>Project (Number/Name)</b> ES1 / Long Range Precision Fires (LRPF)
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<b>Product Development (\$ in Millions)</b>				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			

AMCOM - Aviation and Missile Command; A-PNT - Assured-Position, Navigation and Timing; CCDC AvMC - Combat Capabilities Development Center Aviation & Missile Command; DOTC - DoD Ordnance Technology Consortium; LMMFCS - Lockheed Martin Missiles and Fire Control System; OTA - Other Transaction Agreements; RMS - Raytheon Missile Systems; RSA - Redstone Arsenal, Alabama; S3I - Systems Simulation, Software and Integration; TX - Texas

<b>Support (\$ in Millions)</b>				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; S3 / Pending Competitor in Aug 2021 : RSA, AL	7.869	4.028	Feb 2021	-		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			7.869	4.028		-		-		-		-	Continuing	Continuing	N/A

**Remarks**  
RSA - Redstone Arsenal, AL; S3 Inc - System Studies & Simulation Inc.; SETA - Systems Engineering and Technical Support

<b>Test and Evaluation (\$ in Millions)</b>				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			
Test Support	MIPR	WSMR; RTC : WSMR,NM; RSA, AL	14.153	10.118	Feb 2021	-		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			14.153	10.118		-		-		-		-	Continuing	Continuing	N/A

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

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>		419.040	100.146	-	-	-	Continuing	Continuing	N/A



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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2023 Army</b>			<b>Date: April 2022</b>		
<b>Appropriation/Budget Activity</b> 2040 / 7		<b>R-1 Program Element (Number/Name)</b> PE 0607134A / Long Range Precision Fires (LRPF)		<b>Project (Number/Name)</b> ES1 / Long Range Precision Fires (LRPF)	

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
Technology Maturation and Risk Reduction (TMRR) Phase	██████████				██████████																							
TMRR Vendor #1 Contract (DOTC OTA)	██████████																											
TMRR Vendor #2 Contract (DOTC OTA)	██████████																											
Engineering Development Test (EDT) Component Qualification	██████████																											
EDT Flight Tests					██████████																							
CDR					▲ 2																							
Milestone B	▲ 1																											
Engineering and Manufacturing Development (EMD) Phase					██████████				██████████				██████████				██████████											

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2023 Army		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0607134A / Long Range Precision Fires (LRPF)	<b>Project (Number/Name)</b> ES1 / Long Range Precision Fires (LRPF)

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
AoA	2	2015	3	2015
Materiel Solution Analysis (MSA)	1	2014	3	2017
MSA Vendor #1 Contract (DOTC OTA)	3	2016	3	2017
MSA Vendor #2 Contract (DOTC OTA)	3	2016	3	2017
Milestone A	2	2017	2	2017
Technology Maturation and Risk Reduction (TMRR) Phase	2	2017	2	2022
TMRR Vendor #1 Contract (DOTC OTA)	3	2017	4	2021
TMRR Vendor #2 Contract (DOTC OTA)	3	2017	2	2022
System Requirements Review (SRR)	4	2017	4	2017
System Functional Review (SFR)	1	2018	1	2018
Preliminary Design Review (PDR)	1	2019	1	2019
Prototype Flight Tests	1	2020	3	2020
Engineering Development Test (EDT) Component Qualification / Ground Testing	3	2020	4	2021
EDT Flight Tests	3	2021	1	2022
CDR	1	2022	1	2022
Milestone B	4	2021	4	2021
Engineering and Manufacturing Development (EMD) Phase	1	2022	3	2025