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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 0604768A / <i>Brilliant Anti-Armor Submunition (BAT)</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	-	20.175	-	-	-	-	0.000	0.000	0.000	0.000	0.000	20.175
688: <i>ATACMS BLK II</i>	-	20.175	-	-	-	-	-	-	-	-	0.000	20.175

A. Mission Description and Budget Item Justification

This program element was for Army Tactical Missile System Block II (ATACMS BLK II) missile system Brilliant Anti-Armor (BAT) submunition. In FY18, it was repurposed for BREAKER and in FY19, CD ATACMS was added. BREAKER ended in FY19 and CD ATACMS was moved to a different program element. In FY20 and beyond, this program element funds only PFAL (Palletized Field Artillery Launcher).

Project P01. Multi-Mode Seeker began integration of Strategic Capabilities Office (SCO) STRIKE-X program demonstrated capabilities into ATACMS. This effort focused on providing integration of a seeker to search, detect, acquire, and engage moving maritime/land-based targets. There is no funding in FY2021.

Project 688 is a developmental effort for the Palletized Field Artillery Launcher (PFAL). Previously, PFAL was STRIKE-X capability 1 of the SCO Demonstration program and CD ATACMS was STRIKE X capability 3. PFAL is a palletized erectable launcher that provides alternatives to deliver near-term innovative long-range strike capabilities to improve operational effectiveness for Combatant Commanders. The PFAL launcher consists of an erectable palletized mechanical structure, Fire Control System (FCS), and Power Management System (PMS). PFAL is capable of firing all current Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM) rockets and missiles, to include the Guided Multiple Launch Rocket System (GMLRS), the Army Tactical Missile System (ATACMS), and future munitions such as the Precision Strike Missile (PrSM) and Extended Range GMLRS (ER GMLRS). PFAL is capable of carrying two launch pods each containing either six GMLRS / MLRS rockets or one ATACMS missile. The PFAL launcher is capable of firing from a fixed ground position, Palletized Load System (PLS) trailer, or maritime vessel.

Justification:
There is no FY23 funding.

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B. Program Change Summary (\$ in Millions)	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023 Base</u>	<u>FY 2023 OCO</u>	<u>FY 2023 Total</u>
Previous President's Budget	24.064	0.000	0.000	-	0.000
Current President's Budget	20.175	0.000	0.000	-	0.000
Total Adjustments	-3.889	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-3.889	-			
• SBIR/STTR Transfer	-	-			

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

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604768A / <i>Brilliant Anti-Armor Submunition (BAT)</i>	Project (Number/Name) 688 / <i>ATACMS BLK II</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
688: <i>ATACMS BLK II</i>	-	20.175	-	-	-	-	-	-	-	-	0.000	20.175
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This program element was for Army Tactical Missile System Block II (ATACMS BLK II) missile system Brilliant Anti-Armor (BAT) submunition. In FY18, it was repurposed for BREAKER and in FY19, CD ATACMS was added. BREAKER ended in FY19 and CD ATACMS was moved to a different program element. In FY20 and beyond, this program element funds only PFAL (Palletized Field Artillery Launcher).

Project P01. Multi-Mode Seeker began integration of Strategic Capabilities Office (SCO) STRIKE-X program demonstrated capabilities into ATACMS. This effort focused on providing integration of a seeker to search, detect, acquire, and engage moving maritime/land-based targets. There is no funding in FY2021.

Project 688 is a developmental effort for the Palletized Field Artillery Launcher (PFAL). Previously, PFAL was STRIKE-X capability 1 of the SCO Demonstration program and CD ATACMS was STRIKE X capability 3. PFAL is a palletized erectable launcher that provides alternatives to deliver near-term innovative long-range strike capabilities to improve operational effectiveness for Combatant Commanders. The PFAL launcher consists of an erectable palletized mechanical structure, Fire Control System (FCS), and Power Management System (PMS). PFAL is capable of firing all current Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM) rockets and missiles, to include the Guided Multiple Launch Rocket System (GMLRS), the Army Tactical Missile System (ATACMS), and future munitions such as the Precision Strike Missile (PrSM) and Extended Range GMLRS (ER GMLRS). PFAL is capable of carrying two launch pods each containing either six GMLRS / MLRS rockets or one ATACMS missile. The PFAL launcher is capable of firing from a fixed ground position, Palletized Load System (PLS) trailer, or maritime vessel.

In FY2020 and FY2021, the Army will procure the kits to build 1 prototype to replace the 3 SCO prototypes that were dispositioned to an Army unit in FY2020. In FY2021, the Army will design and develop upgrades to the baseline design based upon the directed requirement.

There is no FY23 funding request.

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

	FY 2021	FY 2022	FY 2023
Title: Palletized Field Artillery Launcher (PFAL)	20.175	-	-
Description: The Palletized Field Artillery Launcher (PFAL) Program provides a palletized erectable launcher capable of firing the Multiple Launched Rocket System (MLRS) Family of Munitions (MFOM). This effort will refine prototypes against Combatant Commanders specific requirements to support a continuous user evaluation.			
Accomplishments/Planned Programs Subtotals	20.175	-	-

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C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

The Palletized Field Artillery Launcher (PFAL) transitions from a Strategic Capabilities Office (SCO) managed effort to management by the Precision Fires Rocket and Missile Systems Project Office. The PFAL program performs development efforts required to refine prototypes against Combatant Commander's specific requirements to support a user evaluation. The PFAL program will conduct analysis and implement design improvements to demonstrate safe and effective design to enable deployment of prototypes as part of a continuous user evaluation.

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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 0604768A / Brilliant Anti-Armor Submunition (BAT)	Project (Number/Name) 688 / ATACMS BLK II
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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	1.688	0.872	Nov 2020	-		-		-		-	0.000	2.560	-
FY 2020 SBIR/STTR Transfer	TBD	Various : Various	0.908	-		-		-		-		-	0.000	0.908	-
Subtotal			2.596	0.872		-		-		-		-	0.000	3.468	N/A

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			
FY 2019 SBIR / STTR Transfer	TBD	TBD : TBD	0.159	-		-		-		-		-	0.000	0.159	-
BREAKER Warhead Development	C/CPFF	LMMFC : Dallas, TX	2.300	-		-		-		-		-	0.000	2.300	-
BREAKER System Analysis, Requirement & Spec Dev	MIPR	AMRDEC : Redstone Arsenal, AL	1.477	-		-		-		-		-	0.000	1.477	-
PFAL Development Engineering	MIPR	CCDC AvMC : Redstone Arsenal	18.269	7.738	Dec 2020	-		-		-		-	0.000	26.007	-
PFAL Prototype Development	C/CPFF	AMTC : Redstone Arsenal, AL	-	0.010	Dec 2020	-		-		-		-	0.000	0.010	-
Prototype Fabrication	TBD	TBD : TBD	-	10.009	Dec 2020	-		-		-		-	0.000	10.009	-
Subtotal			22.205	17.757		-		-		-		-	0.000	39.962	N/A

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, Systems Engineering, and Analysis	TBD	Various : Redstone Arsenal, AL	-	0.457	Dec 2020	-		-		-		-	0.000	0.457	-
Subtotal			-	0.457		-		-		-		-	0.000	0.457	N/A

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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			
Test Support	MIPR	Various : Various	-	1.089	Dec 2020	-		-		-		-	0.000	1.089	-
Subtotal			-	1.089		-		-		-		-	0.000	1.089	N/A
Project Cost Totals			24.801	20.175		-		-		-		-	0.000	44.976	N/A

Remarks
 Acronyms:
 AvMC: Aviation and Missile Center;
 AMTC: Aviation & Missile Technology Consortium;
 CCDC: Combat Capabilities Development Command;
 AMRDEC: Aviation and Missile Research, Development and Engineering Command;
 LMMFC: Lockheed Martin Missiles and Fire Control;
 RSA: Redstone Arsenal, Alabama;
 CD: Cross Domain
 STORM - Strategic and Operational Rockets and Missiles

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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 0604768A / <i>Brilliant Anti-Armor Submunition (BAT)</i>	Project (Number/Name) 688 / <i>ATACMS BLK II</i>	

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
PFAL Development Engineering	PFAL Development Engineering																											

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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 0604768A / <i>Brilliant Anti-Armor Submunition (BAT)</i>	Project (Number/Name) 688 / <i>ATACMS BLK II</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
System Analysis, Requirement & Spec Development	1	2018	4	2019
Warhead Development	1	2019	4	2019
Contract Requirements Package Development	1	2018	4	2019
PFAL Development Engineering	1	2020	4	2021