Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army											Date: March 2024	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 Program Element (Number/Name) PE 0604019A / *Expanded Mission Area Missile (EMAM)*							
COST ($ in Millions)	**Prior Years**	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**Cost To Complete**	**Total Cost**
Total Program Element	-	250.351	97.018	102.589	-	102.589	278.773	300.600	0.000	0.000	0.000	1,029.331
BU9: *IFPC High Energy Laser*	-	208.943	85.852	31.643	-	31.643	-	-	-	-	0.000	326.438
CO6: *IFPC High Power Microwave (HPM)*	-	41.408	11.166	4.031	-	4.031	-	-	-	-	0.000	56.605
DJ5: *Multi-Domain Artillery Cannon System (MDACS)*	-	-	-	66.915	-	66.915	278.773	300.600	-	-	0.000	646.288

Note

This PE supports transitioning the High Energy Laser -Tactical Vehicle Demonstration Science & Technology effort to manufacturing combat ready rapid prototype systems for delivery in FY 2025 and potential future transition to Program of Record.

Multi-Domain Artillery Cannon System (MDACS) project DJ5 is a new start within the Expanded Mission Area Missile (EMAM) program in FY 2025.

A. Mission Description and Budget Item Justification

These funding lines are directly aligned to the Army Air and Missile Defense Modernization Priority. Work in this PE, the Expanded Mission Area Missile (EMAM) program, supports the Integrated Air and Missile Defense (IAMD) architecture and provides Directed Energy - Indirect Fire Protection Capability (DE-IFPC) intercept capability to defeat Cruise Missiles (CM); Unmanned Aircraft System (UAS); Rocket, Artillery, and Mortar (RAM) threats; Fixed Wing (FW); and Rotary Wing (RW). The DE-IFPC is an Air Defense capability consisting of the Indirect Fire Protection Capability - High Energy Laser (IFPC-HEL), the Indirect Fire Protection Capability - High Power Microwave (IFPC-HPM) and the Multi-Domain Artillery Cannon System (MDACS).

- IFPC-HEL will provide a ground-based weapon system designed to acquire, track, engage, and defeat the CM, UAS, RAM, FW and RW threats. The IFPC-HEL requirement consists of a vehicle, high energy laser subsystem, power and thermal subsystem, and a beam control subsystem integrated with battle management command, control and communication software. IFPC-HEL provides much needed protection against adversarial threat systems capable of targeting U.S. and Allied forward operating bases and other critical assets.
- IFPC-HPM will provide a ground-based weapon system designed to acquire, track, engage, and defeat UAS swarms. The IFPC-HPM requirement consists of a HPM source, power and thermal subsystem, and an antenna subsystem interoperable with battle management command, control and communication software. IFPC-HPM provides much needed protection against adversarial UAS swarms capable of targeting and overwhelming U.S. and Allied air defense systems.
- MDACS is a rapid prototype, deep magazine, cost-effective, and scalable system consisting of a Multi-domain Artillery Cannon (MDAC), Multi-Function Precision Radar (MFPR), Multi-Domain Battle Manager (MDBM), Hypervelocity Projectiles (HVP), and an Ammo Handler Vehicle. MDACS complements existing AMD systems and provides integrated and standalone defense against a broad range of threats.

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy.

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army	Date: March 2024
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 0604019A *I Expanded Mission Area Missile (EMAM)*

B. Program Change Summary ($ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	258.320	97.018	363.435	-	363.435
Current President's Budget	250.351	97.018	102.589	-	102.589
Total Adjustments	-7.969	0.000	-260.846	-	-260.846
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.001	-			
• SBIR/STTR Transfer	-7.968	-			
• Adjustments to Budget Years	-	-	-260.846	-	-260.846

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2023	FY 2024
Project: BU9: *IFPC High Energy Laser*		
Congressional Add: *Program Increase: IFPC-HEL*	40.000	-
Congressional Add Subtotals for Project: BU9	40.000	-
Congressional Add Totals for all Projects	40.000	-

Change Summary Explanation

The decrease in funding reflects changes in priorities for the Expanded Mission Area Missile.

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604019A / *Expanded Mission Area Missile (EMAM)*	Project (Number/Name) BU9 / *IFPC High Energy Laser*	

COST ($ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
BU9: *IFPC High Energy Laser*	-	208.943	85.852	31.643	-	31.643	-	-	-	-	0.000	326.438
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This PE supports transitioning the High Energy Laser -Tactical Vehicle Demonstration S&T effort to manufacturing combat ready rapid prototype vehicles for delivery in FY 2025 and potential future transition to Program of Record.

A. Mission Description and Budget Item Justification

This funding line is directly aligned to the Army Air and Missile Defense Modernization Priority.

The Directed Energy Indirect Fire Protection Capability (DE-IFPC) High Energy Laser (HEL) is an Air Defense capability consisting of IFPC - HEL prototypes with residual combat capability at the IFPC Battery Level in support of Multi-Domain Operations (MDO). IFPC-HEL will provide the Army prototype weapon systems for defense of fixed and semi-fixed sites from Cruise Missiles (CM); Unmanned Aircraft Systems (UAS); Rocket, Artillery, and Mortar (RAM); Fixed Wing (FW); and Rotary Wing (RW) threats. This project will deliver an operationally effective rapid prototype capability in the near term. Efforts will include accelerated materiel development and competitive prototyping. IFPC-HEL funds an improved mechanism to effectively confront emerging threats and advance the United States' military dominance in accordance with the National Defense Strategy. Efforts include development, acquisition, test and evaluation, assessment, maturation, and potential future transition of prototype technologies to acquisition programs.

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy, and it supports the Army's future capability opportunities for leap-ahead technology for directed energy.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: IFPC-High Energy Laser	168.943	85.852	31.643
Description: This effort will provide planning, prototype manufacturing, and testing for the Indirect Fire Protection Capability (IFPC)-High Energy Laser (HEL) prototypes with residual combat capability to support the IFPC mission. The IFPC-HEL is a modularized laser weapon system that can be integrated onto a Heavy Expanded Mobility Tactical Truck (HEMTT) Palletized Load System (PLS) to defend fixed and semi-fixed sites from Cruise Missile (CM); Unmanned Aircraft System (UAS); Rocket, Artillery, and Mortar (RAM); Fixed Wing (FW); and Rotary Wing (RW) threats delivered with residual combat capability in FY 2025 as part of the IFPC Battery in support of Multi-Domain Operations (MDO). IFPC-HEL builds on the technology maturation and demonstration from PE 0602150A (Air and Missile Defense Technology) / Project AC9 (High Energy Laser Tactical Vehicle Demonstrator Technology) and PE 0603466A (Air and Missile Defense Advanced Technology) / Project AD1 (High Energy Laser Tactical Vehicle Demo Advanced Technology).			

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604019A / *Expanded Mission Area Missile (EMAM)*	**Project (Number/Name)** BU9 / *IFPC High Energy Laser*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
FY 2024 Plans: Prototype fabrication will continue to include hardware integration and assembly. Will continue systems engineering, program management, engineering and technical support. ***FY 2025 Plans:*** Complete prototype fabrication, system test, evaluation and assessment, prototype deliveries and initiate Contractor Logistics Support (CLS). ***FY 2024 to FY 2025 Increase/Decrease Statement:*** The decrease of $54.209M in FY 2025 reflects progression from hardware purchase and integration in FY 2024 to delivery of prototypes and potential future transition to Program of Record.			
Accomplishments/Planned Programs Subtotals	168.943	85.852	31.643

	FY 2023	FY 2024
Congressional Add: Program Increase: IFPC-HEL	40.000	-
FY 2023 Accomplishments: This effort continued development and demonstration of Indirect Fire Protection Capability - High Energy Laser, including integration with Command and Control.		
Congressional Adds Subtotals	40.000	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

IFPC - HEL prototype weapon systems will be delivered with residual combat capability in FY 2025 as part of the IFPC Battery in support of Multi-Domain Operations (MDO). Soldier touchpoints will be conducted to provide feedback in support of Army requirements generation/soldier centered design, prototype maturation, fielding, and future capability development. Performance characteristics measured in test, evaluation and assessment will inform future acquisition activities and a potential future transition to a Program of Record with PEO Missiles and Space.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604019A / *Expanded Mission Area Missile (EMAM)*	Project (Number/Name) BU9 / *IFPC High Energy Laser*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	Various : Various	0.795	5.382	Dec 2022	8.547	Dec 2023	6.639	Dec 2024	-		6.639	Continuing	Continuing	-
Facilities, IT/Supplies, Travel, Training	C/Various	Various : Various	-	0.260	Dec 2022	-		-		-		-	0.000	0.260	-
Program Increase: IFPC-HEL Management Support	C/Various	Various : Various	-	2.944		-		-		-		-	0.000	2.944	-
		Subtotal	0.795	8.586		8.547		6.639		-		6.639	Continuing	Continuing	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems, Development: Indirect Fire Protection Capability - High Energy Laser (IFPC-HEL)	C/CPFF	Lockheed Martin : Huntsville, AL	7.162	157.642	Jul 2023	77.305	Nov 2023	18.238	Nov 2024	-		18.238	Continuing	Continuing	-
Software Development and Support	MIPR	Various : Various	-	3.224	Feb 2023	-		-		-		-	0.000	3.224	-
Program Increase: IFPC-HEL	C/CPFF	Various : Huntsville, AL	-	37.056		-		-		-		-	0.000	37.056	-
		Subtotal	7.162	197.922		77.305		18.238		-		18.238	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Logistics Support (CLS)	C/CPFF	Lockheed Martin : Huntsville, AL	-	-		-		2.100	Nov 2024	-		2.100	Continuing	Continuing	-
		Subtotal	-	-		-		2.100		-		2.100	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604019A / *Expanded Mission Area Missile (EMAM)*	Project (Number/Name) BU9 / *IFPC High Energy Laser*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	Various	Various : Various	-	2.435		-		4.666	Dec 2024	-		4.666	Continuing	Continuing	-
		Subtotal	-	2.435		-		4.666		-		4.666	Continuing	Continuing	N/A

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	7.957	208.943		85.852		31.643		-		31.643	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604019A / *Expanded Mission Area Missile (EMAM)*	**Project (Number/Name)** BU9 / *IFPC High Energy Laser*

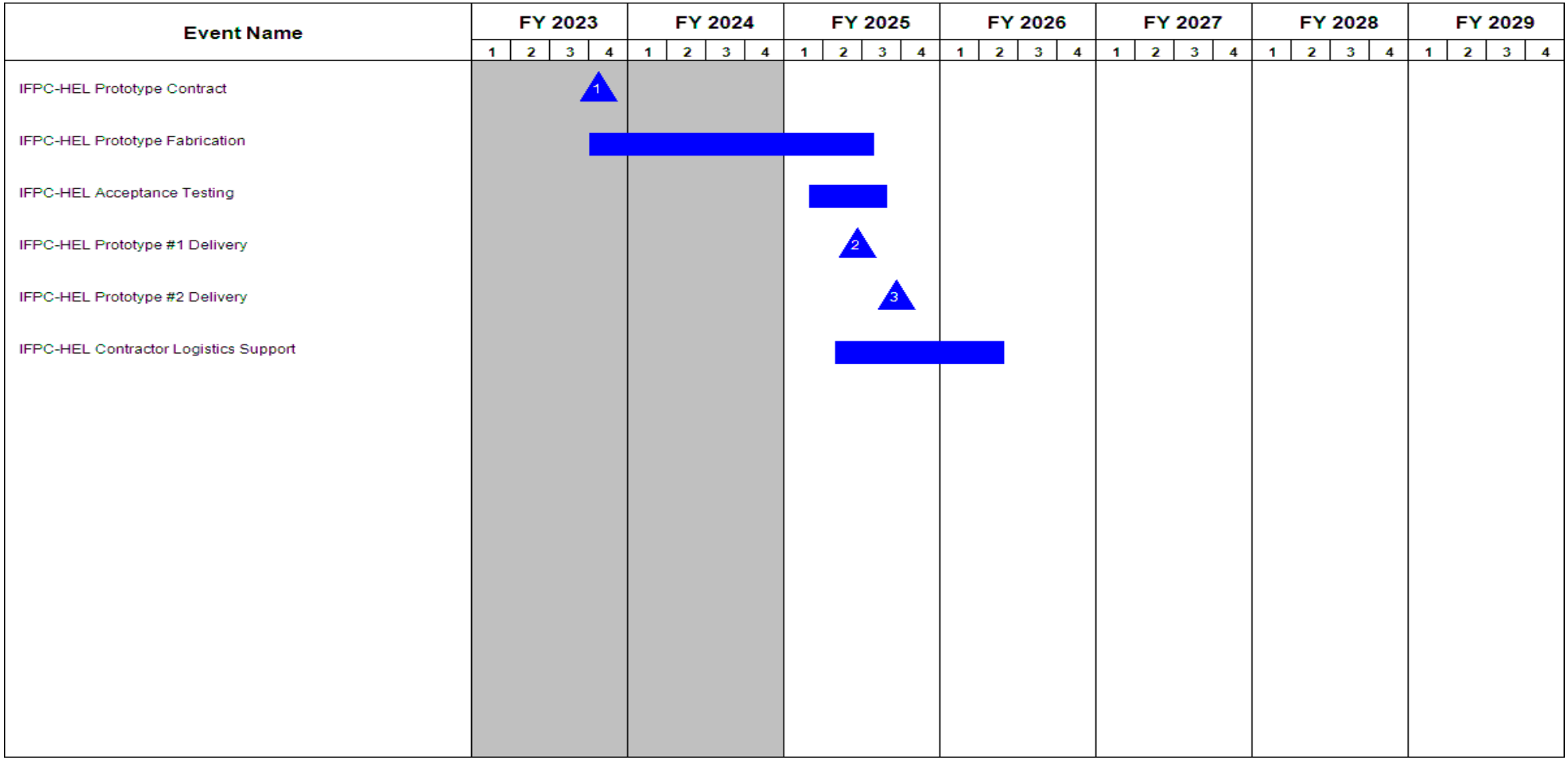

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604019A / *Expanded Mission Area Missile (EMAM)*	**Project (Number/Name)** BU9 / *IFPC High Energy Laser*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
IFPC-HEL Prototype Contract	4	2023	4	2023
IFPC-HEL Prototype Fabrication	4	2023	3	2025
IFPC-HEL Acceptance Testing	1	2025	3	2025
IFPC-HEL Prototype #1 Delivery	2	2025	2	2025
IFPC-HEL Prototype #2 Delivery	3	2025	3	2025
IFPC-HEL Contractor Logistics Support	2	2025	2	2026

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604019A / *Expanded Mission Area Missile (EMAM)*	Project (Number/Name) CO6 / *IFPC High Power Microwave (HPM)*	

COST ($ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
CO6: *IFPC High Power Microwave (HPM)*	-	41.408	11.166	4.031	-	4.031	-	-	-	-	0.000	56.605
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This funding line is directly aligned to the Army Air and Missile Defense Modernization Priority.

The Directed Energy - Indirect Fire Protection Capability (DE-IFPC) - High Power Microwave (HPM) is an Air Defense capability consisting of the IFPC-HPM prototype with residual combat capability at the IFPC Battery Level in support of Multi-domain Operations (MDO). The IFPC-HPM program will provide the Army with HPM prototype weapon systems for the short-range defense of fixed and semi-fixed sites from Unmanned Aircraft System (UAS) swarms. This project will deliver an operationally effective rapid prototype capability in the near term. IFPC-HPM funds an improved mechanism to effectively confront emerging threats and advance the United States' military dominance in accordance with the National Defense Strategy. Efforts include development, acquisition, test and evaluation, assessment, maturation, and potential future transition of prototype technologies to acquisition programs.

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas, the Army Modernization Strategy, and supports the Army's future capability opportunities for leap-ahead technology for directed energy.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: IFPC-High Power Microwave	41.408	11.166	4.031
Description: This effort will provide development, planning, prototype manufacturing, and testing of 4 IFPC-HPM rapid prototypes with residual combat capability to support the IFPC mission. The IFPC-HPM is a weapon system that can be transported by common brigade combat team equipment to defend fixed and semi-fixed sites against Group 1-2 UAS swarms. IFPC-HPM is common with other Services and the Joint Counter-UAS Office HPM effectors for countering UAS. IFPC-HPM leverages previous HPM technology demonstrations and to facilitate continued operational assessment.			
FY 2024 Plans: Will continue prototype fabrication, systems engineering, program management, engineering, and technical support, for weapon system prototyping. Initiate Contractor Logistics Support (CLS).			
FY 2025 Plans: Will support issuance of the residual combat capability to a unit, new threat target software updates, and Contractor Logistics Support (CLS) which facilitates continued operational assessment and a potential future transition to an acquisition program.			
FY 2024 to FY 2025 Increase/Decrease Statement:			

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604019A / *Expanded Mission Area Missile (EMAM)*	**Project (Number/Name)** CO6 / *IFPC High Power Microwave (HPM)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
The decrease of $7.135M in FY 2025 reflects progression from integration and delivery in FY 2024 to Contractor Logistics Support (CLS) and potential future transition to Program of Record.			
Accomplishments/Planned Programs Subtotals	41.408	11.166	4.031

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

DE-IFPC will utilize streamlined acquisition methods, processes and techniques to rapidly prototype the capability. The RCCTO awarded a Prototype Other Transactions Agreement (pOTA) to deliver four HPM prototype systems to Soldiers in FY 2024. Soldier touchpoints will be conducted to provide feedback in support of Army requirements generation, prototype maturation, fielding residual combat capability to a unit of action, and potential future capability development.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604019A / *Expanded Mission Area Missile (EMAM)*	Project (Number/Name) CO6 / *IFPC High Power Microwave (HPM)*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	Various : Various	1.889	2.280	Dec 2022	1.112	Dec 2023	1.145	Dec 2024	-		1.145	Continuing	Continuing	Continuing
Facilities, IT/Supplies, Travel, Training	TBD	Various : Various	-	0.125	Dec 2022	-		-		-		-	0.000	0.125	-
		Subtotal	1.889	2.405		1.112		1.145		-		1.145	Continuing	Continuing	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Indirect Fire Protection Capability - High Power Microwave (IFPC-HPM)	C/FFP	Epirus : Los Angeles, CA	17.009	33.553	Feb 2023	9.354	Dec 2023	-		-		-	Continuing	Continuing	Continuing
Software Development and Support	MIPR	Various : Various	-	0.750	Feb 2023	-		-		-		-	0.000	0.750	-
GFE	MIPR	Various : Various	-	1.000	Feb 2023	-		-		-		-	0.000	1.000	-
		Subtotal	17.009	35.303		9.354		-		-		-	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Logistics Support (CLS)	C/CPFF	Epirus : Los Angeles, CA	-	-		-		2.386	Dec 2024	-		2.386	0.000	2.386	-
		Subtotal	-	-		-		2.386		-		2.386	0.000	2.386	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Support	MIPR	Various : Various	-	0.700	Jun 2023	0.700	Dec 2023	0.500	Dec 2024	-		0.500	0.000	1.900	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604019A / *Expanded Mission Area Missile (EMAM)*	Project (Number/Name) CO6 / *IFPC High Power Microwave (HPM)*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Targets	MIPR	TSMO : Huntsville, AL	-	3.000	Mar 2023	-		-		-		-	0.000	3.000	-
		Subtotal	-	3.700		0.700		0.500		-		0.500	0.000	4.900	N/A

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	18.898	41.408		11.166		4.031		-		4.031	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604019A / *Expanded Mission Area Missile (EMAM)*	**Project (Number/Name)** CO6 / *IFPC High Power Microwave (HPM)*

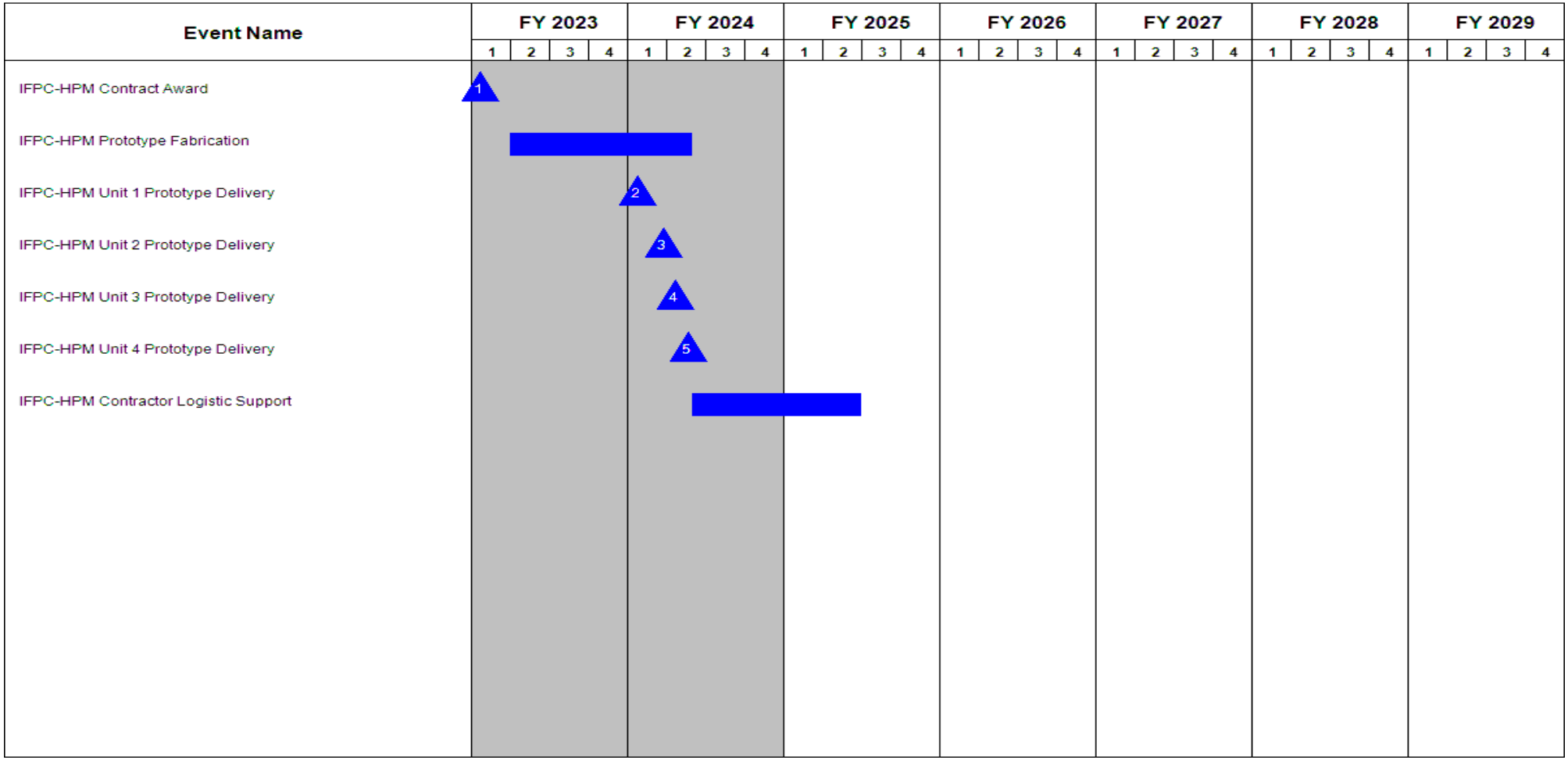

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604019A / *Expanded Mission Area Missile (EMAM)*	**Project (Number/Name)** CO6 / *IFPC High Power Microwave (HPM)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
IFPC-HPM Contract Award	1	2023	1	2023
IFPC-HPM Prototype Fabrication	1	2023	2	2024
IFPC-HPM Unit 1 Prototype Delivery	1	2024	1	2024
IFPC-HPM Unit 2 Prototype Delivery	1	2024	1	2024
IFPC-HPM Unit 3 Prototype Delivery	2	2024	2	2024
IFPC-HPM Unit 4 Prototype Delivery	2	2024	2	2024
IFPC-HPM Contractor Logistic Support	2	2024	2	2025

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604019A / *Expanded Mission Area Missile (EMAM)*	Project (Number/Name) DJ5 / *Multi-Domain Artillery Cannon System (MDACS)*	

COST ($ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
DJ5: *Multi-Domain Artillery Cannon System (MDACS)*	-	-	-	66.915	-	66.915	278.773	300.600	-	-	0.000	646.288
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Multi-Domain Artillery Cannon System (MDACS) is a new start within the Expanded Mission Area Missile (EMAM) program in FY 2025.

A. Mission Description and Budget Item Justification

The Multi-Domain Artillery Cannon System (MDACS) is rapid prototype, deep magazine, cost-effective, and scalable system consisting of a Multi-Domain Artillery Cannon (MDAC), Multi-Function Precision Radar (MFPR), Multi-Domain Battle Manager (MDBM), Hypervelocity Projectiles (HVP), and an Ammo Handler Vehicle. MDACS complements existing AMD systems and provides integrated and standalone defense against a broad range of threats. MDACS will provide the Joint Force with defense of fixed and semi-fixed sites against Cruise Missiles (CM) and Unmanned Aircraft Systems (UAS) while significantly increasing magazine depth and reducing cost-per-engagement.

The Army will leverage current OSD investments and will prototype and assess MDACS at Battery level in FY 2028 with residual combat capability. The prototype will inform an enduring capability requirement.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: Multi Domain Artillery Cannon System (MDACS)	-	-	66.915
Description: This effort will provide development, prototype manufacturing, and operational assessment of a battery formation of MDACS. The battery formation includes MDACs , MFPRs, MDBMs, HVPs and support assets required to facilitate an operational assessment and provide residual combat capability in FY 2028. ***FY 2025 Plans:*** Establish a program office, initiate program management functions, initiate system design and development, purchase long lead items, and commence prototype fabrication. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** New start effort in FY 2025.			
Accomplishments/Planned Programs Subtotals	-	-	66.915

C. Other Program Funding Summary ($ in Millions)

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604019A / *Expanded Mission Area Missile (EMAM)*	**Project (Number/Name)** DJ5 / *Multi-Domain Artillery Cannon System (MDACS)*

C. Other Program Funding Summary ($ in Millions)

Remarks

D. Acquisition Strategy

The MDACS program will utilize streamlined acquisition methods to rapidly prototype the capability. It will leverage existing prototypes from the Air Force Research Laboratory (AFRL) and the Strategic Capabilities Office (SCO) to refine requirements and address Army and Joint Force concepts. Throughout the developmental effort, Soldier touchpoints will gather feedback for Army requirements generation and prototype maturation. MDACS will use the Integrated Battle Command System (IBCS) and conduct a series of flight tests culminating in a battery-level operational assessment (OA) in FY 2028. The OA will inform the Program of Record decision and guide future acquisition activities. Post OA, MDACS will field residual combat capability to a unit of action as part of a MDACS Battery supporting Multi-Domain Operations (MDO).

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604019A / *Expanded Mission Area Missile (EMAM)*	Project (Number/Name) DJ5 / *Multi-Domain Artillery Cannon System (MDACS)*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	TBD	Various : Various	-	-		-		6.678	Oct 2024	-		6.678	Continuing	Continuing	Continuing
		Subtotal	-	-		-		6.678		-		6.678	Continuing	Continuing	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Multi-Domain Artillery Cannon System (MDACS)	C/TBD	TBD : TBD	-	-		-		60.237	Nov 2024	-		60.237	Continuing	Continuing	Continuing
		Subtotal	-	-		-		60.237		-		60.237	Continuing	Continuing	N/A

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-		-		66.915		-		66.915	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604019A / *Expanded Mission Area Missile (EMAM)*	**Project (Number/Name)** DJ5 / *Multi-Domain Artillery Cannon System (MDACS)*

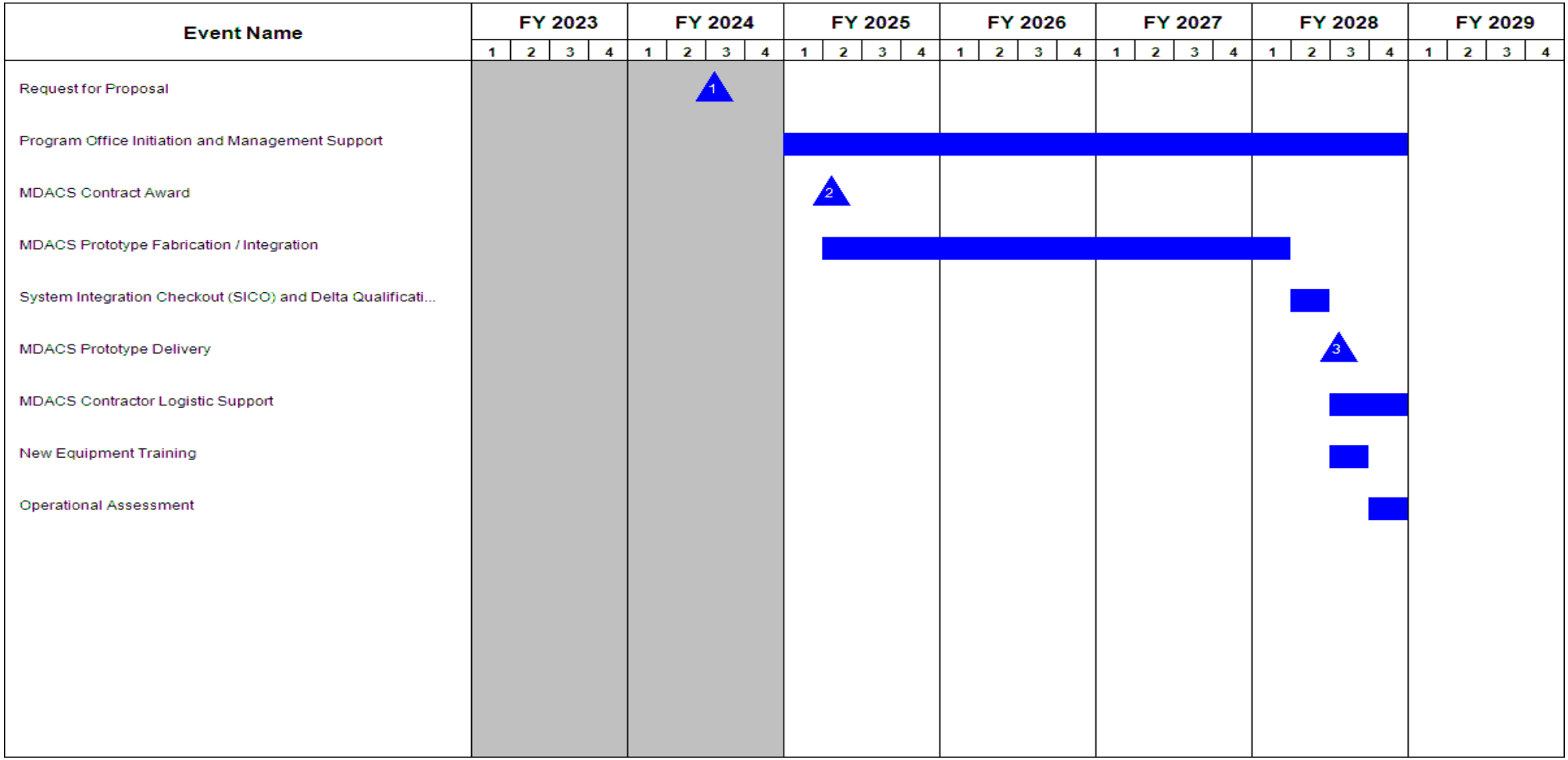

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604019A / *Expanded Mission Area Missile (EMAM)*	**Project (Number/Name)** DJ5 / *Multi-Domain Artillery Cannon System (MDACS)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Request for Proposal	3	2024	3	2024
Program Office Initiation and Management Support	1	2025	4	2028
MDACS Contract Award	2	2025	2	2025
MDACS Prototype Fabrication / Integration	2	2025	1	2028
System Integration Checkout (SICO) and Delta Qualification Testing	2	2028	2	2028
MDACS Prototype Delivery	3	2028	3	2028
MDACS Contractor Logistic Support	3	2028	4	2028
New Equipment Training	3	2028	3	2028
Operational Assessment	4	2028	4	2028