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Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army **Date:** March 2024

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0603801A / <i>Aviation - Adv Dev</i>
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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	0.000	1,113.295	1,502.160	6.591	0.000	6.591	0.000	0.000	0.000	0.000	0.000	2,622.046
B47: <i>Future Vertical Lift</i>	-	202.522	1,027.608	-	-	-	-	-	-	-	0.000	1,230.130
CK7: <i>FARA Ecosystem</i>	-	18.346	29.151	-	-	-	-	-	-	-	0.000	47.497
CS7: <i>FLRAA MTA</i>	-	462.255	16.536	6.591	-	6.591	-	-	-	-	0.000	485.382
F12: <i>Future Attack Reconnaissance Aircraft</i>	-	430.172	428.865	-	-	-	-	-	-	-	0.000	859.037

A. Mission Description and Budget Item Justification

This funding line directly aligns to the Future Vertical Lift (FVL) Army modernization priority. Future Vertical Lift (FVL) is an initiative to develop a family of vertical lift aircraft for the United States Armed Forces. The Department of Defense (DOD) established FVL to focus vertical lift capabilities and technology development as well as retain long-term industrial base capabilities. The Deputy Secretary of Defense issued the FVL Strategic Plan in 2012 to outline a joint approach for the next generation vertical lift aircraft for all military services. The Strategic Plan provided a foundation for replacing the current fleet with advanced capability by shaping the development of vertical lift aircraft for the next 25 to 40 years. In Fiscal Year (FY) 2017, the Army identified FVL as one of the Army's six modernization priorities, and established the FVL Cross Functional Team (CFT). The FVL objectives are increased vertical lift maneuverability, range, speed, payload, survivability, and reliability while reducing the logistics footprint. This capability will provide critical vertical lift aviation capability in multi-domain operations to the joint warfighter and maneuver force.

The Future Long Range Assault Aircraft (FLRAA) program pursues FVL Capability Set 3 (CS3) and provides Combatant Commanders with deterrence, power projection, and tactical capabilities at operational and strategic distances. The Army competitively awarded the weapon system development contract in December 2022, using a hybrid acquisition approach. The contract award initiates the Rapid Prototyping effort to execute a preliminary design and development of FLRAA Virtual Prototypes, using Middle Tier of Acquisition (MTA) authorities.

The total estimated cost of the FLRAA Middle Tier of Acquisition effort is \$600 million RDT&E from FY21 to FY25. The remainder of the FLRAA program is fully funded across the Future Years Defense Program.

The Future Attack Reconnaissance Aircraft (FARA) Capability Set 1 (CS1) was intended to restore reconnaissance dominance by mitigating enemy long-range capabilities by creating lethal effects from outside enemy sensor/weapons range and allowing joint force commanders to maneuver from relative sanctuary. The Army has discontinued the FARA effort beyond FY 2024.

Both FLRAA and FARA variants integrate advanced technologies, using a modular open systems approach, and design configurations with appropriate trades to ensure affordability.

This resourcing funds both FLRAA and FARA.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army **Date:** March 2024

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0603801A / <i>Aviation - Adv Dev</i>
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B. Program Change Summary (\$ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	1,157.472	1,502.160	1,729.307	-	1,729.307
Current President's Budget	1,113.295	1,502.160	6.591	-	6.591
Total Adjustments	-44.177	0.000	-1,722.716	-	-1,722.716
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-3.573	-			
• SBIR/STTR Transfer	-40.604	-			
• Adjustments to Budget Years	-	-	-1,722.716	-	-1,722.716

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: CS7: FLRAA MTA

Congressional Add: *FLRAA Program Increase*

Congressional Add: *Modular Communication, Command, and Control Suite*

Congressional Add Subtotals for Project: CS7

Project: F12: Future Attack Reconnaissance Aircraft

Congressional Add: *FARA All Electrical Flight Controls*

Congressional Add Subtotals for Project: F12

Congressional Add Totals for all Projects

	FY 2023	FY 2024
	23.000	-
	12.000	-
Congressional Add Subtotals for Project: CS7	35.000	-
	10.000	-
Congressional Add Subtotals for Project: F12	10.000	-
Congressional Add Totals for all Projects	45.000	-

Change Summary Explanation

FY25 funding in the amount of \$525.487 million was realigned within Army's Aviation Portfolio. The remainder of the decrease in FY25 funding from the previous PB to the current PB was realigned to PE 0605241A/Future Long Range Assault Aircraft Development, Future Long Range Assault Aircraft, for execution of the Engineering and Manufacturing Development phase of the program.

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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 0603801A / Aviation - Adv Dev				Project (Number/Name) B47 / Future Vertical Lift			
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
B47: Future Vertical Lift	-	202.522	1,027.608	-	-	-	-	-	-	-	0.000	1,230.130
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In Fiscal Year 2025 (FY25), funding previously planned in Program Element 0603801A Project B47 transitions to Program Element 0605241A / Future Long Range Assault Aircraft Development, Project DG5 / Future Long Range Assault Aircraft, to support Budget Activity guidance for programs achieving Milestone B.

A. Mission Description and Budget Item Justification

The Future Vertical Lift (FVL) Project's funding provides for the development of a Future Long Range Assault Aircraft (FLRAA) Capability Set Three weapon system within the FVL family of systems. FLRAA will conduct air assault, urban assault/security, maritime interdiction, medical evacuation, humanitarian assistance/disaster relief, tactical resupply, direct action, noncombatant evacuation operation, and combat search and rescue operations. FLRAA will support the Army, including Special Operations Command (USSOCOM) and the Joint Force, in a contested, near peer threat environment. The FLRAA weapon system will retain the Army's ability to project combat power with transformational increases in range, speed, mobility, and payload over current Army and USSOCOM aircraft.

FLRAA achieved a Materiel Development Decision approval in October 2016 and the Office of Secretary of Defense granted a sufficiency determination of the Analysis of Alternatives (AoA) in July 2019.

The Fiscal Year (FY) 2024 budget request funds continued subsystem risk reduction activities, the initiation of the of the FLRAA weapon system detailed design, continued development of a digital backbone architected to meet Modular Open System Approach (MOSA) objectives, and the initiation of developmental prototype assembly and integration for qualification and test.

The total estimated cost of the FLRAA Middle Tier of Acquisition effort is \$600 million RDT&E from FY21 to FY25. The remainder of the FLRAA program is fully funded across the Future Years Defense Program.

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

	FY 2023	FY 2024	FY 2025
Title: Engineering Services / Research Studies	41.677	52.315	-
Description: Provide engineering research, planning, modeling, and analysis. Support the execution of subsystem risk reduction efforts through the FLRAA Weapon System Development (WSD) contract to continue definition and documentation of subsystem designs as required to inform the system level design and support the FLRAA acquisition schedule. Continue maturation of Model Based System Engineering (MBSE) competencies, infrastructure, and model development used to describe system requirements and design. Continue maturation of Open System Architecture (OSA) standards, processes, and requirements through enterprise-wide collaboration to support a Modular Open System Approach (MOSA) to include definition of system architecture requirements, development of component specification models, and component definition models. Conduct independent cyber and safety			

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) B47 / Future Vertical Lift		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2023	FY 2024	FY 2025
<p>analyses. Provide critical airworthiness support to enable the development of the FLRAA Airworthiness Qualification Specification (AQS). Develop statutory and regulatory Milestone B documentation through Integrated Product Teams (IPT) and working group collaboration.</p> <p>FY 2024 Plans: Support engineering changes associated with refined requirements, review contract deliverables associated with subsystem risk reduction activities and weapon system detailed designs to ensure compliance with technical specifications and airworthiness requirements, continue studies and analyses to refine and implement Open System Architectures (OSA), further enable MBSE in the digital environment, prepare for the FLRAA Weapons System Critical Design Review (CDR), and support the completion and coordination of a FLRAA Milestone B decision.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: In FY25, funding transitions to Budget Activity 6.5 PE 0605241A/Future Long Range Assault Aircraft Development, Project DG5/ Future Long Range Assault Aircraft, for execution of Engineering and Manufacturing Development.</p>				
<p>Title: Program Management</p> <p>Description: Oversight and management of the FLRAA acquisition program. Program analysis of affordability, program performance, and schedule to ensure support of the Army mission. Guide, direct and manage program efforts through development phases of the lifecycle.</p> <p>FY 2024 Plans: Continue to manage the rigorous execution of programmatic, technical, logistics, business and administrative requirements to execute the scope of the FLRAA Engineering and Manufacturing Development acquisition phase, continue to provide critical information technology infrastructure to enable a distributed workforce, and continue to support Aviation enterprise-wide initiatives to facilitate common Modular Open Systems Approach objectives.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: In FY25, funding transitions to Budget Activity 6.5 PE 0605241A/Future Long Range Assault Aircraft Development, Project DG5/ Future Long Range Assault Aircraft, for execution of Engineering and Manufacturing Development.</p>		6.631	6.602	-
<p>Title: Supportability Analysis and Acquisition Support</p> <p>Description: Acquisition and supportability research, planning, modeling, analysis, documentation and reviews supporting the FLRAA acquisition program. Early design influence analysis to assess operational durability; emphasizing digital data thread, active health state awareness in Condition Based Maintenance (CBM+), and optimized human system interface for ease of operations and maintenance.</p> <p>FY 2024 Plans:</p>		6.624	9.851	-

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Army	Date: March 2024
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Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603801A / Aviation - Adv Dev	Project (Number/Name) B47 / Future Vertical Lift
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
<p>Initiate the start of extensive provisioning planning to include provisioning coordination activities, demonstrations, and coordination with Soldiers to identify and discuss Soldier touch points to ensure and operable and maintainable weapon system solution. Continue integration of supportability modeling and analysis in direct support of Weapon System Development execution to also include operation support cost refinement via depot source of repair and level of repair analysis.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: In FY25, funding transitions to Budget Activity 6.5 PE 0605241A/Future Long Range Assault Aircraft Development, Project DG5/ Future Long Range Assault Aircraft, for execution of Engineering and Manufacturing Development.</p>			
<p>Title: Prototype Material and Manufacturing Development</p> <p>Description: Purchased materials, including the development and acquisition of GFE hardware and software necessary to meet FLRAA prototype development activities, execution of subsystem risk reduction activities, and execution of the EMD phase of the FLRAA program, including weapon system detailed design and prototype manufacturing efforts.</p> <p>FY 2024 Plans: Complete subsystem risk reduction efforts, begin weapon system detail design preparing for the Critical Design Review, begin building FLRAA EMD prototypes one through six, continue maturing and purchasing GFE for prototype integration and developmental testing, and continue to mature critical enabling capabilities required to meet Army modernization requirements.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: In FY25, funding transitions to Budget Activity 6.5 PE 0605241A/Future Long Range Assault Aircraft Development, Project DG5/ Future Long Range Assault Aircraft, for execution of Engineering and Manufacturing Development.</p>	147.590	958.840	-
Accomplishments/Planned Programs Subtotals	202.522	1,027.608	-

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2025</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u>	<u>Total Cost</u>
			<u>Base</u>	<u>OCO</u>	<u>Total</u>					<u>Complete</u>	
• CS7: FLRAA MTA	462.255	16.536	6.591	-	6.591	-	-	-	-	0.000	485.382
• DG5: Future Long Range Assault Aircraft	-	-	1,253.637	-	1,253.637	843.708	826.934	697.946	725.788	0.000	4,348.013
• A12002: Future Long Range Assault Aircraft (FLRAA)	-	-	0.000	-	0.000	-	265.937	438.536	787.364	Continuing	Continuing

Remarks
Program Element 0603465A Future Vertical Lift Advanced Technology includes Joint Multi-Role Technology Demonstration (JMR-TD); supported flying demonstrator activities providing knowledge transfer from flight test, data analysis, Soldier touch points, and risk reduction activities to the FLRAA program.

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) B47 / Future Vertical Lift

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

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u> <u>Base</u>	<u>FY 2025</u> <u>OCO</u>	<u>FY 2025</u> <u>Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
Project CS7 includes all FLRAA MTA efforts from FY 2023 through FY 2025, which was initiated as a planned accomplishment under Project B47 in FY 2022.											
Project DG5 includes all FLRAA EMD funding beyond FY 2024.											
Project A12002 includes all FLRAA procurement funding FY 2027 and beyond.											

D. Acquisition Strategy

The Army is executing a hybrid acquisition approach to design, develop, and deliver the FLRAA weapons system. In order to support the Army's modernization strategy and concept for multi-domain operations, the FLRAA program will deliver the first aircraft in FY 2030. This hybrid approach builds on the JMR-TD efforts (started in 2013); the Army's AoA (completed in July 2019); and multiple risk mitigation efforts.

The Army's risk mitigation activities ahead of the Weapon System Development contract award have included: (1) additional conceptual design and flight envelope expansion tasks on the existing JMR-TD Technology Investment Agreement (TIA); (2) MOSA, FVL Architecture Collaboration Working Group (with participation from industry and academia) to establish a common architecture requirements framework for FLRAA system development; and (3) a CD&RR effort, awarded to two Project Agreement Holders (PAH), using an Aviation Missile and Technology Consortium (AMTC) Other Transaction Authority (OTA) agreements to provide substantiating technical documentation on weapon system designs, requirements decompositions, trade-studies, and requirements feasibility for the FLRAA Weapon System Development.

These risk reduction activities have maintained industry engagement and momentum from the JMR-TD program, informed capabilities and system requirements, and provided initial trade assessments for the final operational requirements. They also informed the final acquisition strategy, matured the Government's architecture requirements, and transitioned appropriate Science & Technology investments to the PoR. CD&RR Phase II incorporated efforts leading to preliminary design using a digital engineering environment. The Army competitively awarded the Weapon System Development contract in December 2022 to one vendor with a hybrid acquisition approach. This approach includes the opportunity to employ new DoDI 5000.80 (Operation of the Middle Tier of Acquisition (MTA)) authorities along with a tailored DoDI 5000.85 (Major Capability Acquisition) acquisition strategy.

Finally, the Army is also addressing life cycle affordability, sustainability, and maintainability early in the program. The FLRAA program is employing multiple strategies including: should cost reduction opportunities, use of a digital thread from design through sustainment, and stochastic sustainment modeling. Additionally, FLRAA is one of the Army's pilot programs for digital engineering and life cycle intellectual property and data strategy development.

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) B47 / Future Vertical Lift
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Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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 Management	Various	Various : Redstone Arsenal, AL	18.452	3.617	Dec 2022	3.206	Dec 2023	-		-		-	0.000	25.275	-
Program Management-Consolidated Support Contract	C/FFPLOE	Smartonix, Inc. : Huntsville, AL	5.870	5.548	Mar 2023	3.396	Mar 2024	-		-		-	0.000	14.814	-
Subtotal			24.322	9.165		6.602		-		-		-	0.000	40.089	N/A

Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
Prototype Material - Government Furnished Equipment	Various	Various : Various/ Redstone Arsenal	8.379	26.373	Mar 2023	13.542	Dec 2023	-		-		-	0.000	48.294	-
EMD Subsystem Risk Reduction	C/Various	Bell Textron Inc. : Ft. Worth, TX	-	120.838	May 2023	431.813	Nov 2023	-		-		-	0.000	552.651	-
Prototype Material and Manufacturing Development (EMD)	Option/ Various	Bell Textron Inc. : Various	-	-		508.421	Jun 2024	-		-		-	0.000	508.421	-
Subtotal			8.379	147.211		953.776		-		-		-	0.000	1,109.366	N/A

Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
Acquisition and Supportability Analysis	Various	AMCOM ALC, CCDC AvMC : Redstone Arsenal, AL	12.736	4.857	Nov 2022	7.875	Nov 2023	-		-		-	0.000	25.468	-
Engineering Services / Research Studies - Other	MIPR	Various : Huntsville, AL	38.196	16.565	Nov 2022	-		-		-		-	0.000	54.761	-
Enterprise Logistics and Support Analysis	Various	Various : Redstone Arsenal, AL	-	-		1.976	Mar 2024	-		-		-	0.000	1.976	-

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) B47 / Future Vertical Lift
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Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
Engineering Services - Collaborative Efforts	MIPR	CCDC AvMC, S3I, SRD : Huntsville, AL	-	10.784	Jan 2023	18.207	Jan 2024	-		-		-	0.000	28.991	-
Engineering / Research Support Services	C/FFPLOE	Torch Technologies : Huntsville, AL	-	13.394	Jan 2023	11.297	Jan 2024	-		-		-	0.000	24.691	-
Enterprise Common Technical Support to Programs	Various	Various : Various	8.789	-		12.841	Mar 2024	-		-		-	0.000	21.630	-
Enterprise Architecture Convergence and Holistic Survivability	Various	Various : Huntsville, AL	-	-		6.660	Mar 2024	-		-		-	0.000	6.660	-
Adaptive Work Environment Enabling Infrastructure and Support	Various	Various : Huntsville, AL	-	-		3.310	Mar 2024	-		-		-	0.000	3.310	-
Subtotal			59.721	45.600		62.166		-		-		-	0.000	167.487	N/A

Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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 Test and Evaluation Support	Various	Redstone Test Center : Redstone Arsenal, AL	-	0.546		5.064	Dec 2023	-		-		-	0.000	5.610	-
Subtotal			-	0.546		5.064		-		-		-	0.000	5.610	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		92.422	202.522	1,027.608	-	-	-	0.000	1,322.552	N/A

Remarks

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) B47 / Future Vertical Lift
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Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	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
Architecture Definition and Risk Reduction																												
Competitive Demonstration and Risk Reduction																												
Source Selection Evaluation Board																												
Contract Award																												
Virtual Prototyping (MTA)																												
Preliminary Design (MTA) and Detail Design																												
FLRAA Virtual Prototype Deliveries (Delivered under Proj...																												
Prototype Builds																												

Note
 The FLRAA MTA effort transitioned to Project CS7 in FY23, under which the Virtual Prototypes were delivered; this program transitions to Program Element 0605241A/ Future Long Range Assault Aircraft Development, Project DG5/Future Long Range Assault Aircraft, for execution of the Engineering and Manufacturing Development phase of the program.

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) B47 / Future Vertical Lift
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Material Development Decision	1	2017	1	2017
Analysis of Alternatives	3	2017	4	2019
System Specification Development	2	2019	3	2021
Program Documentation and Contracts Requirements Package	2	2019	3	2021
Architecture Definition and Risk Reduction	3	2019	4	2024
Competitive Demonstration and Risk Reduction	2	2020	1	2023
Request for Proposal Release	4	2021	4	2021
Proposal Preparation	4	2021	4	2021
Source Selection Evaluation Board	3	2021	2	2023
Contract Award	1	2023	1	2023
Virtual Prototyping (MTA)	1	2023	1	2025
Preliminary Design (MTA) and Detail Design	1	2023	1	2025
FLRAA Virtual Prototype Deliveries (Delivered under Project CS7)	4	2024	4	2024
Prototype Builds	3	2024	4	2024

Note

Virtual Prototyping Middle Tier Acquisition (MTA) is funded in B47 for FY 2022 and realigns to Project CS7 in FY 2023.

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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 0603801A / Aviation - Adv Dev				Project (Number/Name) CK7 / FARA Ecosystem			
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
CK7: FARA Ecosystem	-	18.346	29.151	-	-	-	-	-	-	-	0.000	47.497
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Funding supported persistent experimentation of FARA Ecosystem relevant technologies in a Joint All Domain Operations (JADO) environment. The Army's persistent experimentation events garnered early user feedback to inform and refine requirements and accelerate technology development. Demonstration of critical technologies in relevant operational environments informed refinement and validation of requirements for the FARA Ecosystem and its enablers; enabled timely decisions to transition relevant S&T technologies into the Ecosystem; provided an opportunity for operational assessment of capability gaps in the Ecosystem; and accelerated development and delivery of Army Aviation capabilities.

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

	FY 2023	FY 2024	FY 2025
Title: FARA Ecosystems	18.346	29.151	-
Description: Funding for FARA Ecosystem supports prototyping demonstration with relevant technologies in a Joint All Domain Operations (JADO) environment, which will inform FVL requirements including FARA, MOSA, and Launched Effects (LE) and enable timely decisions to accelerate capabilities, transition of S&T technologies. The Army's Experimental Demonstration Gateway Event (EDGE) and Project Convergence (PC) activities will garner early user feedback informing developmental efforts.			
FY 2024 Plans: FY2024 will build upon prior demonstrations, providing for early opportunities to validate technologies and requirement concepts and to off-ramp, maintain, or accelerate investments, to enable modernization at the speed of relevance.			
FY 2024 to FY 2025 Increase/Decrease Statement: Army discontinued FARA efforts beyond FY 2024.			
Accomplishments/Planned Programs Subtotals	18.346	29.151	-

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

Line Item	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
• F12: Future Attack Reconnaissance Aircraft	430.172	428.865	0.000	-	0.000	-	-	-	-	0.000	859.037

Remarks

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) CK7 / FARA Ecosystem

D. Acquisition Strategy

The FVL CFT utilized several U.S. Army Combat Capability Development Centers, Other Government Agencies, Test Centers, Project Management Offices and their respective procurement and scope execution instruments to execute persistent experimentation events to assess the viability of technology and inform the Ecosystems requirements and concepts. The FVL CFT and Program Executive Office Aviation (PEO AVN) conducted Technology Scouting to analyze the most viable Industry and other Government partners for specific FARA Ecosystem use cases, conducted market assessments, created technology roadmaps, and developed recommendations for future experimentation or rapid fielding and procurement investments. The conduct of persistent experimentation events, such as the FVL EDGE series, generated substantial quantifiable cost avoidance to the Government annually by stimulating tens of millions of dollars in Independent Research and Development (IRAD) investments from Industry, and offsetting tens of millions of dollars of Test and Evaluation costs for existing developmental and S&T programs, other Government agencies, and international partners.

The Army discontinued FARA program efforts beyond FY 2024.

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) CK7 / FARA Ecosystem
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Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	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
FVL Acquisition Informed by Risk and Technology Opportun...	FVL Acquisition Informed by Risk and Technology Opportunities																											
FY23 Experimental Demonstration Gateway Event	1 EDGE Demo																											
FY24 Project Convergence Capstone 4					2 PC Demo																							
FY24 Experimental Demonstration Gateway Event									3 EDGE Demo																			

Note
Experimentation and demonstration events in the CK7 schedule profile are aligned to the phasing in the AFC Test Synchronization Matrix.

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) CK7 / FARA Ecosystem
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FVL Acquisition Informed by Risk and Technology Opportunities	2	2022	4	2024
FY22 Experimental Demonstration Gateway Event	3	2022	3	2022
FY22 Project Convergence	4	2022	4	2022
FY23 Experimental Demonstration Gateway Event	3	2023	3	2023
FY24 Project Convergence Capstone 4	2	2024	2	2024
FY24 Experimental Demonstration Gateway Event	4	2024	4	2024

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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 0603801A / Aviation - Adv Dev				Project (Number/Name) CS7 / FLRAA MTA			
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
CS7: FLRAA MTA	-	462.255	16.536	6.591	-	6.591	-	-	-	-	0.000	485.382
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Army's use of Middle Tier of Acquisition (MTA) authorities for Future Long Range Assault Aircraft (FLRAA) transitions work completed during the Competitive Demonstration and Risk Reduction effort to support three priority efforts: (1) completion of the rapid prototyping for the delta Preliminary Design Review; (2) deliver two virtual prototypes including a vehicle dynamic model and portable crew station; and (3) support the requirements for Milestone B certification under 10 U.S.C. 2366b.

Funds will provide for the completion of the FLRAA weapon system preliminary design to include development of a digital backbone architecture to meet modular open system approach (MOSA) objectives. The development and delivery of two virtual prototypes will directly support early user involvement at the Air Maneuver Battle Lab (AMBL), the Combat Aviation Brigade Architecture Integration Lab (CABAIL), and also support system and subsystem analysis and testing.

The total cost of the FLRAA Middle Tier of Acquisition effort under this Project is estimated to be \$485.382 million RDT&E from FY23 to FY25. The remainder of the FLRAA program is fully funded across the Future Years Defense Program.

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

	FY 2023	FY 2024	FY 2025
Title: Middle Tier of Acquisition (MTA) Preliminary Design and Virtual Prototype Rapid Prototyping	427.255	16.536	6.591
Description: The FLRAA MTA program supports finalization of the preliminary design through execution of the delta Preliminary Design Review (dPDR) to complete any outstanding tasks required to ensure any deficiencies identified during the Competitive Demonstration and Risk Reduction (CD&RR) effort are addressed, preliminary designs are sufficiently documented, and all mission system solutions are identified and incorporated into the design. Additionally, MTA efforts support delivery of two (2) FLRAA portable crew stations (FPC) and a Vehicle Dynamics Model (VDM) completing virtual prototype design activities			
FY 2024 Plans: Completes design updates resulting in a successful delta Preliminary Design Review, continues design updates to the FLRAA Virtual Prototypes, and delivers the FLRAA Portable Crew Station (FPC) Trainers.			
FY 2025 Plans: Completes update and final delivery of the FLRAA Virtual Prototypes.			
FY 2024 to FY 2025 Increase/Decrease Statement: Funding decreased from FY24 to FY25 due to reduced scope from virtual prototype delivery to final updates and task closeout.			
Accomplishments/Planned Programs Subtotals	427.255	16.536	6.591

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) CS7 / FLRAA MTA
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	FY 2023	FY 2024
Congressional Add: FLRAA Program Increase	23.000	-
<i>FY 2023 Accomplishments:</i> Executed additional scope on the FLRAA Weapon System Development contract to include incorporating design provisions for MEDEVAC, Air Launched Effects data links, Aviation Mission Common Server, and Heads Up display capabilities. Further refine and mature Government Furnished Equipment and associated models to support the FLRAA MTA program execution.		
Congressional Add: Modular Communication, Command, and Control Suite	12.000	-
<i>FY 2023 Accomplishments:</i> Supported the maturation of technologies and models supporting modular communication, command, and control mounted form factor prototyping efforts.		
Congressional Adds Subtotals	35.000	-

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

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2025</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u>	<u>Total Cost</u>
			<u>Base</u>	<u>OCO</u>	<u>Total</u>					<u>Complete</u>	
• B47: Future Vertical Lift	202.522	1,027.608	0.000	-	0.000	-	-	-	-	0.000	1,230.130

Remarks

The FLRAA MTA was initiated under PE 0603801A/B47 - Future Vertical Lift in FY 2022 and was restructured into the unique Project CS7 for FY 2023 through the remainder of the MTA Program.

D. Acquisition Strategy

The Future Long Range Assault Aircraft (FLRAA), Future Vertical Lift (FVL) Capability Set Three (CS3) is the program that will develop the next generation of affordable vertical lift tactical assault / utility aircraft for the Army.

The FLRAA MTA program supports finalization of the preliminary design through execution of the delta Preliminary Design Review (dPDR) to complete any outstanding tasks required to ensure any deficiencies identified during the Competitive Demonstration and Risk Reduction (CD&RR) effort are addressed, preliminary designs are sufficiently documented, and all mission system solutions are identified and incorporated into the design. Additionally, FLRAA MTA efforts support the design and development of FLRAA virtual prototypes consisting of the FLRAA Vehicle Dynamic Model (VDM) and FLRAA Portable Crew Stations (FPC). The VDM will be used with an FPC prototype simulator and integrated with the CABAIL and AMBL capabilities. The virtual prototypes will be capable of performing hardware in the loop test after successful integration of the Aircraft software. The virtual prototypes will help conduct early tactics, techniques, and procedures (TTPs) experimentation before user evaluations and participate in Army warfighting exercises to develop multi-domain operation doctrine and concepts.

The follow-on physical weapons system development will leverage the outcomes of the FLRAA MTA program to provide the Joint Force with a capability that possesses transformational increases in speed, range, and maneuverability to allow the Army to retain the freedom of maneuver and win in Multi Domain Operations (MDO). This

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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 0603801A / <i>Aviation - Adv Dev</i>	Project (Number/Name) CS7 / <i>FLRAA MTA</i>
<p>medium lift tactical assault and medical evacuation (MEDEVAC) aircraft will augment the Army's H-60 Black Hawk utility helicopter fleet to provide Combat Aviation Brigades with long-range, high-speed options that are survivable in contested environments.</p> <p>The Army is executing a hybrid acquisition approach to design, develop, and deliver the FLRAA weapons system. In order to support the Army's modernization strategy and concept for multi-domain operations, the FLRAA program will deliver the first aircraft in FY 2030. This hybrid approach builds on the JMR-TD efforts (started in 2013), the Army's AoA (completed in July 2019), and multiple ongoing risk mitigation efforts.</p> <p>The Army's risk mitigation activities ahead of the MTA and Weapon System Development include: (1) additional conceptual design and flight envelope expansion tasks on the existing JMR-TD Technology Investment Agreements (TIA); (2) MOSA, FVL Architecture Collaboration Working Group (with participation from industry and academia) to establish a common architecture requirements framework for FLRAA system development; and (3) a CD&RR effort, awarded to two Project Agreement Holders (PAH), using OTA agreements to provide substantiating technical documentation on weapon system designs, requirements decompositions, trade-studies, and requirements feasibility for the FLRAA PoR. These risk reduction activities maintain industry engagement and momentum from the JMR-TD program, inform capabilities and system requirements, and provide initial trade assessments for the final operational requirements. They also inform the final acquisition strategy, mature the Government's architecture requirements development, and transition appropriate Science and Technology investments to the PoR. CD&RR Phase II incorporated efforts leading to preliminary design using a digital engineering environment. The Army competitively awarded the Weapon System Development contract in December 2022 to one vendor with a hybrid acquisition approach.</p> <p>This approach includes the opportunity to employ new DoDI 5000.80 (Operation of the Middle Tier of Acquisition (MTA)) authorities along with a tailored DoDI 5000.85 (Major Capability Acquisition) acquisition strategy. Finally, the Army is also addressing life cycle affordability, sustainability, and maintainability early in the program. The FLRAA program is employing multiple strategies including should cost reduction opportunities, use of a digital thread from design through sustainment, and stochastic sustainment modeling. FLRAA is also one of the Army's pilot programs for digital engineering and life cycle intellectual property and data strategy development.</p>		

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) CS7 / FLRAA MTA
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Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	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
FLRAA delta Preliminary Design (MTA)	██████████ <i>Preliminary Design</i>				██████████																							
FLRAA Virtual Prototyping (MTA)	██████████████████████ <i>Virtual Prototyping</i>				██████████																							
FLRAA Virtual Prototype Delivery 1	██████████				██████████				▲ 1 FPC Delivery 1																			
FLRAA Virtual Prototype Delivery 2	██████████				██████████				▲ 2 FPC Delivery 2																			

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) CS7 / FLRAA MTA
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FLRAA delta Preliminary Design (MTA)	1	2023	2	2024
FLRAA Virtual Prototyping (MTA)	1	2023	1	2025
FLRAA Virtual Prototype Delivery 1	4	2024	4	2024
FLRAA Virtual Prototype Delivery 2	4	2024	4	2024

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) F12 / Future Attack Reconnaissance Aircraft
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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
F12: Future Attack Reconnaissance Aircraft	-	430.172	428.865	-	-	-	-	-	-	-	0.000	859.037
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Capability Set 1 (CS1) Future Attack Reconnaissance Aircraft (FARA) was part of the Future Vertical Lift (FVL) Family of Systems. FARA was intended to restore crewed attack/reconnaissance dominance with sweeping improvements in lethality, agility, reach, survivability, and sustainability. FARA was intended to mitigate enemy long-range capabilities to allow joint force commanders to fight and operate from relative sanctuary while creating lethal effects from outside enemy sensor/weapons range.

Funding supported the development and integration of Government Furnished Equipment (GFE). FARA would have been powered by Improved Turbine Engine (ITE), with maximum cruise airspeed greater than or equal to 180 KTAS, an integrated Area Weapons System (AWS), Modular Effects Launcher (MEL) for Launched Effects (LE) and Long Range Precision Munition (LRPM), and Modular Open System Approach (MOSA) digital backbone.

The FVL Capability Set 1 Initial Capabilities Requirements Document (ICRD) was approved in July 2018 under the name Future Attack Reconnaissance Aircraft (FARA). An Abbreviated Capability Development Document (A-CDD) was approved on 9 Apr 2021 and updated on 15 Aug 2022. The Acquisition Approach and Determination and Findings for Other Transaction Authority for Prototyping agreements were approved on 1 February 2019 by the Acting Under Secretary of Defense (Acquisition and Sustainment) to execute a Competitive Prototyping (CP) effort.

Prior to the Army's decision to discontinue FARA program funding beyond FY 2024, FARA was conducting a Competitive Prototyping (CP) design and demonstration in parallel with the Weapons System (WS) Preliminary Design to inform a Milestone B decision.

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

	FY 2023	FY 2024	FY 2025
Title: Future Attack Reconnaissance Aircraft	420.172	428.865	-
Description: FARA was chartered to design, build, test, and field the next-generation reconnaissance aircraft. Prior to the Army's decision to discontinue FARA program funding beyond FY 2024, FARA was conducting parallel prototyping and preliminary design activities to inform a Milestone B and source selection decision.			
FY 2024 Plans: Continues support of hardware (HW) and software (SW) development, component/subsystem Assembly, Integration and Test (AI&T), SW and HW In-the-Loop efforts, GFE planning/development and MOSA development in preparation for final AI&T of the CP aircraft and conduct CP Flight Demonstration. Continues Increment #1 Weapons System preliminary development and design (air vehicle and mission systems development) culminating in- a Preliminary Design Review (PDR) in FY 2025. Supports			

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) F12 / Future Attack Reconnaissance Aircraft
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
<p>the second and final Open Systems Verification Demonstrations that will verify each vendors compliance with MOSA standards. Supports the flight testing efforts associated with the FARA CP aircraft. Continues support of documentation requirements for the Program of Record (POR). Supports release of the final EMD RFP and initiates the SSEB review process for EMD contract award and down selection to one vendor.</p> <p>Supports early program analyses of life cycle affordability, sustainability, and maintainability. The FARA program is employing multiple strategies including should cost reduction opportunities, use of a digital thread from design through sustainment, and stochastic sustainment modeling.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: The Army has discontinued the FARA program beyond FY 2024.</p>			
Accomplishments/Planned Programs Subtotals	420.172	428.865	-

	FY 2023	FY 2024
Congressional Add: FARA All Electrical Flight Controls	10.000	-
FY 2023 Accomplishments: Support analysis of Flight Control Systems for FARA Air Vehicle / Weapon System Preliminary Design.		
Congressional Adds Subtotals	10.000	-

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

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2025</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u>	<u>Total Cost</u>
			<u>Base</u>	<u>OCO</u>	<u>Total</u>					<u>Complete</u>	
• B47: Future Vertical Lift	202.522	1,027.608	0.000	-	0.000	-	-	-	-	0.000	1,230.130
• CK7: FARA Ecosystem	18.346	29.151	0.000	-	0.000	-	-	-	-	0.000	47.497

Remarks

D. Acquisition Strategy

The Future Attack Reconnaissance Aircraft (FARA) program was executing a streamlined acquisition approach leveraging modern tools, processes, and industry innovation. FARA was born digital, leveraging an Open Systems Approach and Model-Based Systems Engineering from its inception, and demonstrated early cost and schedule efficiencies through Open Systems Verification Demonstrations (OSVD).

Prior to the Army's decision to discontinue FARA program funding beyond FY 2024, FARA was conducting a Competitive Prototyping (CP) design and demonstration in parallel with the Weapons System (WS) Preliminary Design to inform a Milestone B (MS B) decision. The Army's two-phased CP effort utilized Other Transaction Authority for Prototyping (OTAP).

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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 0603801A / <i>Aviation - Adv Dev</i>	Project (Number/Name) F12 / <i>Future Attack Reconnaissance Aircraft</i>

The initial design and risk reduction phase was awarded in April 2019 to five industry performers. Phase two began in March 2020 with two of the five industry performers selected to proceed to final detailed design and the development, integration and test of a flyable prototype air vehicle.

The FARA program plans to conduct engine ground runs, an OSVD, continued test and evaluation of the Modular Effects Launcher, experimentation and demonstration with relevant crewed and uncrewed technologies, technology transfer to other modernization efforts, and program close-out activities in FY 2024.

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) F12 / Future Attack Reconnaissance Aircraft
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Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
PM FARA System Engineering and Program Management	Various	Various : Redstone Arsenal, AL	39.222	22.023	Mar 2023	21.443	Mar 2023	-		-		-	0.000	82.688	-
Subtotal			39.222	22.023		21.443		-		-		-	0.000	82.688	N/A

Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
Competitive Prototype (CP) & Weapons System Preliminary Design - Raider X	C/CS	Sikorsky Aircraft Corporation : Stratford, CT	670.378	192.700	Oct 2022	176.121	Oct 2023	-		-		-	0.000	1,039.199	-
Competitive Prototype (CP) & Weapons System Preliminary Design - 360 Invictus	C/CS	Bell Textron, Inc. : Fort Worth, TX	501.835	135.385	Oct 2022	139.425	Oct 2022	-		-		-	0.000	776.645	-
GFE - Improved Turbine Engine Development	C/CPIF	PM ATE : Redstone Arsenal	43.410	9.713	Dec 2022	7.466	Dec 2023	-		-		-	0.000	60.589	-
GFE - Modular Effects Launcher Development	Various	CCDC AvMC : Redstone Arsenal, AL	39.147	11.620	Dec 2022	17.182	Dec 2022	-		-		-	0.000	67.949	-
GFE - Area Weapon System Development	Various	CCDC AC : Picatinny Arsenal, NJ	26.087	2.256	Dec 2022	3.647	Dec 2023	-		-		-	0.000	31.990	-
Mission Systems - Integration and Support	Various	Various : Various	6.788	5.979	Dec 2022	14.334		-		-		-	0.000	27.101	-
Modular Open System Approach Development	Various	Various : Redstone Arsenal, AL	65.861	13.474	Dec 2022	13.165	Dec 2023	-		-		-	0.000	92.500	-
Subtotal			1,353.506	371.127		371.340		-		-		-	0.000	2,095.973	N/A

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) F12 / Future Attack Reconnaissance Aircraft
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Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
Engineering Services Support - CP Air Vehicle Dev & Test	MIPR	Redstone Test Center, CCDC-AvMC: : Redstone Arsenal, AL	12.528	4.873	Dec 2022	7.251	Dec 2023	-		-		-	0.000	24.652	-
Engineering Services Support - CP Airworthiness	MIPR	CCDC-AvMC-SRD: : Redstone Arsenal, AL	36.656	18.388	Mar 2023	19.535	Mar 2024	-		-		-	0.000	74.579	-
Simulation, Studies, and Analysis	TBD	Various : Various	15.949	3.761	Mar 2023	9.296	Mar 2024	-		-		-	0.000	29.006	-
FARA All Electrical Flight Controls	TBD	Various : Various	5.000	10.000		-		-		-		-	0.000	15.000	-
Subtotal			70.133	37.022		36.082		-		-		-	0.000	143.237	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		1,462.861	430.172	428.865	-	-	0.000	2,321.898	N/A

Remarks
 Under the Other Transaction Authorities for Prototyping (OTAP), five incrementally funded agreements were awarded in April 2019, which have payments based on performance milestones. Funding will be incrementally added to the existing awards by modification as negotiated with each performer. In March 2020, two of the five performers were selected for continued execution through final design, prototype build, and flight testing; the other three performers were issued a stop work order and ceased to receive additional funding. In FY 2023, the OTAP agreements were modified to incorporate additional scope for Weapons System Preliminary Design maturation efforts and the performance period was extended to support a Milestone B decision.

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) F12 / Future Attack Reconnaissance Aircraft

Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	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
OTAP CP Build (Title 10 USC §4022 (formerly 2371b))	Competitive Prototype Build and Ground Runs																											
Open System Verification Demonstration (OSVD) #1					1 OSVD #1																							
FARA Program Discontinuation Decision					2 FARA Program Discontinuation Decision																							
OSVD #2					3 OSVD #2																							

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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 0603801A / Aviation - Adv Dev	Project (Number/Name) F12 / Future Attack Reconnaissance Aircraft

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
OTAP Competitive Prototype (CP) Design (Title 10 USC §4022 (formerly 2371b))	3	2019	2	2020
OTAP CP - Down Select to 2 Performers (Title 10 USC §4022 (formerly 2371b))	2	2020	2	2020
OTAP CP Build (Title 10 USC §4022 (formerly 2371b))	3	2020	4	2024
Open System Verification Demonstration (OSVD) #1	4	2023	4	2023
FARA Program Discontinuation Decision	2	2024	2	2024
OSVD #2	4	2024	4	2024