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 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0605205A *I Small Unmanned Aerial Vehicle (SUAV) (6.5)*							
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	-	6.292	31.284	37.876	-	37.876	34.788	13.733	13.771	13.908	Continuing	Continuing
BR7: *Small Unmanned Aircraft System (6.5)*	-	6.292	31.284	37.876	-	37.876	34.788	13.733	13.771	13.908	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Rucksack Portable Uncrewed Aircraft System (RPUAS) Family of Small Uncrewed Aircraft System (FoSUAS) requirements are transitioning to the Joint Small Uncrewed Aircraft System sUAS Capability Development Document (J-sUAS CDD) to solve current and emergent operational gaps. These systems provide battalion and below ground maneuver elements with critical situational awareness and enhanced force protection. The system provides an organic and responsive reconnaissance and targeting capability with real-time Full Motion Video and sensor data which is also available to inter-operable digital data linked systems, such as the One System Remote Video Terminal and manned platforms. The RPUAS FoSUAS includes the Short Range Reconnaissance (SRR), the Medium Range Reconnaissance (MRR), and the Long Range Reconnaissance (LRR). Each system includes aircraft, ground control equipment, handheld ground control station and Robotics Autonomous Command and Control (RAC2) software.

The Short-Range Reconnaissance (SRR) capability utilizes RQ-28A SRR for first generation fielding which provides platoons 30 minute flight endurance, 3 km operational range, an EO/IR Payload, and sub 3 lb target weight. SRR is currently prototyping the second generation air vehicle FY2022-FY2025 which offers modular payloads, day & night obstacle avoidance, target recognition & automated following, and common software which will be used across all Group I and II UAS.

Long Range Reconnaissance (LRR) System will provide organic maneuver battalions an uncrewed air vehicle designed to support Reconnaissance, Surveillance, and Target Acquisition (RSTA) efforts. The system will have an aircraft weight of less than 55 lbs, a range of 30-60 km and endurance of 5-8 hours. System will include Assured Positioning, Navigation and Timing (APNT), data links to optimize the modular mission payloads (Electro-Optical/Infra-Red (EO/IR), laser targeting/designating) and kinetic architectures in a contested environment.

The Joint Tactical Autonomous Aerial Resupply System (JTAARS) is an autonomous aerial cargo delivery system, organic to the maneuver commander, that will provide options for rapid and agile sustainment of highly mobile tactical combat forces, operating in a widely dispersed manner in the tactical support and close areas. JTAARS will enable maneuver by reducing the tactical force's dependence on ground lines of communication and sustainment, reducing threats to manned convoys and manned aerial systems, lightening Soldier load, and shrinking the supply chain. JTAARS will provide a lift capability of 125 lbs over 13 km one way (26 km round trip).

The total cost of the SRR Middle Tier of Acquisition effort is $28.2 million of RDTE from FY2020 to FY2025. The SRR program is fully funded across the Future Years Defense Program.

Justification: FY2025 RDTE Base funding of $37.876 million for SRR, LRR, and JTAARS.

SRR Tranche 2 funding will be used for system integration, testing and evaluation.

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 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605205A *I Small Unmanned Aerial Vehicle (SUAV) (6.5)*

LRR funding will be used for system development and test of critical components such as APNT, Type 1 encryption, and ECCM survivability. Funding will also be utilized for integration of modular mission payloads (communication relay, electronic warfare payloads and lethal munitions payloads) and Uncrewed Vehicle Control (UVC) software.

FY2025 is the first year of allocation of BA 5 funding for JTAARS. JTAARS funding in FY2025 to develop technical data, finalization of assessment tasks, evaluation and resolution of technology gaps, UVC software integration, range and battery power improvements, and C5ISR/EW Modular Open Suite of Standards (CMOSS) compliance.

B. Program Change Summary ($ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	6.530	31.284	24.542	-	24.542
Current President's Budget	6.292	31.284	37.876	-	37.876
Total Adjustments	-0.238	0.000	13.334	-	13.334
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.238	-			
• Adjustments to Budget Years	-	-	13.334	-	13.334

Change Summary Explanation

The increased funding in the amount of $13.334 million supports planned JTAARS demonstration and experimentation ($13.285 million) and revised economic assumptions for SRR ($0.005 million) and LRR ($0.044 million).

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army											Date: March 2024	
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605205A / *Small Unmanned Aerial Vehicle (SUAV) (6.5)*				Project (Number/Name) BR7 / *Small Unmanned Aircraft System (6.5)*			
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**
BR7: *Small Unmanned Aircraft System (6.5)*	-	6.292	31.284	37.876	-	37.876	34.788	13.733	13.771	13.908	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Rucksack Portable Uncrewed Aircraft System (RPUAS) Family of Small Uncrewed Aircraft System (FoSUAS) requirements are transitioning to the Joint Small Uncrewed Aircraft System sUAS Capability Development Document (J-sUAS CDD) to solve current and emergent operational gaps. These systems provide battalion and below ground maneuver elements with critical situational awareness and enhanced force protection. The system provides an organic and responsive reconnaissance and targeting capability with real-time Full Motion Video and sensor data which is also available to inter-operable digital data linked systems, such as the One System Remote Video Terminal and manned platforms. The RPUAS FoSUAS includes the Short Range Reconnaissance (SRR), the Medium Range Reconnaissance (MRR), and the Long Range Reconnaissance (LRR). Each system includes aircraft, ground control equipment, handheld ground control station and Robotics Autonomous Command and Control (RAC2) software.

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The Joint Tactical Autonomous Aerial Resupply System (JTAARS) is an autonomous aerial cargo delivery system, organic to the maneuver commander, that will provide options for rapid and agile sustainment of highly mobile tactical combat forces, operating in a widely dispersed manner in the tactical support and close areas. JTAARS will enable maneuver by reducing the tactical force's dependence on ground lines of communication and sustainment, reducing threats to manned convoys and manned aerial systems, lightening Soldier load, and shrinking the supply chain. JTAARS will provide a lift capability of 125 lbs over 13 km one way (26 km round trip).

The total cost of the SRR Middle Tier of Acquisition effort is $28.2 million of RDTE from FY2020 to FY2025. The SRR program is fully funded across the Future Years Defense Program.

Justification: FY2025 RDTE Base funding of $37.876 million for SRR, LRR, and JTAARS.

SRR Tranche 2 funding will be used for system integration, testing and evaluation.

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0605205A / *Small Unmanned Aerial Vehicle (SUAV) (6.5)*	**Project (Number/Name)** BR7 / *Small Unmanned Aircraft System (6.5)*

LRR funding will be used for system development and test of critical components such as APNT, Type 1 encryption, and ECCM survivability. Funding will also be utilized for integration of modular mission payloads (communication relay, electronic warfare payloads and lethal munitions payloads) and Uncrewed Vehicle Control (UVC) software.

FY2025 is the first year of allocation of BA 5 funding for JTAARS. JTAARS funding in FY2025 to develop technical data, finalization of assessment tasks, evaluation and resolution of technology gaps, UVC software integration, range and battery power improvements, and C5ISR/EW Modular Open Suite of Standards (CMOSS) compliance.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: Systems Engineering Program Management ***Description:*** Systems Engineering Program Management support for SRR development and demonstration efforts. ***FY 2024 Plans:*** Systems Engineering and Program Management support for SRR and LRR development and demonstration efforts. ***FY 2025 Plans:*** Systems Engineering and Program Management support for the completion of SRR Tranche 2 demonstration and testing, continuation of LRR demonstration and testing, and the initiation of JTAARS demonstration and testing efforts. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase is due to addition of JTAARS and increasing LRR requirements.	0.307	1.685	3.856
Title: SRR System Development and Integration ***Description:*** SRR Development Engineering efforts. ***FY 2024 Plans:*** Development and system integration of SRR air vehicle. ***FY 2025 Plans:*** Completion of the development and system integration of SRR air vehicle. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease is due to the completion of the SRR development and system integration effort in FY25.	3.720	5.355	0.439
Title: LRR System Development and Integration ***Description:*** LRR Development Engineering efforts.	-	19.545	20.330

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0605205A / *Small Unmanned Aerial Vehicle (SUAV) (6.5)*	**Project (Number/Name)** BR7 / *Small Unmanned Aircraft System (6.5)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
FY 2024 Plans: Development and system integration of LRR air vehicle. ***FY 2025 Plans:*** Development and system integration of LRR air vehicle. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase due to planned air vehicle prototype integration.			
Title: JTAARS Demonstration and Experimentation ***Description:*** System procurement, ConOp validation, Technical data development. ***FY 2025 Plans:*** Develop technical data, finalization of assessment tasks, evaluation and resolution of technology gaps, UVC software integration, range and battery power improvements, and C5ISR/EW Modular Open Suite of Standards (CMOSS) compliance. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase is due to effort supporting JTAARS Demonstration and Experimentation.	-	-	12.752
Title: SRR Developmental Test and Evaluation ***Description:*** Test and Evaluation efforts for SRR System Development. ***FY 2024 Plans:*** Efforts to conduct testing and evaluation of mature SRR prototype system. ***FY 2025 Plans:*** Completion of testing and evaluation of mature SRR prototype system. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease is due to the completion of the testing of the mature SRR prototype system.	2.265	3.399	0.371
Title: LRR Development Test and Evaluation ***Description:*** Test and Evaluation efforts for LRR System Development. ***FY 2024 Plans:*** Efforts to conduct testing and evaluation of LRR prototype system. ***FY 2025 Plans:***	-	1.300	0.128

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0605205A / *Small Unmanned Aerial Vehicle (SUAV) (6.5)*	**Project (Number/Name)** BR7 / *Small Unmanned Aircraft System (6.5)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Efforts to conduct testing and evaluation of LRR prototype system. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease due to completion of a majority of testing of prototypes.			
Accomplishments/Planned Programs Subtotals	6.292	31.284	37.876

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
• BR6: *Small Unmanned Aircraft System (6.4)*	1.373	5.144	1.800	-	1.800	1.803	1.822	1.843	1.861	0.000	15.646
• A12511: *SHORT RANGE RECONNAISSANCE*	6.725	20.769	69.573	-	69.573	20.591	20.575	20.533	20.739	Continuing	Continuing
• A12513: *LONG RANGE RECONNAISSANCE*	-	-	0.000	-	0.000	-	17.847	43.526	43.785	Continuing	Continuing

Remarks

D. Acquisition Strategy

The Short Range Reconnaissance utilizes Middle Tier Acquisition pathway for rapid prototyping. SRR Tranche 1 successfully transitioned to a Major Capability Acquisition pathway at Production Decision. The SRR Tranche 2 is in rapid prototyping and is anticipated to follow Tranche 1 by off-ramping into a Full Rate Production decision in FY2025.

The Long Range Reconnaissance completed an Acquisition Shaping Panel in fourth quarter FY2023. Prototypes will be evaluated from up to 4 vendors in 2 phases that include Soldier Touch Points and Technical evaluations. The final selected system will then undergo Developmental Testing (DT) that will include Engineering Flight Tests, Radio/Antenna Characterization, follow on SW/HW DT and cyber testing.

The Joint Tactical Autonomous Aerial Resupply System (JTAARS) also completed an Acquisition Shaping Panel in fourth quarter FY2023 with direction from the Shaping Panel to conduct the FY2024 JTAARS assessment. The results of the demonstration will be briefed in FY2025 to determine prototyping or production.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605205A / *Small Unmanned Aerial Vehicle (SUAV) (6.5)*	Project (Number/Name) BR7 / *Small Unmanned Aircraft System (6.5)*	

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
System Engineering Program Management (SEPM)	Various	Various : Various	0.723	0.307	Oct 2022	1.685	Oct 2023	3.856	Oct 2024	-		3.856	Continuing	Continuing	Continuing
		Subtotal	0.723	0.307		1.685		3.856		-		3.856	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
SRR Development Engineering	Various	ACC Redstone : Redstone Arsenal	5.303	3.720	Jan 2023	5.355	Jan 2024	0.439	Jan 2025	-		0.439	Continuing	Continuing	Continuing
LRR Development Engineering	Various	ACC Redstone : Redstone Arsenal, AL	-	-		19.545	Feb 2024	20.330	Feb 2025	-		20.330	Continuing	Continuing	Continuing
JTAARS Demonstration and Experimentation	TBD	TBD : TBD	-	-		-		12.752	Feb 2025	-		12.752	Continuing	Continuing	Continuing
		Subtotal	5.303	3.720		24.900		33.521		-		33.521	Continuing	Continuing	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
SRR Test and Evaluation	Various	ACC Redstone : Redstone Arsenal	1.946	2.265	Aug 2023	3.399	Aug 2024	0.371	Aug 2025	-		0.371	Continuing	Continuing	Continuing
LRR Test and Evaluation	Various	ACC Redstone : Redstone Arsenal, AL	-	-		1.300	May 2024	0.128	May 2025	-		0.128	Continuing	Continuing	Continuing
		Subtotal	1.946	2.265		4.699		0.499		-		0.499	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army			Date: March 2024
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605205A / *Small Unmanned Aerial Vehicle (SUAV) (6.5)*	Project (Number/Name) BR7 / *Small Unmanned Aircraft System (6.5)*	

	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	7.972	6.292		31.284		37.876		-		37.876	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0605205A / *Small Unmanned Aerial Vehicle (SUAV) (6.5)*	**Project (Number/Name)** BR7 / *Small Unmanned Aircraft System (6.5)*

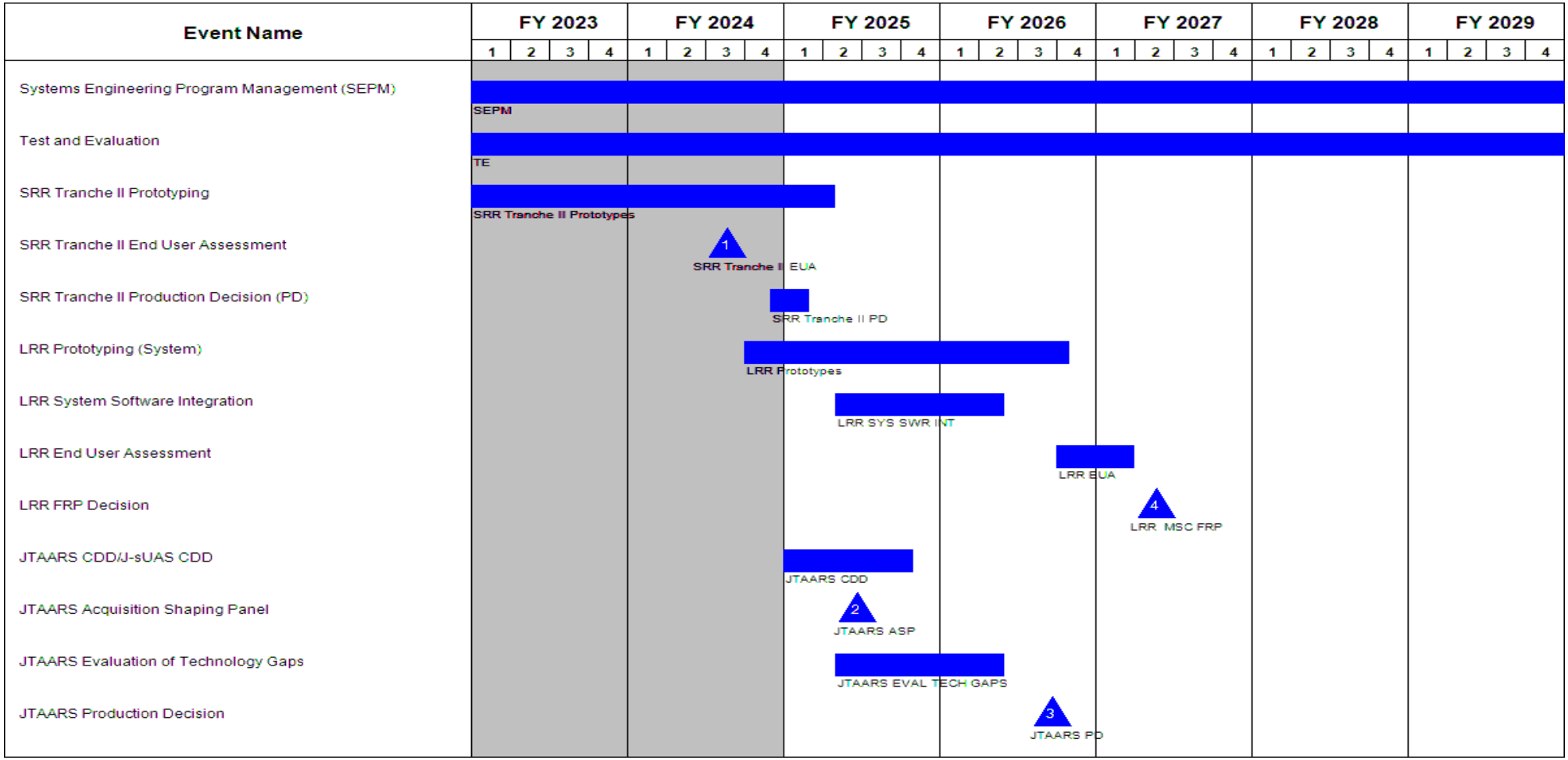

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0605205A / *Small Unmanned Aerial Vehicle (SUAV) (6.5)*	**Project (Number/Name)** BR7 / *Small Unmanned Aircraft System (6.5)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Systems Engineering Program Management (SEPM)	2	2018	4	2030
Test and Evaluation	4	2018	4	2030
SRR Tranche I End User Assessment	4	2020	4	2020
SRR Tranche I Production Decision (PD)	1	2022	1	2022
SRR Tranche II Prototype OTA Award	2	2022	2	2022
SRR Tranche II Prototyping	2	2022	2	2025
SRR Tranche II End User Assessment	3	2024	3	2024
SRR Tranche II Production Decision (PD)	4	2024	1	2025
LRR Prototyping (System)	4	2024	4	2026
LRR System Software Integration	2	2025	2	2026
LRR End User Assessment	4	2026	1	2027
LRR FRP Decision	2	2027	2	2027
JTAARS CDD/J-sUAS CDD	1	2025	4	2025
JTAARS Acquisition Shaping Panel	2	2025	2	2025
JTAARS Evaluation of Technology Gaps	2	2025	2	2026
JTAARS Production Decision	3	2026	3	2026