Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Army											Date: April 2022	
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 0604101A *I Small Unmanned Aerial Vehicle (SUAV) (6.4)*							
COST ($ in Millions)	**Prior Years**	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**Cost To Complete**	**Total Cost**
Total Program Element	-	1.328	0.926	1.425	-	1.425	1.801	1.832	1.833	1.851	Continuing	Continuing
BR6: *Small Unmanned Aircraft System (6.4)*	-	1.328	0.926	1.425	-	1.425	1.801	1.832	1.833	1.851	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Rucksack Portable Unmanned Aircraft System (RPUAS) Family of Small Unmanned Aircraft System (FoSUAS) provides battalion and below ground maneuver elements with critical situational awareness and enhanced force protection. The system provides the small unit commander an organic and responsive reconnaissance and targeting capability with real-time Full Motion Video and sensor data. Other compatible receivers, such as the One System Remote Video Terminal and appropriately equipped manned platforms may also receive the FoSUAS products.

The RPUAS FoSUAS provides the battalion and below ground maneuver elements with an organic, on-demand, asset to develop situational awareness, enhance force protection, and secure routes, points, and areas. The system provides the small unit commander an organic and responsive reconnaissance and targeting capability with real-time Full Motion Video and sensor data. The RPUAS FoSUAS includes a combination of three separate hand-launched mission specific configurable aircraft that do not require an improved launch/recovery. The three separate mission specific configurable Unmanned Aircraft (UA) are the Short Range Reconnaissance (SRR), the Medium Range Reconnaissance (MRR), and the Long Range Reconnaissance (LRR). In addition to the aircraft, the system contains ground control equipment, which includes an interoperable handheld ground control station (H-GCS) which incorporates the Tactical Open Government Owned Architecture (TOGA). The FoSUAS mission specific capability for MRR will utilize existing RQ-11 systems. The SRR capability will utilize the upcoming RQ-28A SRR. The LRR capability is under development.

The total cost of the Short Range Reconnaissance (SRR) Middle Tier of Acquisition effort is $34.20 million of RDT&E on from FY20 to FY24. The remainder of the SRR program is fully funded across the Future Years Defense Program.

Justification: FY 2023 Research, Development, Test, and Evaluation (RDT&E) Base funding of $1.425 million to meet Capabilities Production Document (CPD) Increment II Block II related requirements. Specifically, to conduct advanced component development activities for SRR prototype systems in high fidelity and realistic operating environments.

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Army	Date: April 2022
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 0604101A *I Small Unmanned Aerial Vehicle (SUAV) (6.4)*

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	1.328	0.926	0.000	-	0.000
Current President's Budget	1.328	0.926	1.425	-	1.425
Total Adjustments	0.000	0.000	1.425	-	1.425
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	1.425	-	1.425

Change Summary Explanation

FY 2023 funding increase reflects the fact that the FY 2022 President's Budget request did not include out-year funding.

Exhibit R-2A, RDT&E Project Justification: PB 2023 Army			Date: April 2022
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604101A / *Small Unmanned Aerial Vehicle (SUAV) (6.4)*	Project (Number/Name) BR6 / *Small Unmanned Aircraft System (6.4)*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
BR6: *Small Unmanned Aircraft System (6.4)*	-	1.328	0.926	1.425	-	1.425	1.801	1.832	1.833	1.851	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Family of Small Unmanned Aircraft System (FoSUAS) provides battalion and below ground maneuver elements with critical situational awareness and enhanced force protection. The system provides the small unit commander an organic and responsive reconnaissance and targeting capability with real-time Full Motion Video and sensor data. Other compatible receivers, such as the One System Remote Video Terminal and appropriately equipped manned platforms may also receive the FoSUAS products.

The Rucksack Portable Unmanned Aircraft Systems (RPUAS) FoSUAS provides the battalion and below ground maneuver elements with an organic, on-demand, asset to develop situational awareness, enhance force protection, and secure routes, points, and areas. The system provides the small unit commander an organic and responsive reconnaissance and targeting capability with real-time Full Motion Video and sensor data. The RPUAS FoSUAS includes a combination of three separate hand-launched mission specific configurable aircraft that do not require an improved launch/recovery. The three separate mission specific configurable Unmanned Aircraft (UA) are the Short Range Reconnaissance (SRR), the Medium Range Reconnaissance (MRR), and the Long Range Reconnaissance (LRR). In addition to the aircraft, the system contains ground control equipment, which includes an interoperable handheld ground control station (H-GCS) which incorporates the Tactical Open Government Owned Architecture (TOGA). The FoSUAS mission specific capability for MRR will utilize existing RQ-11 systems. The SRR capability will utilize the upcoming RQ-28A SRR. The LRR capability is under development.

The total cost of the Short Range Reconnaissance (SRR) Middle Tier of Acquisition effort is $34.20 million of RDT&E on from FY20 to FY24. The remainder of the SRR program is fully funded across the Future Years Defense Program.

Justification: FY 2023 Research, Development, Test, and Evaluation (RDT&E) Base funding of $1.425 million to meet Capabilities Production Document (CPD) Increment II Block II related requirements. Specifically, to conduct advanced component development activities for SRR prototype systems in high fidelity and realistic operating environments.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Title: Component Development and Integration	0.542	0.400	0.616
Description: Engineering to develop and to integrate new, advanced components into SRR.			
FY 2022 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604101A / *Small Unmanned Aerial Vehicle (SUAV) (6.4)*	**Project (Number/Name)** BR6 / *Small Unmanned Aircraft System (6.4)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Advanced component development efforts for SRR. ***FY 2023 Plans:*** Advanced component development efforts for SRR. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase due to additional effort to complete integration with Tranche 2 SRR			
Title: System Engineering Program Management ***Description:*** System Engineering Program Management support during development and integration of components for SRR air vehicles. ***FY 2022 Plans:*** System Engineering and Program Management support of advanced component development activities for SRR. ***FY 2023 Plans:*** System Engineering and Program Management support of advanced component development activities for SRR. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase due to efforts to complete integration and testing of components for Tranche 2 SRR	0.136	0.069	0.106
Title: System Test and Evaluation ***Description:*** Testing to Evaluate components for the SRR air vehicle. ***FY 2022 Plans:*** Integration, test, and evaluation of advanced components for the SRR system. ***FY 2023 Plans:*** Integration, test, and evaluation of advanced components for the SRR system. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase due to evaluation efforts for components for Tranche 2 SRR.	0.650	0.423	0.703
Title: FY22 SIBR/STTR Transfer ***FY 2022 Plans:*** SIBR/STTR Transfer from the FY22 Enactment. ***FY 2022 to FY 2023 Increase/Decrease Statement:***	-	0.034	-

Exhibit R-2A, RDT&E Project Justification: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604101A / *Small Unmanned Aerial Vehicle (SUAV) (6.4)*	**Project (Number/Name)** BR6 / *Small Unmanned Aircraft System (6.4)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
SBIR/STTR amount in accordance with Title 15 USC 638.			
Accomplishments/Planned Programs Subtotals	1.328	0.926	1.425

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• BR7: *Small Unmanned Aircraft System (6.5)*	5.780	2.275	6.530	-	6.530	9.254	3.097	3.098	3.129	Continuing	Continuing
• A00010: *SMALL UNMANNED AIRCRAFT SYSTEM*	16.551	16.005	0.000	-	0.000	-	-	-	-	Continuing	Continuing
• A12511: *SHORT RANGE RECONNAISSANCE*	-	-	10.598	-	10.598	20.666	20.817	20.917	20.816	Continuing	Continuing

Remarks

D. Acquisition Strategy

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army			Date: April 2022
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604101A / *Small Unmanned Aerial Vehicle (SUAV) (6.4)*	Project (Number/Name) BR6 / *Small Unmanned Aircraft System (6.4)*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering Program Management	Various	Various : Various	-	0.136		0.069		0.106	Oct 2022	-		0.106	Continuing	Continuing	Continuing
SIBR/STTR Transfer	TBD	TBD : TBD	-	-		0.034	Apr 2022	-		-		-	0.000	0.034	-
		Subtotal	-	0.136		0.103		0.106		-		0.106	Continuing	Continuing	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Component development and Integration	Various	ACC Redstone : Redstone Arsenal	-	0.542	Jun 2021	0.400	Jun 2022	0.616	Feb 2023	-		0.616	Continuing	Continuing	Continuing
		Subtotal	-	0.542		0.400		0.616		-		0.616	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
System Test and Evaluation	Various	ACC Redstone : Redstone Arsenal	-	0.650	Aug 2021	0.423	Aug 2022	0.703	Aug 2023	-		0.703	Continuing	Continuing	Continuing
		Subtotal	-	0.650		0.423		0.703		-		0.703	Continuing	Continuing	N/A

	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	1.328		0.926		1.425		-		1.425	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604101A / *Small Unmanned Aerial Vehicle (SUAV) (6.4)*	**Project (Number/Name)** BR6 / *Small Unmanned Aircraft System (6.4)*

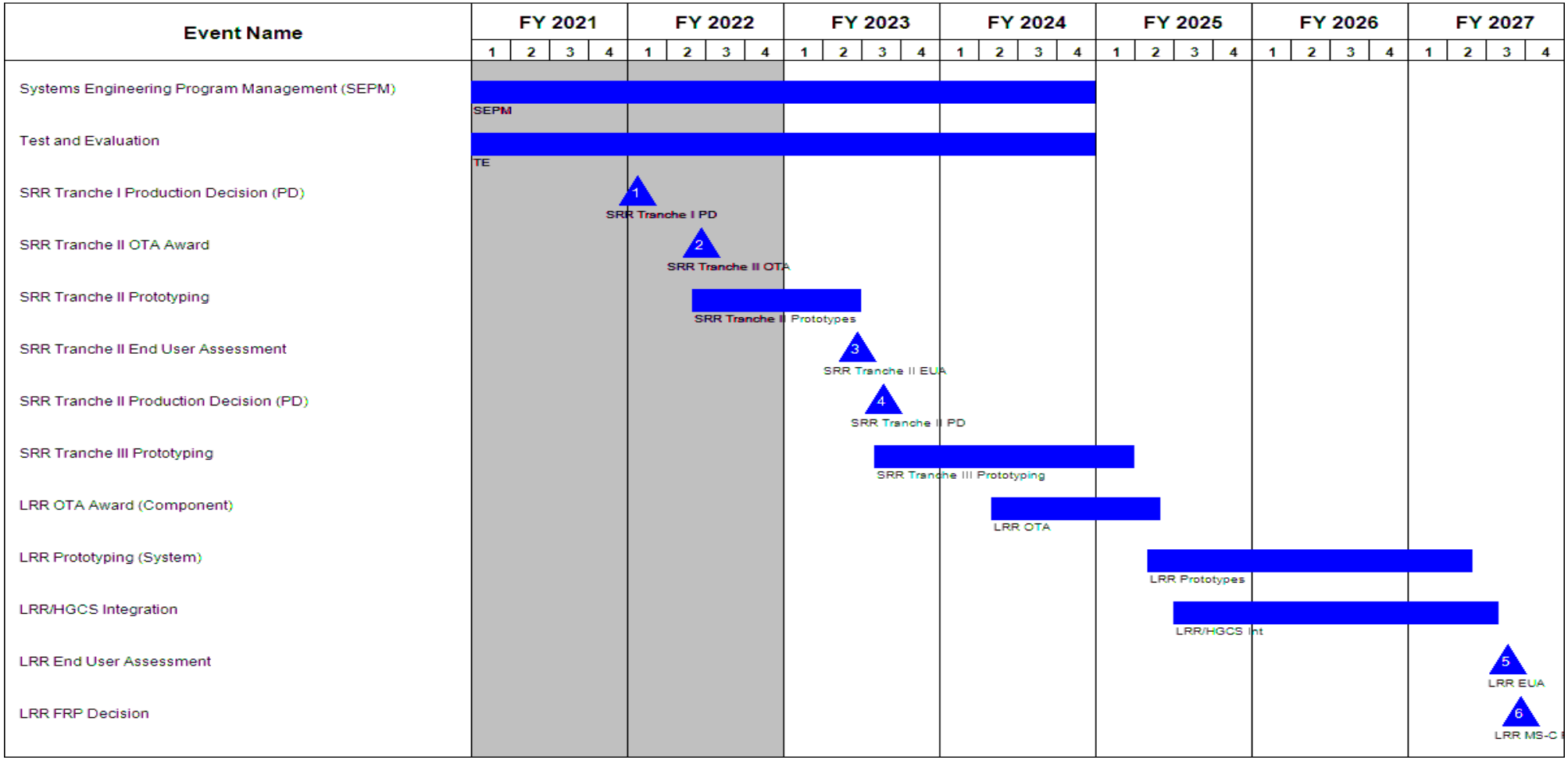

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604101A / *Small Unmanned Aerial Vehicle (SUAV) (6.4)*	**Project (Number/Name)** BR6 / *Small Unmanned Aircraft System (6.4)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Tactical Open Government Owned Architecture Development	4	2014	4	2014
Tactical Open Government Architecture Test Event 2	3	2015	3	2015
Systems Engineering Program Management (SEPM)	2	2018	4	2024
SRR Tranche I OTA Award	3	2019	3	2019
SRR Tranche I Prototyping	3	2018	4	2019
Test and Evaluation	4	2018	4	2024
SRR/HGCS Integration	2	2018	4	2020
SRR Tranche I End User Assessment	4	2020	4	2020
SRR Tranche I Production Decision (PD)	1	2022	1	2022
SRR Tranche II OTA Award	2	2022	2	2022
SRR Tranche II Prototyping	2	2022	2	2023
SRR Tranche II End User Assessment	2	2023	2	2023
SRR Tranche II Production Decision (PD)	3	2023	3	2023
SRR Tranche III Prototyping	3	2023	1	2025
LRR OTA Award (Component)	2	2024	2	2025
LRR Prototyping (System)	2	2025	2	2027
LRR/HGCS Integration	3	2025	3	2027
LRR End User Assessment	3	2027	3	2027
LRR FRP Decision	3	2027	3	2027

Note

Schedule events shown prior to Fiscal Year (FY) 2021 are for informational purposes only.