Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army											Date: March 2023	
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 2022**	**FY 2023**	**FY 2024 Base**	**FY 2024 OCO**	**FY 2024 Total**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**Cost To Complete**	**Total Cost**
Total Program Element	-	0.892	1.425	5.144	-	5.144	1.796	1.799	1.818	1.839	Continuing	Continuing
BR6: *Small Unmanned Aircraft System (6.4)*	-	0.892	1.425	5.144	-	5.144	1.796	1.799	1.818	1.839	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 utilizes the RQ-28A SRR for first generation and is prototyping the second generation air vehicle FY2022-FY2025. The LRR capability is in planning and will begin development in FY2024.

FY2024 will begin investigation of autonomous aerial resupply capabilities to provide organic logistics support to the Brigade Combat Teams.

The total cost of the Short Range Reconnaissance (SRR) Middle Tier of Acquisition effort is $30 million of RDT&E from FY20 to FY25. The SRR program is fully funded across the Future Years Defense Program.

Justification: FY 2024 Research, Development, Test, and Evaluation (RDT&E) Base funding of $5.144 million to meet Capabilities Production Document (CPD) Increment II Block II related requirements. Specifically, to conduct advanced component development activities for SRR and LRR prototype systems in high fidelity and realistic operating environments. FY 2024 is the first year of allocation of 6.4 funds for LRR and autonomous aerial resupply capability.

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army	Date: March 2023
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 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	0.926	1.425	1.801	-	1.801
Current President's Budget	0.892	1.425	5.144	-	5.144
Total Adjustments	-0.034	0.000	3.343	-	3.343
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.034	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	3.343	-	3.343

Change Summary Explanation

Increase in FY24 Current President's Budget over the Previous President's Budget is $3.343 million which has been added for the Short Range Reconnaissance (SRR), Long Range Reconnaissance (LRR) System and autonomous aerial resupply capability. These funds will investigate, develop and integrate payloads and hand controller for the LRR and begin investigation of autonomous aerial resupply capability options.

Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023
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 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
BR6: *Small Unmanned Aircraft System (6.4)*	-	0.892	1.425	5.144	-	5.144	1.796	1.799	1.818	1.839	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 utilizes the RQ-28A SRR for first generation and is prototyping the second generation air vehicle FY2022-FY2025. The LRR capability is in planning and will begin development in FY2024.

FY2024 will begin investigation of autonomous aerial resupply capabilities to provide organic logistics support to the Brigade Combat Teams.

The total cost of the Short Range Reconnaissance (SRR) Middle Tier of Acquisition effort is $30 million of RDT&E from FY20 to FY25. The SRR program is fully funded across the Future Years Defense Program.

Justification: FY 2024 Research, Development, Test, and Evaluation (RDT&E) Base funding of $5.144 million to meet Capabilities Production Document (CPD) Increment II Block II related requirements. Specifically, to conduct advanced component development activities for SRR and LRR prototype systems in high fidelity and realistic operating environments. FY 2024 is the first year of allocation of 6.4 funds for LRR and autonomous aerial resupply capability.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024
Title: System Engineering Program Management	0.069	0.083	0.385
Description: System Engineering Program Management (SEPM) support during development and integration of components for SRR & LRR air vehicles.			

Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
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 2022	FY 2023	FY 2024
FY 2023 Plans: System Engineering and Program Management support of advanced component development activities for SRR. ***FY 2024 Plans:*** System Engineering and Program Management support of advanced component development activities for SRR. LRR. ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Increase in FY2024 is due to adding SEPM costs for Component Development for LRR.			
Title: SRR Component Development and Integration ***Description:*** Engineering to develop and to integrate new, advanced components into SRR. ***FY 2023 Plans:*** Advanced component development efforts for SRR. ***FY 2024 Plans:*** Advanced component development efforts for SRR. ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Increase from 2023 to 2024 continues component development efforts for SRR.	0.400	0.595	0.688
Title: LRR Component Development and Integration ***Description:*** Engineering to develop and to integrate new, advanced components into LRR. Components under consideration may include radio, payloads and A-PNT. ***FY 2024 Plans:*** Advanced component development efforts for LRR ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Increase for FY2024 is due to beginning component development for LRR.	-	-	2.913
Title: SRR Component Test and Evaluation ***Description:*** Testing to evaluate components for the SRR air vehicle. ***FY 2023 Plans:*** Integration, test, and evaluation of advanced components for the SRR system. ***FY 2024 Plans:***	0.423	0.695	0.790

Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
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 2022	FY 2023	FY 2024
Integration, test, and evaluation of advanced components for the SRR system. ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Increase from FY2023 to FY2024 continues component test and evaluation efforts for SRR.			
Title: LRR Component Test and Evaluation ***Description:*** Testing to evaluate components for the LRR air vehicle. ***FY 2024 Plans:*** Integration, test, and evaluation of advanced components for the LRR system. ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Increase in FY2024 for component test and evaluation efforts for LRR.	-	-	0.368
Title: Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) ***Description:*** Funding Transferred in accordance with Title 15 USC §638 ***FY 2023 Plans:*** Funding transferred in accordance with Title 15 USC §638 ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Funding transferred in accordance with Title 15 USC §638	-	0.052	-
Accomplishments/Planned Programs Subtotals	0.892	1.425	5.144

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• BR7: *Small Unmanned Aircraft System (6.5)*	2.192	6.530	31.284	-	31.284	24.542	19.909	13.706	13.744	Continuing	Continuing
• A00010: *SMALL UNMANNED AIRCRAFT SYSTEM*	16.005	-	0.000	-	0.000	-	-	-	-	0.000	16.005
• A12511: *SHORT RANGE RECONNAISSANCE*	-	10.598	20.769	-	20.769	20.937	20.550	20.534	20.492	Continuing	Continuing
• A12513: *LONG RANGE RECONNAISSANCE*	-	-	0.000	-	0.000	-	-	50.400	76.420	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
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)*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost

Remarks

D. Acquisition Strategy

The Short Range Reconnaissance utilizes Middle Tier Acquisition pathway for rapid prototyping. The Medium Range Reconnaissance is in sustainment. The Long Range Reconnaissance will complete an Acquisition Shaping Panel in FY 2023.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army			Date: March 2023
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 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering Program Management	Various	Various : Various	0.136	0.069		0.083	Oct 2022	0.385	Oct 2023	-		0.385	Continuing	Continuing	Continuing
Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR)	TBD	TBD : TBD	-	-		0.052	Sep 2023	-		-		-	0.000	0.052	-
		Subtotal	0.136	0.069		0.135		0.385		-		0.385	Continuing	Continuing	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SRR Component development and Integration	Various	ACC Redstone : Redstone Arsenal	0.542	0.400	Jun 2022	0.595	Feb 2023	0.688	Feb 2024	-		0.688	Continuing	Continuing	Continuing
LRR Component Development and Integration	Various	ACC Redstone : Redstone Arsenal, AL	-	-		-		2.913	Jan 2024	-		2.913	Continuing	Continuing	Continuing
		Subtotal	0.542	0.400		0.595		3.601		-		3.601	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SRR Component Test and Evaluation	Various	ACC Redstone : Redstone Arsenal	0.650	0.423	Aug 2022	0.695	Aug 2023	0.770	Aug 2024	-		0.770	Continuing	Continuing	Continuing
LRR Component Test and Evaluation	Various	ACC Redstone : Redstone Arsenal	-	-		-		0.388	Jul 2024	-		0.388	Continuing	Continuing	Continuing
		Subtotal	0.650	0.423		0.695		1.158		-		1.158	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army			Date: March 2023
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)*	

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1.328	0.892		1.425		5.144		-		5.144	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army		Date: March 2023
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)*

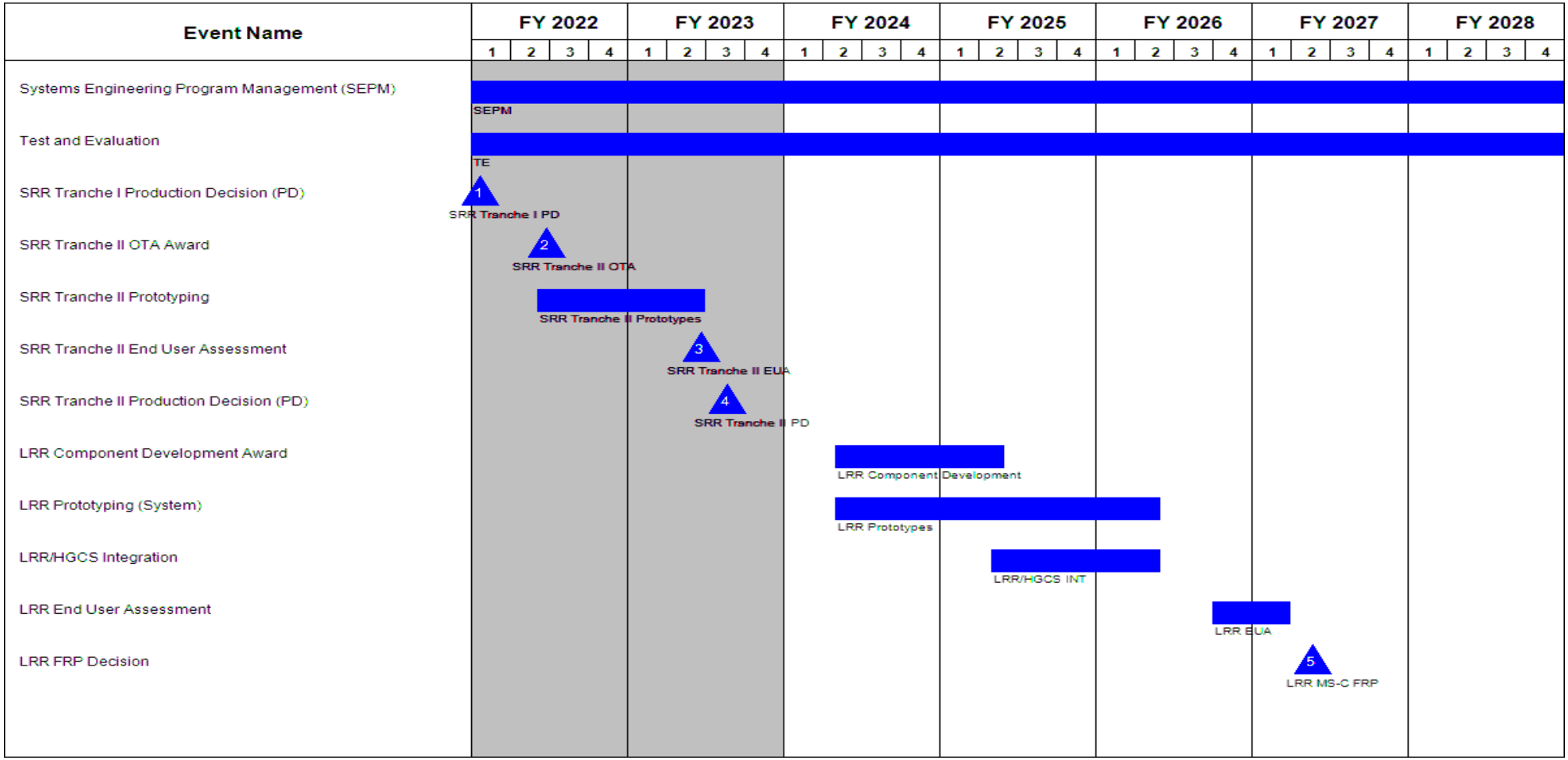

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0604101A / *Small Unmanned Aerial Vehicle (SUAV) (6.4)*	**Project (Number/Name)** BR6 / *Small Unmanned Aircraft System (6.4)*

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	2028
SRR Tranche I OTA Award	3	2019	3	2019
SRR Tranche I Prototyping	3	2018	4	2019
Test and Evaluation	4	2018	4	2028
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
LRR Component Development Award	2	2024	2	2025
LRR Prototyping (System)	2	2024	2	2026
LRR/HGCS Integration	2	2025	2	2026
LRR End User Assessment	4	2026	1	2027
LRR FRP Decision	2	2027	2	2027

Note

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