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 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0607143A *I Unmanned Aircraft System Universal Products*							
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	-	4.426	10.512	25.393	-	25.393	0.503	34.222	31.942	28.850	Continuing	Continuing
EX1: *Unmanned Aircraft Systems Universal Products*	-	4.426	10.512	25.393	-	25.393	0.503	34.222	31.942	28.850	Continuing	Continuing

A. Mission Description and Budget Item Justification

This funding line directly aligns to the Future Vertical Lift (FVL) portfolio. Scalable Control Interface (SCI) will be the primary means of Command and Control (C2) for Future Unmanned Aircraft Systems (FUAS), to include Air Launched Effects (ALE), Future Tactical UAS (FTUAS) and optionally manned rotary wing aircraft. Mission Command devices in both ground and airborne platforms (e.g. Future Attack and Reconnaissance Aircraft - FARA) will host SCI software serving as nodes on the Integrated Tactical Network or other Army-provided network to retrieve and provide data. SCI distributes UAS capabilities by greatly increasing the number of UAS control devices available to Soldiers, Commanders, and Battle Staff. SCI provides simultaneous employment of multiple aircraft/payloads from a single control node. SCI leverages a Modular Open System Approach (MOSA) to software in order to reduce time and cost to integrate new hardware and software in response to the dynamic future operating environment.

Deployment of SCI will include, but is not limited to, devices in the Mobile/Handheld Computing Environment (such as Nett Warrior), Mounted Computing Environment (such as MFoCS [Mounted Family of Computer Systems]), Command Post Computing Environment (such as TSI [Tactical Services Infrastructure), and future Army rotary wing aircraft (FARA and Future Long Range Assault Aircraft - FLRAA). SCI will integrate decision aiding, autonomy, and artificial intelligence improvements as they technically mature, in order to support MDO and reduce cognitive workload.

Justification: Fiscal Year (FY) 2024 SCI (Universal Products) Base funding of $25.393 million will continue the development, test, and integration of improved SCI capabilities as hosted on Mission Command and manned aircraft command and control devices in accordance with the SCI Abbreviated-Capabilities Development Document (A-CDD).

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 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0607143A *I Unmanned Aircraft System Universal Products*

B. Program Change Summary ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	4.594	0.512	0.514	-	0.514
Current President's Budget	4.426	10.512	25.393	-	25.393
Total Adjustments	-0.168	10.000	24.879	-	24.879
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	10.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.168	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	24.879	-	24.879

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2022	FY 2023
Project: EX1: *Unmanned Aircraft Systems Universal Products*		
Congressional Add: *Program Increase: Software Development Efforts*	-	10.000
Congressional Add Subtotals for Project: EX1	-	10.000
Congressional Add Totals for all Projects	-	10.000

Change Summary Explanation

Funding provided for the SCI Software requirements as detailed in the SCI A-CDD.

Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607143A / *Unmanned Aircraft System Universal Products*	Project (Number/Name) EX1 / *Unmanned Aircraft Systems Universal Products*	

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
EX1: *Unmanned Aircraft Systems Universal Products*	-	4.426	10.512	25.393	-	25.393	0.503	34.222	31.942	28.850	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This funding line directly aligns to the Future Vertical Lift (FVL) portfolio. Scalable Control Interface (SCI) will be the primary means of Command and Control (C2) for Future Unmanned Aircraft Systems (FUAS), to include Air Launched Effects (ALE), Future Tactical UAS (FTUAS) and optionally manned rotary wing aircraft. Mission Command devices in both ground and airborne platforms (e.g. Future Attack and Reconnaissance Aircraft - FARA) will host SCI software serving as nodes on the Integrated Tactical Network or other Army-provided network to retrieve and provide data. SCI distributes UAS capabilities by greatly increasing the number of UAS control devices available to Soldiers, Commanders, and Battle Staff. SCI provides simultaneous employment of multiple aircraft/payloads from a single control node. SCI leverages a Modular Open System Approach (MOSA) to software in order to reduce time and cost to integrate new hardware and software in response to the dynamic future operating environment.

Deployment of SCI will include, but is not limited to, devices in the Mobile/Handheld Computing Environment (such as Nett Warrior), Mounted Computing Environment (such as MFoCS [Mounted Family of Computer Systems]), Command Post Computing Environment (such as TSI [Tactical Services Infrastructure), and future Army rotary wing aircraft (FARA and Future Long Range Assault Aircraft - FLRAA). SCI will integrate decision aiding, autonomy, and artificial intelligence improvements as they technically mature, in order to support MDO and reduce cognitive workload.

Justification: Fiscal Year (FY) 2024 SCI (Universal Products) Base funding of $25.393 million will continue the development, test, and integration of improved SCI capabilities as hosted on Mission Command and manned aircraft command and control devices in accordance with the SCI A-CDD.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024
Title: Scalable Control Interface (SCI)	4.426	0.493	25.393
Description: SCI will be the primary means of C2 for Program of Record Army UAS. SCI software will be hosted on Mission Command devices in both ground and airborne platforms serving as nodes on the Integrated Tactical Network to retrieve and provide data. SCI distributes UAS capabilities by greatly increasing the number of UAS control devices available to Soldiers, Commanders, and Battle Staff. SCI provides simultaneous employment of multiple aircraft/payloads from a single control node.			
FY 2023 Plans: FY 2023 funding will be used to continue the development, integration, test, and demonstration of software applications meeting the SCI Software requirements and hosted Mission Command devices as detailed in the SCI A-CDD.			
FY 2024 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0607143A / *Unmanned Aircraft System Universal Products*	**Project (Number/Name)** EX1 / *Unmanned Aircraft Systems Universal Products*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024
FY 2024 funding will be used to continue the development, test, and the integration of improved SCI capabilities as hosted on Mission Command and manned aircraft command and control devices in accordance with the SCI Abbreviated - Capabilities Development Document (A-CDD). ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Increase in funding will complete integration and qualification of SCI Minimum Viable Product (MVP).			
Title: SBIR/STTR ***Description:*** Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) Description: Funding transferred in accordance with Title 15 USC §638 ***FY 2023 Plans:*** FY23 SBIR/STTR: Funding transferred in accordance with Title 15 USC §638 ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY23 SBIR/STTR: Funding transferred in accordance with Title 15 USC §638	-	0.019	-
Accomplishments/Planned Programs Subtotals	4.426	0.512	25.393

	FY 2022	FY 2023
Congressional Add: Program Increase: Software Development Efforts	-	10.000
FY 2023 Plans: Funding for Scalable Control Interface development efforts		
Congressional Adds Subtotals	-	10.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Presently, PM UAS conducts SCI Software development and integration efforts under separate contracts awarded to niche experts in UAS software development, Human Machine Interface development and integration, and Mobile/Handheld and Mounted Computing Environment capabilities. Government ownership and management of the MOSA software interface standards is streamlining time and cost required to integrate future unmanned aircraft and payloads. SCI introduces an intuitive user interface that reduces required training and increases cognitive retention.

Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0607143A / *Unmanned Aircraft System Universal Products*	**Project (Number/Name)** EX1 / *Unmanned Aircraft Systems Universal Products*

SCI provides warfighters with prompt updates by rapidly integrating best of breed software applications instead of relying on costly sole source sustainment of monolithic software well past its usable lifecycle.

Starting in FY24 and as the program matures, PM UAS intends to partner with the software/robotics lab in the Ground Vehicle Support Center (GVSC) - the current developers of the Warfighter Machine Interface product - to provide a strong government integration team that will utilize incentivized contract for agile software development and integration.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607143A / *Unmanned Aircraft System Universal Products*	Project (Number/Name) EX1 / *Unmanned Aircraft Systems Universal Products*	

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
SBIR/STTR	TBD	TBD : TBD	-	-		0.019	Sep 2023	-		-		-	0.000	0.019	-
		Subtotal	-	-		0.019		-		-		-	0.000	0.019	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
Scalable Control Interface (SCI) Software Development	C/Various	Various : Various	84.219	4.426	Mar 2022	8.096	Apr 2023	21.350	Mar 2024	-		21.350	0.000	118.091	-
SEPM	TBD	TBD : TBD	-	-		1.194	Apr 2023	2.890	Dec 2023	-		2.890	0.000	4.084	-
Software Support	TBD	TBD : TBD	-	-		1.203	Apr 2023	1.153	Mar 2024	-		1.153	0.000	2.356	-
		Subtotal	84.219	4.426		10.493		25.393		-		25.393	0.000	124.531	N/A

	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
Project Cost Totals	84.219	4.426		10.512		25.393		-		25.393	0.000	124.550	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0607143A / *Unmanned Aircraft System Universal Products*	**Project (Number/Name)** EX1 / *Unmanned Aircraft Systems Universal Products*

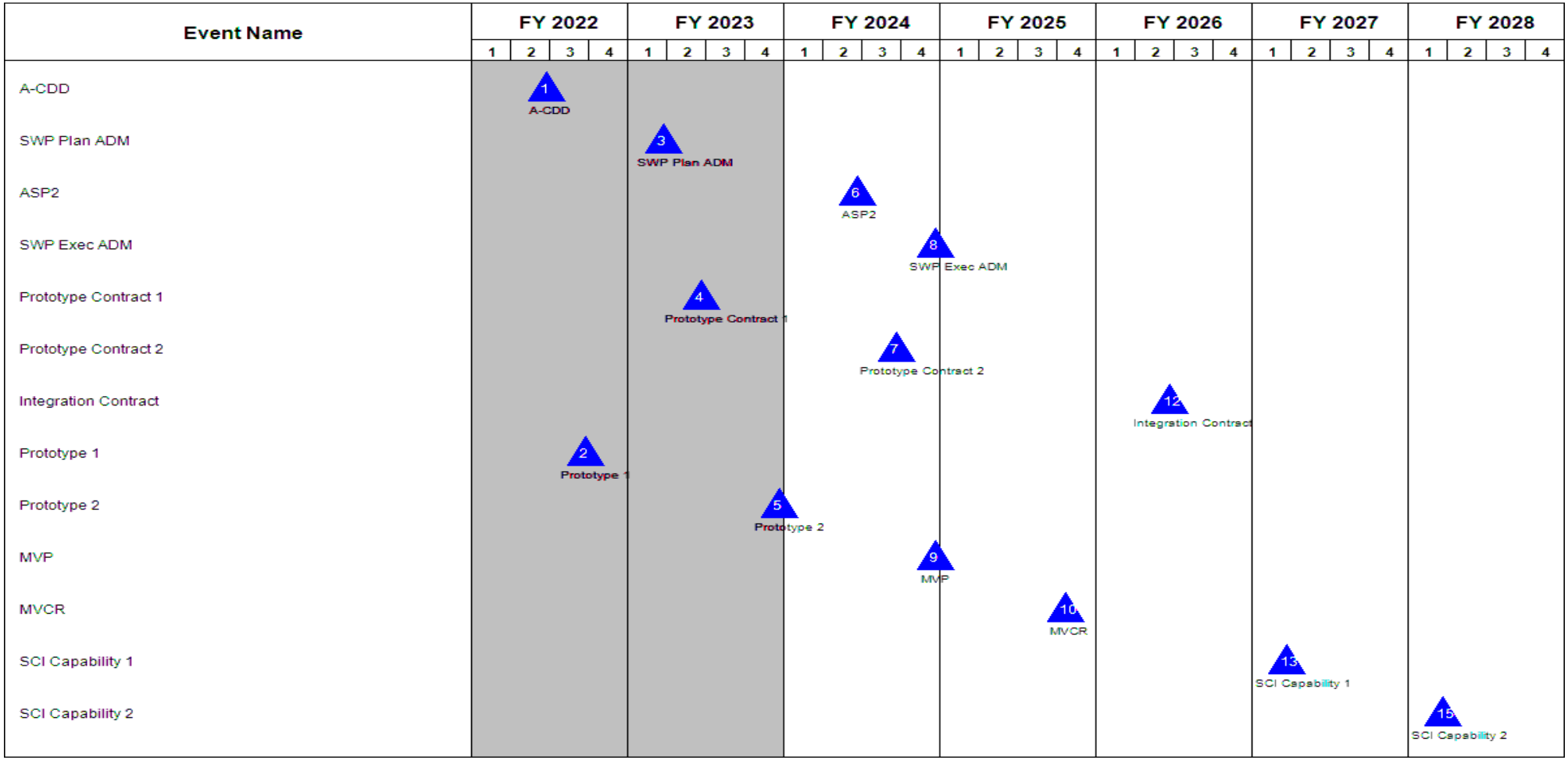

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0607143A / *Unmanned Aircraft System Universal Products*	**Project (Number/Name)** EX1 / *Unmanned Aircraft Systems Universal Products*

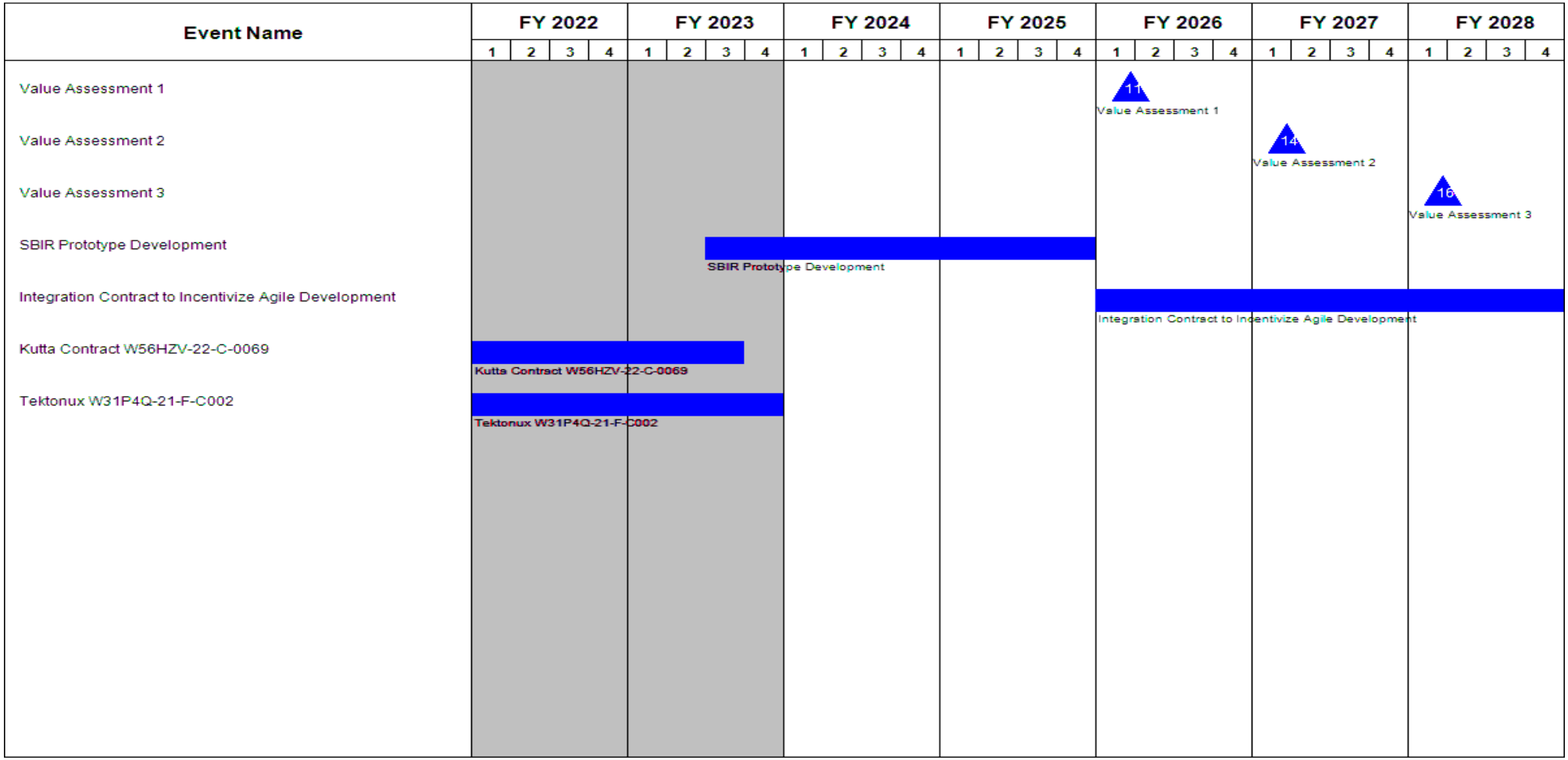

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0607143A / *Unmanned Aircraft System Universal Products*	**Project (Number/Name)** EX1 / *Unmanned Aircraft Systems Universal Products*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
A-CDD	2	2022	2	2022
SWP Plan ADM	1	2023	1	2023
ASP2	2	2024	2	2024
SWP Exec ADM	4	2024	4	2024
Prototype Contract 1	2	2023	2	2023
Prototype Contract 2	3	2024	3	2024
Integration Contract	2	2026	2	2026
Prototype 1	3	2022	3	2022
Prototype 2	4	2023	4	2023
MVP	4	2024	4	2024
MVCR	4	2025	4	2025
SCI Capability 1	1	2027	1	2027
SCI Capability 2	1	2028	1	2028
Value Assessment 1	1	2026	1	2026
Value Assessment 2	1	2027	1	2027
Value Assessment 3	1	2028	1	2028
SBIR Prototype Development	3	2023	4	2025
Integration Contract to Incentivize Agile Development	1	2026	4	2028
Kutta Contract W56HZV-22-C-0069	1	2022	3	2023
Tektonux W31P4Q-21-F-C002	1	2022	4	2023