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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 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0305204A / <i>Tactical Unmanned Aerial Vehicles</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	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.500
11A: <i>Advanced Payload Develop & Spt</i>	-	4.500	-	-	-	-	-	-	-	-	0.000	4.500

A. Mission Description and Budget Item Justification

Project 11A Advanced Payload Develop & Spt: The Advanced Payloads Development project is a shared funding line between multiple payload programs. These payload programs support the Army's transformation by developing Reconnaissance, Surveillance and Target Acquisition (RSTA) and Intelligence, Surveillance and Reconnaissance (ISR) payload systems for Brigade Combat Teams, Divisions, and Corps Unmanned Aircraft Systems (UAS). This is in accordance with Headquarters Department of the Army (HQDA) and Training and Doctrine Command (TRADOC) UAS priorities. Additionally, this Program Element (PE) supports Future Advanced Payloads for Army UAS systems.

The Common Sensor Payload (CSP) is an Electro Optical / Infrared / Laser Designator (EO/IR/LD) payload that provides High Definition (HD) Full Motion Video (FMV) in both the EO and Mid Wave IR (MWIR) spectrums with day/night capability to collect and display continuous imagery and the ability to designate targets of interest for attack by laser guided precision weapons. CSP is the EO/IR/LD sensor for the Gray Eagle UAS which supports force applications, battlespace awareness, force protection, and net-centric operations across the battlefield to provide wide area, near real time RSTA capabilities. Current product improvements continue to focus on the development and implementation of technologies that directly support emerging requirements of the Army's Current and Future Force. CSP Version 3 (v3) is the next procurable solution of CSP and resolves obsolescence issues present on legacy (v1 & v2) CSP configurations. Target Location Accuracy (TLA) is a software capability specific to CSP v3 that improves target mensuration. The Army Acquisition Objective (AAO) for CSP is based on aircraft/ platform quantities; specifically, one CSP per Gray Eagle UAS plus spares.

0305204A 11A has no Fiscal Year (FY) 2025 funding request.

B. Program Change Summary (\$ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	4.500	0.000	0.000	-	0.000
Current President's Budget	4.500	0.000	0.000	-	0.000
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Army										Date: March 2024		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0305204A / <i>Tactical Unmanned Aerial Vehicles</i>				Project (Number/Name) 11A / <i>Advanced Payload Develop & Spt</i>			
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
11A: <i>Advanced Payload Develop & Spt</i>	-	4.500	-	-	-	-	-	-	-	-	0.000	4.500
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

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0305204A 11A has no Fiscal Year (FY) 2025 funding request.

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

	FY 2023	FY 2024	FY 2025
Title: CSP Increased Usability and Lethality	4.500	-	-
Description: Software and Hardware developments to increase lethality and usability of the CSP while reducing cognitive burden on the Warfighter.			
Accomplishments/Planned Programs Subtotals	4.500	-	-

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
• A01005: <i>CSP FMV</i>	72.700	13.650	14.086	-	14.086	33.074	33.475	34.885	35.270	0.000	237.140

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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>
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Remarks

D. Acquisition Strategy

The Enhanced Electro-Optical (EO)/Infrared (IR) Capability Production Document, approved 19 December 2016, defines additional Key Performance Parameter (KPP) requirements for the Full Motion Video (FMV) sensor on the Gray Eagle platform. The first KPP increases detection, recognition, and identification requirements which can only be met with the High Definition (HD) v2 variation of the Common Sensor Payload (CSP). Currently, units are being fielded with CSP v2s, with additional CSP v2s in production and retrofit. The FY 2023 acquisition strategy for CSP includes the completion of testing supporting CSP v3 development. FY23 is the last year of RDTE funding. APA funds on line A01005 are procuring v3 payloads from FY23 forward.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army												Date: March 2024			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 7				PE 0305204A / Tactical Unmanned Aerial Vehicles				11A / Advanced Payload Develop & Spt ehicles							
Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
CSP Program Management	MIPR	PM EOIR : Fort Belvoir, VA	8.356	0.290	Dec 2022	-		-		-		-	0.000	8.646	-
Subtotal			8.356	0.290		-		-		-		-	0.000	8.646	N/A
Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Training Development	C/CPFF	i3 : Huntsville, AL	0.878	0.640	Apr 2023	-		-		-		-	0.000	1.518	-
Subtotal			0.878	0.640		-		-		-		-	0.000	1.518	N/A
Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
CSP Testing (TLA)	MIPR	Various : Various	0.583	3.570	Nov 2022	-		-		-		-	0.000	4.153	-
Subtotal			0.583	3.570		-		-		-		-	0.000	4.153	N/A
Project Cost Totals			9.817	4.500		-		-		-		-	0.000	14.317	N/A
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army		Date: March 2024
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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
CSP v3 Testing	[Redacted]																											
CSP v3 Integration					[Redacted]																							
CSP TLA NGA Validation									[Redacted]																			
CSP v3 Production Decision					▲ CSP v3 Production Decision																							
CSP v3 Procurement					[Redacted]				[Redacted]				[Redacted]															

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Army		Date: March 2024
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
CSP HD (EO/IR/LD) Production	2	2013	4	2022
CSP HD Retrofit (Proc)	4	2013	4	2022
CSP HW/SW Improvements Reduce Cognitive Burden Development	1	2016	4	2021
CSP HW/SW Improvements Reduce Cognitive Burden Testing / Integration	3	2017	4	2020
CSP TLA Development	4	2018	4	2022
CSP TLA PDR/CDR	1	2020	1	2020
CSP v3 Testing	1	2022	3	2023
CSP v3 Integration	4	2023	3	2024
CSP TLA NGA Validation	3	2024	3	2025
CSP v3 Production Decision	4	2023	4	2023
CSP v3 Procurement	3	2023	4	2026