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**Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / <i>Radar Development</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	-	77.158	94.944	76.090	-	76.090	53.492	44.895	41.684	40.167	0.000	428.430
E10: <i>Sentinel</i>	-	77.158	94.944	44.927	-	44.927	19.024	22.051	19.641	28.244	0.000	305.989
PS1: <i>Army Long Range Persistent Surveillance (ALPS)</i>	-	-	-	31.163	-	31.163	34.468	22.844	22.043	11.923	0.000	122.441

**Note**

In Fiscal Year (FY) 2025, Project PS1 /Army Long Range Persistent Surveillance (ALPS) is a new effort realigned within PE 0604820A / Radar Development. Funding realigned from PE 0604741A / Air Defense Command Control and Intelligence - Eng Dev, Project 126 /PEO Electronic Protect for the design development and hardware fabrication of ALPS.

**A. Mission Description and Budget Item Justification**

This funding line is a key enabler of the Army Modernization Priorities in support of the Sentinel Radar program and will provide for an incrementally fielded Integrated Air and Missile Defense Fire Control System/capability for the composite Army Air and Missile Defense Brigades. The Sentinel system is a key component of the Army Integrated Air and Missile Defense (AIAMD) architecture, providing critical air surveillance of the forward areas. The AIAMD architecture is an integrated fires development effort that includes survivability, resiliency, and effectiveness improvements against advanced threats from near-peer adversaries. This effort includes integration with an evolving common fires mission command, common development tools and processes, and annual test and evaluation to provide data to support program assessments and progress toward closure of performance gaps.

Sentinel A3 consists of a radar-based sensor with its prime mover/power, Identification Friend or Foe (IFF), and Forward Area Air Defense (FAAD) Command, Control and Intelligence (C2I) interfaces. The radar is deployed in both an air defense role and a force protection role for Counter-Rocket, Artillery, and Mortar (C-RAM) missions. The sensor is an advanced three-dimensional battlefield X-Band air defense phased-array radar with an instrumented range of 75 kilometers. Sentinel is capable of operating day or night, in adverse weather conditions, in the battlefield environments of dust, smoke, aerosols and enemy countermeasures. It provides 360-degree azimuth coverage for acquisition tracking. Sentinel contributes to the digital battlefield by automatically detecting, classifying, identifying and reporting targets (cruise missiles, unmanned aircraft systems, rotary wing and fixed wing aircraft). Sentinel acquires targets sufficiently forward of the battle area to allow weapons reaction time and engagement at optimum ranges. Sentinel's integrated IFF reduces the potential for fratricide of U.S. and Coalition aircraft.

The Sentinel A4 Active Electronically Scanned Array (AESA) is the next generation of radar technology to replace the current phase and frequency scanned array used by Sentinel today. Sentinel A4 hardware and software upgrades will extend the range for ground-based surveillance and situational awareness; will have faster and more accurate Non-Cooperative Target Recognition (NCTR) for clearing fires and preventing fratricide; will improve track accuracy, and management of larger track loads; and improve operation in severe/urban clutter. The system will provide simultaneous multi-mission capability and provides hemispherical surveillance to detect and track small targets, such as Unmanned Aircraft Systems (UAS) and Cruise Missiles, in clutter and will detect and track slow targets, such as UAS and Rotary Wing aircraft, at low altitudes in clutter. The system will detect, track, and classify Rocket, Artillery, and Mortar (RAM) threats and will support M-SHORAD, AIAMD, IFPC and Guam Defense Systems (GDS) Operational requirements with Fire Control quality tracks. Sentinel A4 will incorporate the upgraded AN/TPX-61 IFF with M-Code

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2025 Army	<b>Date:</b> March 2024
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<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / <i>Radar Development</i>
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capability added by replacing the GB-Gram card with M-Code GB-Gram cards. Sentinel A4 will also address system survivability enhancements via the Air and Missile Defense - Integration (AMD-I) efforts. Sentinel A4 will incorporate an adjunct sensor to provide additional technology for the detection and identification of current and emerging threats.

The Army Long-Range Persistent Surveillance (ALPS) is a persistent, passive air surveillance sensor system. ALPS capabilities include long-range, 360-degree surveillance against conventional fixed wing and rotary wing aircraft, UAS, and cruise missiles. ALPS supports tactical to strategic operations via its capability to connect with multiple Army and Joint Command and Control systems including the IAMD Battle Command System (IBCS).

The ALPS program tasks include all programmatic and engineering activities needed to modernize systems currently supporting multiple Combatant Commands and design/development effort to provide a passive capability to Army Air and Missile Defense forces in accordance with the requirements in the Capability Development Document (CDD).

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
Previous President's Budget	71.259	94.944	48.837	-	48.837
Current President's Budget	77.158	94.944	76.090	-	76.090
Total Adjustments	5.899	0.000	27.253	-	27.253
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	8.500	-			
• SBIR/STTR Transfer	-2.601	-			
• Adjustments to Budget Years	-	-	27.253	-	27.253

**Change Summary Explanation**

In FY2025 an addition of \$31.1M for Army Long-range Persistent Surveillance (ALPS) (Project PS1) and a reduction of \$3.9M for Sentinel (Project E10) results in a net change of \$27.2M to Radar Development Program Element.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604820A / <i>Radar Development</i>				<b>Project (Number/Name)</b> E10 / <i>Sentinel</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
E10: <i>Sentinel</i>	-	77.158	94.944	44.927	-	44.927	19.024	22.051	19.641	28.244	0.000	305.989
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

Sentinel A4 detects, tracks, and classifies Rocket, Artillery, and Mortar (RAM) threats and will support Integrated Air and Missile Defense Battle Command System (IBCS) requirements and contributes sensor support for mitigating current and future Indirect Fire Protection Capability Increment 2 mission requirements as well as Mobile Short Range Air Defense (M-SHORAD) battalions. FY 2024 funding supports the integration for Initial Operational Test and Evaluation (IOT&E) Systems, the development of additional survivability enhancements (AMDI-I) for inclusion into Sentinel A4, integration of adjunct sensor into Sentinel A4 configurations, as well as the non-recurring engineering efforts to enhance the Sentinel A4 configuration to support Guam Defense Systems (GDS) mission set to enable fielding in country by requested timelines. FY2025 funding will support IOT&E and the Operational Assessment required for a Full Rate Production (FRP) decision.

Electronic Attack/Electronic Protect (EA/EP) addresses the electronic countermeasures (ECM) gap for Sentinel A3. This effort continues through the life of the radar, addressing both changing threats and electronic counter measure gaps.

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

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> Product Development	61.880	89.383	31.795
<b>Description:</b> Funding is provided for the following Product Development efforts:			
<b>FY 2024 Plans:</b> Will continue build and integration of five (5) Initial Operational Test and Evaluation (IOT&E) assets for delivery in support of system IOT&E. Will develop additional survivability enhancements (AMD-I) for inclusion into Sentinel A4. Will enhance Sentinel A4 to support Defense of Guam mission. Will continue to perform technical assessments, concept studies, cost reduction, risk reduction, threat analysis, and required documentation for Sentinel A3.			
<b>FY 2025 Plans:</b> Will execute Initial Operational Test and Evaluation (IOT&E) for Sentinel A4 and the Operational Assessment required for a Full Rate Production (FRP) decision. Will execute additional enhancements to Sentinel A4 to support new and evolving requirements for the Guam Defense Systems mission. Will continue development of additional survivability enhancements (AMD-I) and integration of adjunct sensor for inclusion into Sentinel A4. Will continue to perform technical assessments, concept studies, cost reduction, risk reduction, threat analysis, and required documentation for Sentinel A3.			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b>			

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**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Army **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / Radar Development	<b>Project (Number/Name)</b> E10 / Sentinel
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**B. Accomplishments/Planned Programs (\$ in Millions)**

	FY 2023	FY 2024	FY 2025
Decrease due to transition of program from Engineering and Manufacturing Development (EMD) and Low Rate Initial Production (LRIP) to a full rate production status in FY2025. Ongoing software modifications required in FY2025 for AMD-I, emerging threats, and Guam Defense Systems.			
<b>Title:</b> Test & Evaluation	15.278	5.561	13.132
<b>Description:</b> Funding is provided for the following Test and Evaluation efforts:			
<b>FY 2024 Plans:</b> Supports soldier touchpoint for Sentinel A4 User Operational Evaluation Systems (UOES) to gain soldier feedback. Initiates target and range support for Sentinel A4 Initial Operational Test and Evaluation (IOT&E). Provides support for System of System integration test events. Will conduct software qualification test and hardware verification testing, field testing against representative targets. Prepares logistics products and required documentation for materiel release of software and hardware upgrades for Sentinel A3 and Sentinel A4.			
<b>FY 2025 Plans:</b> Supports Sentinel A4 Initial Operational Test and Evaluation (IOT&E). Will conduct software qualification test and hardware verification testing, field testing against representative targets. Prepares required documentation for materiel release of software and hardware upgrades for Sentinel A3 and Sentinel A4.			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Increase from FY2024 to FY2025 supports Sentinel A4 Initial Operational Test and Evaluation (IOT&E).			
<b>Accomplishments/Planned Programs Subtotals</b>	77.158	94.944	44.927

**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>
• WK5057: Sentinel Mods	214.736	161.886	180.253	-	180.253	493.037	505.210	461.565	467.189	Continuing	Continuing
• EX2: Lower Tier Air Missile Defense (LTAMD) Capability	366.637	816.663	149.463	-	149.463	122.785	124.002	128.507	123.399	0.000	1,831.456
• FM3: Future Interceptor	7.880	8.040	8.058	-	8.058	8.068	8.154	8.245	8.327	0.000	56.772
• C53101: MSE Missile	2,471.372	1,212.832	963.060	-	963.060	975.410	1,132.518	1,461.976	1,204.578	Continuing	Continuing
• EY7: IFPC Increment 2 - Block 1	126.308	196.248	138.553	-	138.553	117.923	10.862	11.139	136.733	0.000	737.766
• C62002: IFPC INC 2- I BLOCK 1 SYSTEM	22.709	313.189	411.430	-	411.430	663.872	786.454	802.826	997.832	0.000	3,998.312
• FI4: Maneuver - Short Range Air Defense (M-SHORAD)	9.985	10.188	22.412	-	22.412	15.265	10.229	10.343	10.446	0.000	88.868

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**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Army **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / Radar Development	<b>Project (Number/Name)</b> E10 / Sentinel
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**C. Other Program Funding Summary (\$ in Millions)**

<b>Line Item</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• C14300: M-SHORAD - Procurement	246.867	400.697	69.091	-	69.091	42.676	-	-	-	Continuing	Continuing
• S40: Army Integrated Air and Missile Defense	245.791	254.163	525.963	-	525.963	412.252	394.003	310.057	316.151	0.000	2,458.380
• BZ5075: IAMD Battle Command System	459.343	412.556	403.028	-	403.028	584.262	651.373	449.114	509.060	Continuing	Continuing
• 0604741A: Air Defense Command, Control and Intelligence - Eng Dev	54.244	74.738	69.653	-	69.653	63.879	70.400	71.366	72.084	Continuing	Continuing
• AD5070: AIR & MSL Defense Planning & Control Sys	72.619	68.892	80.011	-	80.011	-	-	-	-	0.000	221.522

**Remarks**

These programs are an integral part of the Army Integrated Air and Missile Defense (AIAMD) architecture.

**D. Acquisition Strategy**

Sentinel A3 and its predecessors were procured from Raytheon as a non-developmental item. The U.S. Government does not have adequate data rights for the Sentinel A3 and its predecessors; therefore no other contractor has the technical ability to modify the Sentinel A3 radar or Sentinel A3 software. The modifications for Sentinel A3 fall into these categories: Electronic Attack/Electronic Protect; Signal Data Processor; North Finding Module; Medium Bandwidth; Resiliency and Software Assurance Modification (RSAM); Counter Rocket Artillery and Mortar (C-RAM), Low Slow Small, Unmanned Aircraft Systems, Cruise Missiles; and Mode S. Electronic Attack/Electronic Protect will be an ongoing effort to ensure Sentinel A3 remains relevant in the field until A4 is fielded.

For the Sentinel A4 modification, Lockheed Martin was competitively awarded a Fixed Price Incentive Firm (FPIF) contract to develop a modified Sentinel with a new Active Electronically Scanned Array (AESA) antenna. The contract award to Lockheed Martin includes EMD with priced options for LRIP. RDTE funded assets are on contract with Lockheed Martin including EMD prototypes, UOES assets to support System of System Integration Testing and IOT&E assets.

Sentinel is a component of an integrated fires development effort that includes survivability, resiliency, and effectiveness improvements against advanced threats from near-peer adversaries. This effort includes integration with an evolving common fires mission command, common development tools and processes, and annual test and evaluation to provide data to support program assessments and progress toward closure of performance gaps.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / Radar Development	<b>Project (Number/Name)</b> E10 / Sentinel
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<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Management Support	Various	Various : Multiple	21.780	4.768	Nov 2022	4.858	Nov 2023	3.400	Nov 2024	-		3.400	Continuing	Continuing	Continuing
<b>Subtotal</b>			21.780	4.768		4.858		3.400		-		3.400	Continuing	Continuing	N/A

<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Electronic Attack/ Electronic Protect	Various	Raytheon & Various : Fullerton, CA / Various	36.499	4.000	Jan 2023	3.839	Jan 2024	3.324	Jan 2025	-		3.324	Continuing	Continuing	-
Active Electronically Scanned Array (A4)	C/FPIF	Lockheed Martin & Search, Track, Acquire, Radiate, Eliminate (PM STARE) : Syracuse, NY and Huntsville, AL	305.783	47.213	Jan 2023	54.108	Jan 2024	7.371	Jan 2025	-		7.371	Continuing	Continuing	-
System survivability Enhancements (AMD-I) (A4)	SS/ Various	Lockheed Martin & Search, Track, Acquire, Radiate, Eliminate (PM STARE) : Syracuse, NY and Huntsville, AL	-	-		12.064	Jan 2024	17.700	Jan 2025	-		17.700	Continuing	Continuing	-
Guam Defense Systems (GDS) Development (A4)	C/FPIF	Lockheed Martin & Search, Track, Acquire, Radiate, Eliminate (PM STARE) : Syracuse, NY and Huntsville, AL	-	5.899	Nov 2022	14.514	Jan 2024	-		-		-	Continuing	Continuing	-
<b>Subtotal</b>			342.282	57.112		84.525		28.395		-		28.395	Continuing	Continuing	N/A



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

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / Radar Development	<b>Project (Number/Name)</b> E10 / Sentinel
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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
<b>Sentinel A3</b>																												
Electronic Attack/Electronic Protect (EA/EP)																												
EA/EP																												
<b>Active Electronically Scanned Array (AESA) (A4)</b>																												
Developmental Test																												
Developmental Test																												
Guam Defense Systems Development																												
Combatant Commands NRE																												
Limited User Testing																												
LUT																												
Operational Test Agency (OTA) Milestone Assessment Report																												
OMAR																												
Milestone C																												
MS C																												
User Operational Evaluation System (UOES) Build and Inte...																												
UOES Build and Integration																												
Initial Operational Test and Evaluation System Build and...																												
IOT&E Asset Build and Integration																												
Soldier touchpoint and feedback and test																												
UOES system of system integration																												
System Survivability Enhancements (AMD-I)																												
AMD-I																												
Range and Target Support																												
Range and Test Support																												

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

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / <i>Radar Development</i>	<b>Project (Number/Name)</b> E10 / <i>Sentinel</i>
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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
Initial Operational Test and Evaluation (IOT&E)																												
Pre-Planned Product Enhancements																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / <i>Radar Development</i>	<b>Project (Number/Name)</b> E10 / <i>Sentinel</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Sentinel A3	2	2019	4	2030
Electronic Attack/Electronic Protect (EA/EP)	2	2015	4	2030
Active Electronically Scanned Array (AESA) (A4)	4	2019	4	2033
Milestone B	4	2019	4	2019
Engineering Manufacturing and Development Prototype Build and Integration	2	2020	2	2022
Preliminary Design Review	2	2020	2	2020
Critical Design Review	2	2021	2	2021
Contractor Verification Testing	4	2021	2	2022
Developmental Test	2	2022	4	2024
Guam Defense Systems Development	2	2023	2	2026
Limited User Testing	3	2023	3	2023
Operational Test Agency (OTA) Milestone Assessment Report	3	2023	3	2023
Milestone C	4	2023	4	2023
User Operational Evaluation System (UOES) Build and Integration	1	2022	2	2024
Initial Operational Test and Evaluation System Build and Integration	4	2023	4	2024
Soldier touchpoint and feedback and test	4	2024	1	2025
System Survivability Enhancements (AMD-I)	2	2024	4	2029
Range and Target Support	4	2024	4	2024
Initial Operational Test and Evaluation (IOT&E)	1	2025	3	2025
Pre-Planned Product Enhancements	2	2025	4	2030

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604820A / Radar Development				<b>Project (Number/Name)</b> PS1 / Army Long Range Persistent Surveillance (ALPS)			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
PS1: Army Long Range Persistent Surveillance (ALPS)	-	-	-	31.163	-	31.163	34.468	22.844	22.043	11.923	0.000	122.441
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

In Fiscal Year (FY) 2025, Project PS1 /Army Long Range Persistent Surveillance (ALPS) is a new effort realigned within PE 0604820A / Radar Development. Funding realigned from PE 0604741A / Air Defense Command Control and Intelligence - Eng Dev, Project 126 /PEO Electronic Protect for the design development and hardware fabrication of ALPS.

**A. Mission Description and Budget Item Justification**

The Army Long-Range Persistent Surveillance (ALPS) is a persistent, passive air surveillance sensor system. ALPS capabilities include long-range, 360-degree surveillance against conventional fixed wing and rotary wing aircraft, UAS, and cruise missiles. ALPS supports tactical to strategic operations via its capability to connect with multiple Army and Joint Command and Control systems including the IAMD Battle Command System (IBCS).

The ALPS program was started as an urgent capability in response to multiple Combatant Commands identified operational needs. The ALPS program tasks include all programmatic and engineering activities needed to modernize systems currently supporting multiple Combatant Commands and design/development effort to provide a passive capability to Army Air and Missile Defense forces in accordance with the requirements in the Capability Development Document (CDD). The ALPS system will be improved to maintain capability against the evolving threat.

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

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> Program Development and Support	-	-	31.163
<b>Description:</b> Provide program development and support for the ALPS program including technical work, design development, and modernization efforts.			
<b>FY 2025 Plans:</b> - Continue development and trade studies - Hardware fabrication - Develop statutory/regulatory documentation			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> FY2024 to FY2025 change reflects realignment from PE 0604741A / Air Defense Command Control and Intelligence - Eng Dev, Project 126 /PEO Electronic Protect. The increase in effort is due to the initiation of design development and hardware fabrication.			
<b>Accomplishments/Planned Programs Subtotals</b>	-	-	31.163

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / <i>Radar Development</i>	<b>Project (Number/Name)</b> PS1 / <i>Army Long Range Persistent Surveillance (ALPS)</i>

**C. Other Program Funding Summary (\$ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

ALPS will use an Indefinite Delivery, Indefinite Quantity (IDIQ) contract to conduct the development and integration for ALPS, followed by a production contract to support future delivery of ALPS systems. The ALPS systems developed to support multiple Combatant Commands operational needs will be improved to maintain capability against emerging and evolving threats. An Acquisition Shaping Panel will be held in FY2024 for guidance from the Army Acquisition Executive to inform acquisition pathway.

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2025 Army</b>												<b>Date: March 2024</b>			
<b>Appropriation/Budget Activity</b> 2040 / 5				<b>R-1 Program Element (Number/Name)</b> PE 0604820A / Radar Development				<b>Project (Number/Name)</b> PS1 / Army Long Range Persistent Surveillance (ALPS)							
<b>Management Services (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Other Government Agencies & Government Program Management	Various	Various : various	-	-		-		5.500	Dec 2024	-		5.500	0.000	5.500	-
<b>Subtotal</b>			-	-		-		5.500		-		5.500	0.000	5.500	N/A
<b>Product Development (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Programmatic and Engineering Activities	Various	various : various	-	-		-		25.663	Dec 2024	-		25.663	0.000	25.663	-
<b>Subtotal</b>			-	-		-		25.663		-		25.663	0.000	25.663	N/A
<b>Project Cost Totals</b>			-	-		-		31.163		-		31.163	0.000	31.163	N/A
<b>Remarks</b>															

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2025 Army</b>		<b>Date: March 2024</b>
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / Radar Development	<b>Project (Number/Name)</b> PS1 / Army Long Range Persistent Surveillance (ALPS)

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
Concept development and trade studies									Concept development and trade studies																			
Design, Development & Test													Design, Development & Test															
Develop Statutory/Regulatory Documentation													Develop Statutory/Regulatory Documentation															
Initiate Hardware Fabrication																	Initiate Hardware Fabrication											
Continue Modernization Activities																					Continue Modernization Activities							

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604820A / <i>Radar Development</i>	<b>Project (Number/Name)</b> PS1 / <i>Army Long Range Persistent Surveillance (ALPS)</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Concept development and trade studies	1	2025	4	2025
Design, Development & Test	1	2025	4	2026
Develop Statutory/Regulatory Documentation	1	2025	4	2027
Initiate Hardware Fabrication	1	2026	4	2027
Continue Modernization Activities	1	2027	4	2029