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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2019 Army **Date:** February 2018

<b>Appropriation/Budget Activity</b> 2040: Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development					<b>R-1 Program Element (Number/Name)</b> PE 0202429A / Aerostat Joint Project - COCOM Exercise							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	-	6.178	6.749	0.001	-	0.001	0.000	0.000	0.000	0.000	0.000	12.928
EP8: COCOM Exercise	-	6.178	6.749	0.001	-	0.001	0.000	0.000	0.000	0.000	0.000	12.928

## A. Mission Description and Budget Item Justification

Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) is a supporting program for Army and Joint Integrated Air and Missile Defense, providing elevated, persistent, over the horizon surveillance and fire control quality data on Army and Joint networks, enabling protection of the U.S. and coalition forces as well as critical geo political assets from Cruise Missiles, Aircraft, Unmanned Aerial Vehicles, Tactical Ballistic Missiles, Large Caliber Rockets, and Surface Moving Targets. A JLENS Orbit consists of two systems: a fire control radar system and a wide-area surveillance radar system. Each radar system consists of a separate 74-meter tethered aerostat, mobile mooring station, radar and communications payload, processing station, and associated ground support equipment. The systems are designed to work together, but can operate independently. The JLENS Orbit is transportable by road, rail, sea and air.

JLENS uses advanced sensor and networking technologies to provide persistent, 360-degree, wide-area surveillance and precision tracking of Land Attack Cruise Missiles and other types of Air Breathing Threats. This information is distributed via joint service networks and provides fire control quality data to Surface to Air missile systems, such as Army Patriot and Navy Aegis, increasing the weapons' capabilities by allowing systems to engage targets normally below, outside, or beyond surface based weapons' field of view. JLENS also provides fire control quality data to fighter aircraft, allowing the aircraft to engage hostile threats from extended ranges, and contributes to the development of a single integrated air picture.

JLENS prepared and participated in Operation Noble Eagle (ONE) with NORAD-USNORTHCOM National Capital Region (NCR) Integrated Air Defense System (IADS) Operational Exercise (OPEX) from FY14-FY16 as directed by the Joint Requirements Oversight Council Memorandum (JROCM) 021-13 signed by the Vice Chairman of the Joint Chiefs of Staff on 31 January 2013. The OPEX included an operational assessment to "inform a future decision for enduring operational employment", in accordance with Joint Requirements Oversight Council Memorandum (JROCM) 021-13. The Combatant Command (CCMD) objective for the OPEX was to provide the full range of JLENS Orbit level capability to include: Persistent Wide Area Surveillance (WAS) through Battle Command System Fixed (BCS-F) Integration Combat Identification (CID) / Electronic Identification (EID) Precision Cue to Fighters/Ground-Based Air Defense (GBAD) via Tactical Data Link (TDL) Integrated Fire Control to Fighters (IFC)/GBAD via TDL.

JLENS ended OPEX participation in October 2015 with the direction to store the system in place.

JLENS received an Acquisition Decision Memorandum (ADM), dated 18 July 2017, directing the program to prepare and submit a program termination plan. Disposition of 185 ISO containers consisting of classified and unclassified material along with 12 trailers will take two years (FY 2018-2019). In FY 2018, the focus is on the disposition of classified and starting the disposition of unclassified material. The remaining unclassified material will be disposed of in FY 2019.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army				Date: February 2018	
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development		R-1 Program Element (Number/Name) PE 0202429A / Aerostat Joint Project - COCOM Exercise			
B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	45.482	6.749	0.001	-	0.001
Current President's Budget	6.178	6.749	0.001	-	0.001
Total Adjustments	-39.304	0.000	0.000	-	0.000
• Congressional General Reductions	-0.003	-			
• Congressional Directed Reductions	-39.082	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.219	-			
Change Summary Explanation					
FY 2017 adjustments are the result of Congressional mark as part of the FY 2017 Appropriation Act, SBIR/STTR and FFRDC transfer.					

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army										Date: February 2018		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0202429A / Aerostat Joint Project - COCOM Exercise				Project (Number/Name) EP8 / COCOM Exercise			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
EP8: COCOM Exercise	-	6.178	6.749	0.001	-	0.001	0.000	0.000	0.000	0.000	0.000	12.928
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) is a supporting program for Army and Joint Integrated Air and Missile Defense, providing elevated, persistent, over the horizon surveillance and fire control quality data on Army and Joint networks, enabling protection of the U.S. and coalition forces as well as critical geo political assets from Cruise Missiles, Aircraft, Unmanned Aerial Vehicles, Tactical Ballistic Missiles, Large Caliber Rockets, and Surface Moving Targets. A JLENS Orbit consists of two systems: a fire control radar system and a wide-area surveillance radar system. Each radar system consists of a separate 74-meter tethered aerostat, mobile mooring station, radar and communications payload, processing station, and associated ground support equipment. The systems are designed to work together, but can operate independently. The JLENS Orbit is transportable by road, rail, sea and air.

JLENS uses advanced sensor and networking technologies to provide persistent, 360-degree, wide-area surveillance and precision tracking of Land Attack Cruise Missiles and other types of Air Breathing Threats. This information is distributed via joint service networks and provides fire control quality data to Surface to Air missile systems, such as Army Patriot and Navy Aegis, increasing the weapons' capabilities by allowing systems to engage targets normally below, outside, or beyond surface based weapons' field of view. JLENS also provides fire control quality data to fighter aircraft, allowing the aircraft to engage hostile threats from extended ranges, and contributes to the development of a single integrated air picture.

JLENS prepared for and participated in Operation Noble Eagle (ONE) with NORAD-USNORTHCOM National Capital Region (NCR) Integrated Air Defense System (IADS) Operational Exercise (OPEX) from FY14-FY16, as directed by the Joint Requirements Oversight Council Memorandum (JROCM) 021-13 signed by the Vice Chairman of the Joint Chiefs of Staff on 31 January 2013. JLENS participation in the OPEX was to allow for a combatant commander's operational assessment of JLENS capabilities to "inform a future decision for enduring operational employment".

Operational Control of JLENS for the OPEX was transferred to the NORAD/NORTHCOM Joint Air Defense Operations Center (JADOC) on 15 October 2015. Due to a tether break accident on 28 October 2015 and resulting loss of the Fire Control System aerostat and significant damage to the Radar and Mobile Mooring Station, the Commander NORAD/NORTHCOM suspended JLENS participation in the OPEX pending results of accident investigations and Failure Review Board recommendations. JLENS participation in the OPEX was terminated per an Under Secretary for Defense Policy decision memorandum dated 15 June 2016. In accordance with Army Acquisition Executive (AAE) direction, JLENS equipment supporting the OPEX was packed and stored at the APG sites effective 21 June 2016, pending higher headquarters decision on the future of the JLENS program.

JLENS ended OPEX participation in October 2015 with the direction to store the system in place.

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army		Date: February 2018		
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0202429A / Aerostat Joint Project - COCOM Exercise	Project (Number/Name) EP8 / COCOM Exercise		
JLENS received an Acquisition Decision Memorandum (ADM), dated 18 July 2017, directing the program to prepare and submit a program termination plan. Disposition of 185 ISO containers consisting of classified and unclassified material along with 12 trailers will take two years (FY 2018-2019). In FY 2018, the focus is on the disposition of classified and starting the disposition of unclassified material. The remaining unclassified material will be disposed of in FY 2019.				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019
Title: JLENS Exercise		6.178	6.749	0.001
Description: Plan and execute JLENS participation in the NORAD-USNORTHCOM National Capital Region Integrated Air Defense System (IADS) OPEX.				
FY 2018 Plans: Perform program shutdown activities to include disposition of assets and program office support.				
FY 2019 Plans: Perform program shutdown activities.				
FY 2018 to FY 2019 Increase/Decrease Statement: FY 2019 remaining activity is disposal of unclassified material.				
Accomplishments/Planned Programs Subtotals		6.178	6.749	0.001
C. Other Program Funding Summary (\$ in Millions)				
N/A				
Remarks				
D. Acquisition Strategy				
JLENS prepared for and participated in Operation Noble Eagle (ONE) with NORAD-USNORTHCOM National Capital Region (NCR) Integrated Air Defense System (IADS) Operational Exercise (OPEX) from FY 2014-FY 2016, as directed by the Joint Requirements Oversight Council Memorandum (JROCM) 021-13 signed by the Vice Chairman of the Joint Chiefs of Staff on 31 January 2013. JLENS participation in the OPEX was to allow for a combatant commander's operational assessment of JLENS capabilities to "inform a future decision for enduring operational employment".				
Operational Control of JLENS for the OPEX was transferred to the NORAD/NORTHCOM Joint Air Defense Operations Center (JADOC) on 15 October 2015. Due to a tether break accident on 28 October 2015 resulting in the loss of the Fire Control System aerostat, significant damage to the Radar and Mobile Mooring Station, the Commander NORAD/NORTHCOM suspended JLENS participation in the OPEX pending results from accident investigations and Failure Review Board recommendations. JLENS participation in the OPEX was terminated per an Under Secretary for Defense Policy decision memorandum dated 15 June 2016. In accordance with Army Acquisition Executive (AAE) direction, JLENS equipment supporting the OPEX was packed and stored at the APG sites effective 21 June 2016, pending higher headquarters decision on the future of the JLENS program. Courses of action under consideration are staging JLENS equipment in indefinite storage to meet potential future contingency requirements; and termination of the JLENS program with disposition/demilitarization of JLENS equipment.				

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army		Date: February 2018
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0202429A / Aerostat Joint Project - COCOM Exercise	Project (Number/Name) EP8 / COCOM Exercise
E. Performance Metrics N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army												Date: February 2018			
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0202429A / Aerostat Joint Project - COCOM Exercise				Project (Number/Name) EP8 / COCOM Exercise					
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
JLENS Exercise - PM Support, OGA, Travel, Transportation, Licenses, Agreements and program shutdown	MIPR	Multiple Various : AL/ MD/UT/SC	10.624	6.178	Jan 2017	6.749		0.001		-		0.001	4.396	27.948	-
JLENS Exercise Aberdeen Proving Ground, MD (APG) Support	MIPR	Multiple Various : MD	9.814	-		-		-		-		-	2.350	12.164	-
Subtotal			20.438	6.178		6.749		0.001		-		0.001	6.746	40.112	N/A
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
JLENS - COCOM Exercise, Failure Review Board and Displacement Contract	SS/FFP	Multiple Various : AL/ MD/NC/MA/CA	45.257	-		-		-		-		-	0.000	45.257	-
JLENS - Technical Services Contract	SS/ FFPLOE	Multiple Various : MD/MA/CA	2.000	-		-		-		-		-	0.000	2.000	-
UTTR Orbit 2 Staging	IA	Various : UT	1.257	-		-		-		-		-	0.000	1.257	-
Subtotal			48.514	-		-		-		-		-	0.000	48.514	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			68.952	6.178		6.749		0.001		-		0.001	6.746	88.626	N/A
Remarks															

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2019 Army</b>			<b>Date:</b> February 2018		
<b>Appropriation/Budget Activity</b> 2040 / 7		<b>R-1 Program Element (Number/Name)</b> PE 0202429A / <i>Aerostat Joint Project - COCOM Exercise</i>		<b>Project (Number/Name)</b> EP8 / <i>COCOM Exercise</i>	

Event Name	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
JLENS NCR Exercise Contract																												
JLENS NCR Operations																												
JLENS System Displacement																												
Combatant Command (COCOM) Assessment																												
Enduring Operation Decision Point																												
JLENS NCR Operations Final Data Submission																												
Continued New Equipment Training for Replacement Soldiers																												
Program Disposition of Assets and shutdown																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2019 Army			<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0202429A / <i>Aerostat Joint Project - COCOM Exercise</i>	<b>Project (Number/Name)</b> EP8 / <i>COCOM Exercise</i>	

**Schedule Details**

<b>Events</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Aberdeen Proving Grounds (APG) Site Planning and Preparation	1	2014	4	2015
JLENS NCR Exercise Contract	1	2015	4	2017
JLENS NCR Operations	1	2015	3	2017
JLENS System Displacement	4	2017	4	2017
Combatant Command (COCOM) Assessment	3	2017	3	2017
Enduring Operation Decision Point	3	2017	3	2017
JLENS NCR Operations Final Data Submission	3	2017	3	2017
New Equipment Training for Replacement Soldiers	2	2015	1	2016
Continued New Equipment Training for Replacement Soldiers	2	2017	2	2017
Program Disposition of Assets and shutdown	1	2018	1	2019