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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force										Date: February 2018		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0604288F I National Airborne Ops Center (NAOC) Recap							
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
Total Program Element	-	0.000	7.850	9.740	0.000	9.740	19.549	101.011	135.532	138.000	Continuing	Continuing
646507: NAOC Recap Development	-	0.000	7.850	9.740	0.000	9.740	19.549	101.011	135.532	138.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY2018, PE 0302015F, E-4B National Airborne Operations Center (NAOC) Project 674777, E-4B Aircraft Modernization efforts were transferred to PE 0604288F, National Airborne Ops Center (NAOC) Recap, Project 646507, NAOC Recap Development, in order to provide greater transparency.

A. Mission Description and Budget Item Justification

The E-4B National Airborne Operations Center (NAOC) is a survivable node of the National Military Command System (NMCS), providing POTUS, SECDEF and the CJCS a worldwide, survivable, and enduring node of the NMCS to fulfill national security requirements throughout all stages of conflict. As a command, control and communications center directing US forces, executing emergency war orders and coordinating the activities of civil authorities including national contingency plans, this capability ensures continuity of operations plans and continuity of government as required in a national emergency or after negation/destruction of ground command and control centers.

The E-4B NAOC Recapitalization effort will replace the aging E-4B fleet which faces capability gaps, diminishing manufacturing sources, increased maintenance costs, and parts obsolescence as it approaches the end of its serviceable life. The recapitalization effort will be informed by Air Force and Department of Defense analyses used to determine a holistic approach to replacing the aging E-4B fleet and integrating its capabilities with other nuclear and national command and control mission sets.

In 2015, the Joint Staff completed a Mission Area Analysis (MAA) focused on the Nuclear Command, Control and Communication (NC3) National Military Command system (NMCS) airborne fleets. This analysis examined alternative architectures and CONOPS for achieving requirements, and suggested potential programmatic, platform, and/or mission system synergies across and between fleet recapitalization programs (E-4B, E-6B, VC-25, C-32A). Further, the Joint Staff documented the essential functions necessary to execute Nuclear Command and Control, and defined the operational role of the NC2 enterprise out to 2030 in a NC2 CONOPS. From 2014-2016, the Joint Staff performed an NC2 Capabilities Based Assessment (CBA) to determine potential gaps in the NC2 mission and architecture. The findings of these studies have culminated in an evolved NMCS "aerial layer mission alignment strategy" that allows the Department of Defense (DoD) to consolidate the airborne command center capabilities provided by the E-4B and E-6B into a single fleet of uniformly-configured aircraft. This concept is known as the Survivable Airborne Operations Center, or SAOC.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver E-4B weapon system capability; furthermore it may include support funding for emerging modification requirements to support PMS, A&AS, equipment and other as required.

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BA-04 - This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P) because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.							
B. Program Change Summary (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	
Previous President's Budget		0.000	7.850	9.813	0.000	9.813	
Current President's Budget		0.000	7.850	9.740	0.000	9.740	
Total Adjustments		0.000	0.000	-0.073	0.000	-0.073	
• Congressional General Reductions		0.000	0.000				
• Congressional Directed Reductions		0.000	0.000				
• Congressional Rescissions		0.000	0.000				
• Congressional Adds		0.000	0.000				
• Congressional Directed Transfers		0.000	0.000				
• Reprogrammings		0.000	0.000				
• SBIR/STTR Transfer		0.000	0.000				
• Other Adjustments		0.000	0.000	-0.073	0.000	-0.073	
Change Summary Explanation							
No Significant Program Changes							
C. Accomplishments/Planned Programs (\$ in Millions)					FY 2017	FY 2018	FY 2019
Title: E-4B NAOC Recap					0.000	7.850	9.740
Description: Recapitalization efforts include those activities related to the current E-4B NAOC fleet. Efforts will involve early acquisition activities, to include but not limited to, preparation for a Materiel Development Decision (MDD), an Analysis of Alternatives (AoA), development of initial requirements/acquisition strategy, risk reduction activities, and other efforts necessary to initiate a recapitalization program.							
FY 2018 Plans: Conduct Analysis of Alternatives, conduct risk reduction studies & analyses, complete CONEMP development, achieve Material Development Decision (MDD) and begin Materiel Solution Analysis.							
FY 2019 Plans: Complete AoA and continue Material Solution Analysis activities.							
FY 2018 to FY 2019 Increase/Decrease Statement: Increase funds completion of AoA as well as Material Solution Analysis activities.							
Accomplishments/Planned Programs Subtotals					0.000	7.850	9.740

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D. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• RDTE 07 PE 0302015F: <i>E-4B National Airborne Operations Center (NAOC)</i>	1.000	-	0.000	-	0.000	0.000	0.000	0.000	-	Continuing	Continuing
Remarks											
E. Acquisition Strategy The E-4B Recapitalization program is currently pre-Materiel Development Decision (MDD). The current acquisition strategy primarily consists of achieving MDD and then completing the program's Analysis of Alternatives (AoA). A more robust acquisition strategy will follow as the AoA is concluded and ultimately finished.											
F. Performance Metrics Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Air Force												Date: February 2018			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0604288F / National Airborne Ops Center (NAOC) Recap				Project (Number/Name) 646507 / NAOC Recap Development					
Product Development (\$ 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
Analysis of Alternatives	MIPR	Various : TBD	-	-		4.057	Apr 2018	3.802	Oct 2019	-		3.802	Continuing	Continuing	-
CONEMP Development	MIPR	Various : TBD	-	-		0.251	Apr 2018	-		-		-	Continuing	Continuing	-
Risk Reduction Studies	MIPR	Various : TBD	-	-		2.800	Apr 2018	2.800	Oct 2019	-		2.800	Continuing	Continuing	-
Program Contract Support	MIPR	Various : TBD	-	-		0.742	Apr 2018	0.840	Oct 2019	-		0.840	Continuing	Continuing	-
Materiel Solution Analysis	MIPR	Various : TBD	-	-		-		2.298	Oct 2019	-		2.298	Continuing	Continuing	-
Subtotal			-	-		7.850		9.740		-		9.740	Continuing	Continuing	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			-	-		7.850		9.740		-		9.740	Continuing	Continuing	N/A
Remarks															
Costs associated with development planning, risk reduction and preliminary planning activities including systems engineering strategy and analysis; completion and reporting of the Analysis of Alternatives.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force																Date: February 2018			
Appropriation/Budget Activity 3600 / 4								R-1 Program Element (Number/Name) PE 0604288F / National Airborne Ops Center (NAOC) Recap								Project (Number/Name) 646507 / NAOC Recap Development			

	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
NAOC Recap Development																												
Analysis of Alternatives																												
Materiel Solution Analysis																												
Milestone A																												
Technology Maturation Risk Reduction																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force		Date: February 2018
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>NAOC Recap Development</i>				
Analysis of Alternatives	3	2018	4	2019
Materiel Solution Analysis	3	2018	2	2020
Milestone A	2	2020	2	2020
Technology Maturation Risk Reduction	3	2020	2	2022