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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force										Date: February 2018		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0401319F I Presidential Aircraft Recapitalization (PAR)							
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	288.426	311.252	434.069	673.032	0.000	673.032	739.123	638.824	536.773	332.422	Continuing	Continuing
655250: Presidential Aircraft Recap (PAR)	288.426	311.252	434.069	673.032	0.000	673.032	739.123	638.824	536.773	332.422	Continuing	Continuing
Quantity of RDT&E Articles	-	2	-	-	-	-	-	-	-	-		

Program MDAP/MAIS Code: 425

Note

FY10-14 Prior Years Funding \$27.29M was executed in PE 0401314F, BPAC 675355.

A. Mission Description and Budget Item Justification

The Presidential Aircraft Recapitalization (PAR) Program, now officially designated as VC-25B, will replace the Presidential VC-25A fleet which faces capability gaps, rising maintenance costs, and parts obsolescence as it reaches the end of its planned 30-year life-cycle. The VC-25B Program Office will deliver a new fleet of aircraft to meet the requirements for the President to execute the duties of Head of State, Chief Executive, and Commander-in-Chief. The VC-25B Program will uniquely modify Boeing 747-8 commercial aircraft to provide the President, staff, and guests with safe and reliable air transportation with the equivalent level of communications capability and security available in the White House. The modifications to the 747-8 aircraft will include an electrical power upgrade with dual Auxiliary Power Units that are usable in flight, mission communication system, work and rest environment, executive interior, military avionics, self-defense system, autonomous enplaning and deplaning, and autonomous baggage loading. No significant changes to the existing VC-25A Concept of Operations or Concept of Employment are expected.

In August 2012, the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) approved the VC-25B Materiel Development Decision. The Capability Development Document (CDD) was validated by the Joint Requirements Oversight Council in November 2014. In January 2015, the Secretary of the Air Force's Determination and Findings designated the Boeing 747-8 aircraft as the VC-25B platform, and the USD (AT&L)'s Acquisition Decision Memorandum authorized Pre-Milestone B (Pre-MS B) contracts aimed at improving affordability and reducing program execution risk. In February 2015, the Assistant Secretary of the Air Force for Acquisition approved a Justification and Approval designating Boeing as the sole source for PAR Pre-MS B activities and Post-MS B design, integration, modification, and test activities. The acquisition strategy was approved by USD(AT&L) in September 2015. In March 2017, the White House reaffirmed the minimum set of requirements necessary to meet Presidential mission needs; these requirements are codified in the March 2017 CDD. MS B certification occurred in September 2016.

This budget supports Pre-MS B risk reduction activities and studies, Post-MS B design, integration, modification, and test of two aircraft to make them Presidential mission ready. In FY17, the program began Preliminary Design (PD) and awarded a contract modification to purchase two Boeing 747-8 commercial aircraft, taking acceptance of those aircraft in early FY18. In FY18 and FY19, the program will continue PD activities and begin Engineering and Manufacturing Development (EMD).

Funds may be used to address emerging and short-notice Diminishing Manufacturing and Material Shortage (DMSMS) issues.

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This program element may include necessary civilian pay expenses required to manage, execute, and deliver VC-25B system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, and 0605898F.						
This program is in Budget Activity 5, System Development and Demonstration (SDD), because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements.						
B. Program Change Summary (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget		351.220	434.069	737.096	0.000	737.096
Current President's Budget		311.252	434.069	673.032	0.000	673.032
Total Adjustments		-39.968	0.000	-64.064	0.000	-64.064
• Congressional General Reductions		0.000	0.000			
• Congressional Directed Reductions		-29.000	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		-10.968	0.000			
• Other Adjustments		0.000	0.000	-64.064	0.000	-64.064
Change Summary Explanation						
The FY17 funding request was reduced by \$39.968M due to a Congressional mark for early-to-need Preliminary Design and Small Business Innovative Research taxes. The FY19 funding request was reduced by \$59M to account for the change in acquisition strategy for the purchase of the 747-8 aircraft.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2017	FY 2018	FY 2019
Title: PAR Pre-MS B Risk Reduction, Commercial A/C, PD, EMD, & Program Management Administration (PMA)				310.729	433.219	669.537
Description: Pre-MS B activities to refine requirements and reduce risk; begin PD activities and utilize modeling and simulation, system integration labs, and mockups to assist in the design; execute EMD activities; and accomplish PMA to support the Program Office. In FY17, the Program Office purchased two commercial 747-8 aircraft which will enable PAR test activities. EMD activities include the management, detailed design, integration, modification, test/verification, certification, and pre-operational support to deliver two VC-25B Aircraft to be Presidential mission-ready.						
FY 2018 Plans: Funds in FY 2018 will continue PD activities, begin EMD, and support PMA.						
FY 2019 Plans:						

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2017	FY 2018	FY 2019
Funds in FY 2019 will continue PD and EMD activities, and support PMA.												
FY 2018 to FY 2019 Increase/Decrease Statement: The increase in funding is due to the ramp up of EMD design, integration, modification, and test activities.												
Title: VC-25B Government Test										0.523	0.850	3.495
Description: Government test activities to prepare for, oversee, and conduct test events.												
FY 2018 Plans: Funds in FY 2018 will be used to prepare for and participate in test planning and events leading to PDR, update the Test & Evaluation Master Plan (TEMP), and support EMD contract modification award.												
FY 2019 Plans: Funds in FY 2019 will be used for Systems Integration Laboratory (SIL) development and design discussions for events leading to CDR; and participation in early test planning and reviews.												
FY 2018 to FY 2019 Increase/Decrease Statement: The increase in funding is due to increased test planning with SIL development efforts, and oversight with the start of SIL testing.												
Accomplishments/Planned Programs Subtotals										311.252	434.069	673.032
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	
• MILCON PE 0401319F: PAR Facilities	22.220	271.500	191.000	-	191.000	-	-	-	-	Continuing	Continuing	
• OPAF 04 Lineitem 843050: PAR Mechanized Material Handling Equip	-	-	41.110	-	41.110	-	-	-	-	Continuing	Continuing	
• OPAF 03 Lineitem 8347240: PAR CCTV/Audiovisual Equipment	-	-	4.010	-	4.010	-	-	-	-	Continuing	Continuing	
• OPAF 03 Lineitem 837300: PAR Base Comm Infrastructure	-	-	-	-	-	4.010	-	-	-	Continuing	Continuing	
• O&M O&M: PE 0401319F: PAR Furnishings and Equipment	-	-	-	-	-	-	1.951	-	-	Continuing	Continuing	

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D. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u> <u>Base</u>	<u>FY 2019</u> <u>OCO</u>	<u>FY 2019</u> <u>Total</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
Remarks FY18 MILCON funding line pending Congressional marks for as much as \$196M. The FY19 numbers account for those pending marks in order to maintain full funding.											
E. Acquisition Strategy The USD(AT&L) VC-25B Acquisition Strategy was approved in September 2015. The VC-25B Program will integrate technologically mature subsystems into commercial Boeing 747-8 aircraft. The VC-25B Program will design, integrate, modify, and test two aircraft to make them Presidential mission ready. Boeing will be the prime integrator for VC-25B development activities. However, the Air Force intends to incorporate competition for subsystems for the modified aircraft as much as practicable and will participate substantively in selected Boeing-led subsystem competitions. The VC-25B Program has a single contract with multiple planned major contract modifications which include 747-8 commercial aircraft, PD and EMD. The contract for risk reduction activities was awarded on 29 January 2016. The contract modification for two commercial aircraft was awarded 4 August 2017. The contract modification for PD was awarded 12 September 2017.											
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 / 5						R-1 Program Element (Number/Name) PE 0401319F / Presidential Aircraft Recapitalization (PAR)				Project (Number/Name) 655250 / Presidential Aircraft Recap (PAR)					
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
VC-25B Contract Activities	SS/ Various	The Boeing Company : Seattle, WA	280.129	304.873	Mar 2017	425.657	Dec 2017	662.050	Oct 2018	-		662.050	Continuing	Continuing	-
Subtotal			280.129	304.873		425.657		662.050		-		662.050	Continuing	Continuing	N/A
Test and Evaluation (\$ 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
VC-25B Developmental Test and Evaluation	MIPR	412 TW, JITC : Various, NV	0.231	0.523	Feb 2017	0.850	Oct 2017	3.495	Dec 2018	-		3.495	Continuing	Continuing	-
Subtotal			0.231	0.523		0.850		3.495		-		3.495	Continuing	Continuing	N/A
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
VC-25B Other Government Costs	Various	AFLCMC/WV : WPAFB, OH	2.759	2.297	Nov 2016	3.230	Nov 2017	3.787	Nov 2018	-		3.787	Continuing	Continuing	-
VC-25B A&AS	C/T&M	AFLCMC/WL : WPAFB, OH	5.307	3.559	Dec 2016	4.332	Feb 2018	3.700	Feb 2019	-		3.700	Continuing	Continuing	-
Subtotal			8.066	5.856		7.562		7.487		-		7.487	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			288.426	311.252		434.069		673.032		-		673.032	Continuing	Continuing	N/A
Remarks FY 2010-2014 RDT&E Funding (\$27.3M) was executed in PE 0401314F, Project 675355, BA07.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force			Date: February 2018		
Appropriation/Budget Activity 3600 / 5		R-1 Program Element (Number/Name) PE 0401319F / <i>Presidential Aircraft Recapitalization (PAR)</i>			Project (Number/Name) 655250 / <i>Presidential Aircraft Recap (PAR)</i>

	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
VC-25B																												
Pre-MS B Risk Reduction Activities																												
Commercial A/C Award																												
Preliminary Design Award & Activities																												
In-Progress Review, FY17																												
PDR																												
In-Progress Review, FY18																												
CDR																												
EMD Award & Activities																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401319F / <i>Presidential Aircraft</i> <i>Recapitalization (PAR)</i>	Project (Number/Name) 655250 / <i>Presidential Aircraft Recap (PAR)</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
VC-25B				
Pre-MS B Risk Reduction Activities	1	2017	2	2018
Commercial A/C Award	4	2017	4	2017
Preliminary Design Award & Activities	4	2017	1	2019
In-Progress Review, FY17	3	2017	3	2017
PDR	1	2019	1	2019
In-Progress Review, FY18	3	2018	3	2018
CDR	1	2020	1	2020
EMD Award & Activities	4	2018	4	2023