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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force										Date: February 2019		
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 VC-25B							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	599.678	418.500	657.932	757.923	0.000	757.923	718.324	585.473	514.522	354.688	68.563	4,675.603
655250: VC-25B	599.678	418.500	657.932	757.923	0.000	757.923	718.324	585.473	514.522	354.688	68.563	4,675.603
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 VC-25B Program, formerly known as the Presidential Aircraft Recapitalization (PAR) Program, will replace the Presidential VC-25A fleet which faces capability gaps, rising maintenance costs, and parts obsolescence as it ages beyond 30 years. 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 two 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, a mission communication system, a work and rest environment, an executive interior, military avionics, a 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 airframe 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 Pre-MS B activities; and Post-MS B design, integration, modification, and test activities. USD(AT&L) approved the initial acquisition strategy in September 2015. MS B certification occurred in September 2016. 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. Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)) approved the updated acquisition strategy and the Acquisition Program Baseline (APB) in December 2018.  This budget supports Post-MS B design, integration, modification, and test of two aircraft to make them Presidential mission ready. In FY18 and FY19, the program continued Preliminary Design (PD) and awarded the Engineering and Manufacturing Development (EMD) contract modification. In FY20, the program will continue EMD activities to include design, integration, modification, and test, as well as begin Product Support (PS) activities.  Funds may be used to address emerging and short-notice Diminishing Manufacturing Sources and Material Shortage (DMSMS) issues.												

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This program element includes necessary civilian pay expenses required to manage, execute, and deliver the 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.						
As directed in the FY 2018 NDAA, Sec 825, amendment to PL 114-92 FY 2016 NDAA, Sec 828 Penalty for Cost Overruns, the FY 2018 Air Force penalty total is \$14.373M. The calculated percentage reduction to each research, development, test and evaluation and procurement account will be allocated proportionally from all programs, projects, or activities under such account.						
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 prior to full rate production.						
B. Program Change Summary (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget		434.069	673.032	739.123	0.000	739.123
Current President's Budget		418.500	657.932	757.923	0.000	757.923
Total Adjustments		-15.569	-15.100	18.800	0.000	18.800
• Congressional General Reductions		0.000	0.000			
• Congressional Directed Reductions		0.000	-15.100			
• 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		-15.569	0.000			
• Other Adjustments		0.000	0.000	18.800	0.000	18.800
Change Summary Explanation						
The FY18 funding was reduced by \$15.569M due to Small Business Innovative Research (SBIR) transfer.						
The FY19 funding was reduced by \$15.1M due to a Congressional mark, (\$5.1M EMD hot start unjustified) and (\$10M EMD funding unjustified).						
The FY19 funding is expected to be reduced by an additional \$23.599M due to SBIR transfer.						
The FY20 funding was increased by \$18.8M to fully fund VC-25B to the Acquisition Program Baseline.						
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: VC-25B PD, EMD, Product Support, & Program Management Administration (PMA)		417.650	656.701	755.388	0.000	755.388

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
<p><b>Description:</b> Continue PD activities and utilize modeling and simulation, system integration labs, and mockups to assist in design; execute EMD activities; and accomplish PMA to support the Program Office. FY20 will continue EMD activities such as the management, detailed design, integration, modification, test/verification, certification, and product support to deliver two Presidential mission-ready VC-25B Aircraft.</p> <p><b>FY 2019 Plans:</b> Funds in FY 2019 continue PD and EMD activities, and support PMA.</p> <p><b>FY 2020 Base Plans:</b> Funds in FY 2020 will continue EMD activities, begin product support activities, and support PMA.</p> <p><b>FY 2020 OCO Plans:</b> N/A</p> <p><b>FY 2019 to FY 2020 Increase/Decrease Statement:</b> The increase in funding shown is misrepresented. The FY20 budget reflects the VC-25B APB with a \$141M shortfall in FY19. The FY19 shortfall will be addressed as part of the budgeting process. If approved, there will be a FY19 to FY20 decrease in funding due to the purchase of material long-lead items in FY19, and the transition from more costly design activities to the actual modification of the aircraft.</p>						
<p><b>Title:</b> VC-25B Government Test</p> <p><b>Description:</b> Government test activities to prepare for, oversee, and conduct test events.</p> <p><b>FY 2019 Plans:</b> Funds in FY 2019 are being used for Systems Integration Laboratory (SIL) development and design discussions for events leading to CDR; and participation in early test planning and reviews.</p> <p><b>FY 2020 Base Plans:</b> Funds in FY 2020 will be used to conduct test planning with Joint Interoperability Test Command (JITC), Lead Developmental Test and Evaluation Organization (LDTO), and Facilities/Ranges; as well as participate in working groups and reviews.</p> <p><b>FY 2020 OCO Plans:</b> N/A</p> <p><b>FY 2019 to FY 2020 Increase/Decrease Statement:</b></p>		0.850	1.231	2.535	0.000	2.535

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
The increase in funding is due to ramp-up of test planning activities in support of JITC, LDTO, and Facilities/Ranges, as well as the ramp-up of test planning activities related to the Mission Communication System (MCS) and SILs.														
Accomplishments/Planned Programs Subtotals										418.500	657.932	757.923	0.000	757.923
D. Other Program Funding Summary (\$ in Millions)														
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost			
• MILCON PE 0401319F: PAR Facilities	142.384	166.116	86.000	-	86.000	-	-	-	-	0.000	394.500			
• OPAF 03 Lineitem 843050: PAR Mechanized Material Handling Equip	-	41.110	-	-	-	-	-	-	-	0.000	41.110			
• OPAF 03 Lineitem 8347240: PAR CCTV/Audiovisual Equipment	-	3.005	-	-	-	-	-	-	-	0.000	3.005			
• OPAF 03 Lineitem 837300: PAR Base Comm Infrastructure	-	-	4.010	-	4.010	0.500	2.600	1.700	-	0.000	8.810			
• O&M O&M: PE 0401319F: PAR Furnishings and Equipment	-	-	-	-	-	1.951	-	-	-	0.000	1.951			
Remarks														
E. Acquisition Strategy														
USD(AT&L) approved the initial VC-25B Acquisition Strategy in September 2015. USD(A&S) approved the updated VC-25B Acquisition Strategy and set the APB in December 2018. The FY20 budget reflects the VC-25B APB with a \$141M shortfall in FY19. The FY19 shortfall will be addressed as part of the budgeting process. 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 is the prime integrator for VC-25B development activities. The VC-25B Program has a single contract with multiple major contract modifications which include risk reduction activities, 747-8 commercial aircraft purchase, PD, EMD, and Product Support. The contract for risk reduction activities was awarded in January 2016. The contract modification to purchase two commercial aircraft was awarded in August 2017. The contract modification for PD was awarded in September 2017. The contract modification for EMD was awarded in July 2018.														

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<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0401319F / VC-25B	
<b><u>F. Performance Metrics</u></b> <p>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.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 5						R-1 Program Element (Number/Name) PE 0401319F / VC-25B				Project (Number/Name) 655250 / VC-25B					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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 : Various	585.002	410.943	Jul 2018	643.125		741.728		-		741.728	2,114.129	4,494.927	-
Subtotal			585.002	410.943		643.125		741.728		-		741.728	2,114.129	4,494.927	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	0.754	0.850	Oct 2017	1.231	Dec 2018	2.535	Dec 2019	-		2.535	58.910	64.280	-
Subtotal			0.754	0.850		1.231		2.535		-		2.535	58.910	64.280	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	5.056	2.941	Nov 2017	9.504	Nov 2018	9.477	Nov 2019	-		9.477	45.632	72.610	-
VC-25B A&AS	C/T&M	AFLCMC/WL : WPAFB, OH	8.866	3.766	Feb 2018	4.072	Feb 2019	4.183	Feb 2020	-		4.183	22.896	43.783	-
Subtotal			13.922	6.707		13.576		13.660		-		13.660	68.528	116.393	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			599.678	418.500		657.932		757.923		-		757.923	2,241.567	4,675.600	N/A
Remarks FY 2010-2014 RDT&E Funding (\$27.3M) was executed in PE 0401314F, Project 675355, BA07.															

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2020 Air Force															<b>Date:</b> February 2019				
<b>Appropriation/Budget Activity</b> 3600 / 5										<b>R-1 Program Element (Number/Name)</b> PE 0401319F / VC-25B					<b>Project (Number/Name)</b> 655250 / VC-25B				

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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>VC-25B</b>																												
Pre-MS B Risk Reduction Activities																												
PD																												
In-Progress Review, FY18																												
PDR																												
EMD																												
In-Progress Review, FY19																												
CDR																												
Product Support																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2020 Air Force			<b>Date:</b> February 2019
<b>Appropriation/Budget Activity</b> 3600 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0401319F / VC-25B	<b>Project (Number/Name)</b> 655250 / VC-25B	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>VC-25B</b>				
Pre-MS B Risk Reduction Activities	1	2018	2	2018
PD	1	2018	1	2019
In-Progress Review, FY18	3	2018	3	2018
PDR	1	2019	1	2019
EMD	4	2018	4	2024
In-Progress Review, FY19	1	2019	1	2019
CDR	4	2019	4	2019
Product Support	4	2020	4	2024