Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force Date: May 2017

Appropriation/Budget Activity R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 5: System PE 0401319F I Presidential Aircraft Recapitalization (PAR)

Development & Demonstration (SDD)

	,											
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	11.006	82.420	351.220	434.069	0.000	434.069	737.096	835.479	649.636	540.659	Continuing	Continuing
655250: Presidential Aircraft Recap (PAR)	11.006	82.420	351.220	434.069	0.000	434.069	737.096	835.479	649.636	540.659	Continuing	Continuing
Quantity of RDT&E Articles	-	-	2	-	-	-	-	-	-	-		

Program MDAP/MAIS Code: 425

Note

PE 0401319F, Presidential Aircraft Recapitalization, changed from incorrect name of Presidential Aircraft Replacement. 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 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 PAR 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 PAR 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 PAR 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 PAR 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.

This budget supports Pre-MS B risk reduction activities and studies, as well as Post-MS B design, integration, modification, and test of two aircraft to make them Presidential mission ready. Pre-MS B efforts are the first step in a deliberate process to control program risks and life-cycle costs. These activities include the definition of detailed requirements and design trade-offs required to support informed decisions, leading to a lower risk Engineering and Manufacturing Development program and lower life cycle costs. MS B certification occurred in September 2016. In FY17, the program will purchase two Boeing 747-8 commercial aircraft and begin Preliminary Design. The FY 2018 funding request was reduced by \$191.562 million to account for the availability of prior year execution balances.

PE 0401319F: Presidential Aircraft Recapitalization (... Air Force

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force

Date: May 2017

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)

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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	82.420	351.220	625.631	0.000	625.631
Current President's Budget	82.420	351.220	434.069	0.000	434.069
Total Adjustments	0.000	0.000	-191.562	0.000	-191.562
 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	-191.562	0.000	-191.562

Change Summary Explanation

The FY 2018 funding request was reduced by \$191.562 million to account for the availability of prior year execution balances.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: PAR Pre-MS B Risk Reduction, Commercial A/C, Prelim Design, EMD, & PMA	82.354	350.697	433.219
Description: Pre-MS B activities to refine requirements and reduce risk; begin Preliminary Design activities and utilize modeling and simulation, system integration labs, and mockups to assist in the design; EMD activities; and Program Management Administration to support the Program Office. In FY17, the Program Office will begin incrementally funding 2 commercial 747-8 aircraft which will enable PAR test activities. EMD activities will include the management, detailed design, integration, modification, test/verification, certification, and pre-operational support to deliver two PAR Aircraft to be Presidential mission ready. FY 2016 Accomplishments: Funds in FY 2016 continued Pre-MS B activities and supported Program Management Administration.			
FY 2017 Plans: Funds in FY 2017 will complete Pre-MS B activities, begin Preliminary Design activities, and support Program Management Administration. The Program Office will also begin incrementally funding 2 aircraft which will support PAR developmental activities. FY 2018 Plans:			

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Air Force

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 5: System

PE 0401319F I Presidential Aircraft Recapitalization (PAR)

Development & Demonstration (SDD)

FY 2016	FY 2017	FY 2018
0.066	0.523	0.850
s 82.420	351.220	434.069
	0.066	0.066 0.523

D. Other Program Funding Summary (\$ in Millions)

		-	FY 2018	FY 2018	FY 2018					Cost To	
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost
• MILCON: PE	0.000	22.220	271.500	0.000	271.500	37.000	0.000	0.000	0.000	0.00	330.720
0401319F: PAR Facilities											
OPAF: BA04: Lineitem	0.000	0.000	0.000	0.000	0.000	41.403	0.000	0.000	0.000	0.00	41.403
#843050: PAR Mechanized											
Material Handling Equip											
• OPAF: BA03: Lineitem #8347240:	0.000	0.000	0.000	0.000	0.000	4.039	0.000	0.000	0.000	0.00	4.039
PAR CCTV/Audiovisual Equipment											
• OPAF: BA03: Lineitem #837300:	0.000	0.000	0.000	0.000	0.000	0.000	4.040	0.000	0.000	0.00	4.040
PAR Base Comm Infrastructure											
• O&M: PE 0401319F: <i>PAR</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.002	0.000	0.00	2.002
Furnishings and Equipment											

Remarks

E. Acquisition Strategy

The USD(AT&L) PAR Acquisition Strategy was approved in September 2015. The PAR Program will integrate technologically mature subsystems into commercial Boeing 747-8 aircraft. The PAR Program will design, integrate, modify, and test two aircraft to make them Presidential mission ready. Boeing will be the prime

PE 0401319F: Presidential Aircraft Recapitalization (... Air Force

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force		Date: May 2017
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 (P.	,
integrator for PAR development activities. However, the Air Force intends to and will participate substantively in selected Boeing-led subsystem competition modifications which include 747-8 commercial aircraft, Preliminary Design, and	ons. The PAR Program will have a single contract with m	ultiple planned major contract
F. Performance Metrics Please refer to the Performance Base Budget Overview Book for information Force performance goals and most importantly, how they contribute to our missing performance goals.		esources are contributing to Air

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Exhibit R-3, RDT&E			2018 Air F	orce							1_			7						
Appropriation/Budge 3600 / 5	et Activity	<i>y</i>		PE 040		Presidenti	umber/Na al Aircraft				Cost To Cost To Cost Complete Cost Continuing Continuing Continuing Continuing Continuing Cost Cost Contract Cost Complete Cost Complete Cost Contract Cost Complete Cost Contract Cost Complete Cost Contract Cost Complete Cost Contract Cost Cost Cost Contract Cost Cost Cost Cost Cost Contract Cost Cost Cost Cost Cost Cost Cost Cos									
Product Developme	nt (\$ in M	illions)		FY	2016	FY 2	2017		2018 ise	FY 2	2018 CO	FY 2018 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			Target Value of Contract					
PAR Contract Activities	SS/ Various	The Boeing Company : Seattle, WA	7.660	77.246	Feb 2016	343.135	Mar 2017	425.732	Jan 2018	0.000		425.732	Continuing	Continuing	-					
		Subtotal	7.660	77.246		343.135		425.732		0.000		425.732	-	-	-					
Support (\$ in Million	ıs)			FY 2	2016	FY 2	2017		2018 ise	FY 2		FY 2018 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			Target Value of Contract					
		Subtotal	-	-		-		-		-		-	-	-	-					
Test and Evaluation	(\$ in Mill	ions)		FY 2	2016	FY 2	2017	FY 2 Ba	2018 ise	FY 2		FY 2018 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		Target Value of Contract					
PAR Developmental Test and Evaluation	MIPR	412 TW, JITC : Various	0.165	0.066	Jan 2016	0.523	Jan 2017	0.850	Jan 2018	0.000		0.850	Continuing	Continuing	-					
		Subtotal	0.165	0.066		0.523		0.850		0.000		0.850	-	-	-					
Management Service	es (\$ in N	lillions)		FY 2	2016	FY 2	2017		2018 ise	FY 2		FY 2018 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	Total Cost	Target Value of Contract					
PAR Other Government Costs	Various	AFLCMC/WLJ: WPAFB, OH	1.357	1.571	Mar 2016	2.600	Nov 2016	2.537	Nov 2017	0.000		2.537	Continuing	Continuing	-					
	C/TOM	AFLCMC/WL:	1.824	3.537	Feb 2016	4.962	Mar 2017	4.950	Feb 2018	0.000		4.950	Continuing	Continuing	-					
PAR A&AS	C/T&M	WPAFB, OH												1	1					

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2	2018 Air F	orce							Date:	May 2017	7	
Appropriation/Budget Activity 3600 / 5			PE 040	•	Presidenti	lumber/Na ial Aircraft	,	Project (655250 /		r/ Name) ntial Aircr	aft Reca _l	o (PAR)
	Prior Years	FY 2016	FY 2	2017	1	2018 ase	FY 2 OC		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	11.006	82.420	351.220		434.069		0.000		434.069	-	-	-

Remarks

FY 2010-2014 RDT&E Funding (\$27.3M) was executed in PE 0401314F, Project 675355, BA07.

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xhibit R-4, RDT&E Schedule Profile: FY 2018 A	Air F	orce																						Dat	e: M	lay	20	17			
ppropriation/Budget Activity 600 / 5								PE	040	r ogra 0131 oitaliz	9F	I Pr	esid	der	•			ime)						er/N dent				t Re	сар	(PAF
		FY	2016			FY	201	17		FY	20	18			FY	201	9		FY	20	20			FY	202 ²	1		F	FY 2	022	
	1	2	3	4	1	2	2 3	4	. 1	1 2	2 ;	3	4	1	2	3	4	1	2	2 3	3	4	1	2	3	4	Ļ	1	2	3	4
Pre-MS B Risk Reduction Activities												·						,												·	
Commercial A/C RFP Release																															
Milestone B and EMD RFP Release Decision																															
Commercial A/C Award																															
Preliminary Design Award & Activities																															
In Process Review, FY17																															
PDR																															
In Process Review, FY18																															
EMD Award & Activities																															
CDR																															

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Air Force			Date: May 2017
3600 / 5	, ,	- , (umber/Name) Presidential Aircraft Recap (PAR)

Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
Pre-MS B Risk Reduction Activities	2	2016	2	2018
Commercial A/C RFP Release	2	2016	2	2016
Milestone B and EMD RFP Release Decision	4	2016	4	2016
Commercial A/C Award	3	2017	3	2017
Preliminary Design Award & Activities	4	2017	2	2019
In Process Review, FY17	3	2017	3	2017
PDR	4	2018	4	2018
In Process Review, FY18	3	2018	3	2018
EMD Award & Activities	3	2018	4	2022
CDR	3	2019	3	2019