Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force

Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

PE 0401314F I Operational Support Airlift

Operational Systems Development

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	49.898	17.521	38.538	27.784	-	27.784	38.376	16.283	-	-	Continuing	Continuing
675355: Presidential Aircraft Recapitalization	11.753	7.247	6.153	-	-	-	-	-	-	-	Continuing	Continuing
676024: VC-25 Avionics Modernization Program	38.145	10.274	32.385	27.784	-	27.784	38.376	16.283	-	-	Continuing	Continuing

MDAP/MAIS Code: 425

#### **Note**

FY15 and beyond, Project 675355 Presidential Aircraft Recapitalization efforts will be executed in PE0401319F, Project 655250, Presidential Aircraft Recap in order to improve transparency for ACAT I acquisition programs.

## A. Mission Description and Budget Item Justification

This line item previously supported two Presidential support airlift modernization efforts: Presidential Aircraft Recapitalization (PAR) and VC-25A Avionics Modernization Program (AMP). FY15 and beyond, Project 675355 Presidential Aircraft Recapitalization efforts will be executed in PE0401319F, Project 655250, Presidential Aircraft Recap in order to improve transparency for ACAT I acquisition programs; this line item is dedicated soley to VC-25A AMP.

VC-25A AMP assures unrestricted global access to civilian and military airspace to support the President of the United States as Head of State, Chief Executive, and Commander in Chief. AMP upgrades use a systems approach to aid pilot awareness and alleviate task saturation enhancing safety in a high technology concentrated airspace environment. VC-25A AMP is a required modification to address safety of flight and to ensure the viability of the Presidential support airlift fleet until PAR is fielded.

PE 0401314F: Operational Support Airlift

Air Force Page 1 of 14

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force

**Appropriation/Budget Activity** 

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

Operational Systems Development

R-1 Program Element (Number/Name)
PE 0401314F / Operational Support Airlift

Date: March 2014

operational Systems Bevelopment					
B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	7.471	44.553	21.144	-	21.144
Current President's Budget	17.521	38.538	27.784	-	27.784
Total Adjustments	10.050	-6.015	6.640	-	6.640
<ul> <li>Congressional General Reductions</li> </ul>	-0.025	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-6.015			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	11.100	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.224	-			
Other Adjustments	-0.801	-	6.640	-	6.640

### **Change Summary Explanation**

FY13 adjustment of \$11.1M was a Congressional Add for VC-25 AMP to mitigate a shortfall from an FY12 Mark.

FY14 adjustment is a Congressional Directed Reduction due to program decrease (\$6.015M).

FY15 adjustment of \$6.640M is due to greater than expected Non Recurring Engineering (NRE) costs and inaccurate contractor estimates.

Note: FY15 and beyond, Project 675355 Presidential Aircraft Recapitalization efforts will be executed in PE0401319F, Project 655250, Presidential Aircraft Recapin order to improve transparency for ACAT I acquisition programs.

PE 0401314F: Operational Support Airlift Air Force

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Exhibit R-2A, RDT&E Project J	Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force  Date: March 2014											
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0401314F / Operational Support Airlift Recapitalization  Project (Number/Name) 675355 / Presidential Aircraft Recapitalization							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
675355: Presidential Aircraft Recapitalization	11.753	7.247	6.153	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

#### Note

FY15 and beyond, Project 675355 Presidential Aircraft Recapitalization efforts will be executed in PE0401319F, Project 655250, Presidential Aircraft Recap in order to improve transparency for ACAT I acquisition programs.

### A. Mission Description and Budget Item Justification

This funding supports development planning efforts and studies as well as Engineering and Manufacturing Development (EMD) contract activities for the Presidential Aircraft Recapitalization (PAR) effort. PAR will recapitalize the VC-25A system and support the Office of the President in executing Constitutional roles of Head of State, Chief Executive, and Commander in Chief. The principal mission of PAR is to provide the President of the United States and the President's staff and guests with safe, comfortable air transportation with the same level of security and communications capability as is available at the White House. As a 'national level' airborne communications node providing voice, data, video, processed imagery and network services, PAR enables the President and traveling staff to address the full range of political and military operations globally. Development planning funding supports planning efforts and products including systems engineering strategy and analysis; risk analysis and management; concept definition and trade studies; test and evaluation strategy; life cycle cost estimates; sustainment and logistics analysis; information support and network analysis; technology and manufacturing maturity analysis and acquisition planning analysis. Funding also supports award of the PAR EMD contract and initial preliminary design efforts.

FY15 and beyond, Project 675355 Presidential Aircraft Recapitalization efforts will be executed in PE0401319F, Project 655250, Presidential Aircraft Recap in order to improve transparency for ACAT I acquisition programs.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Development Planning	7.247	6.153	-
Description: Developmental Planning/EMD Contract			
FY 2013 Accomplishments: Continued risk reduction preliminary planning activities:			

PE 0401314F: Operational Support Airlift

Air Force

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force			Date: March 2014
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401314F / Operational Support Airlift	- 3 (	lumber/Name) Presidential Aircraft
550077	1 E 04010141 / Operational Support Airline	Recapitaliz	

	Re	capitalization		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Systems engineering strategy and analysis; risk reduction analysis and manage and trade studies; test and evaluation strategy; life cycle cost estimates; sustain and network analysis; technology and manufacturing maturity analysis; and according to the cost of the cost of the cycle cost estimates; sustain and network analysis; technology and manufacturing maturity analysis; and according to the cycle cost of the cycle cost of the cycle cost of the cycle cost of the cycle cycle cost of the cycle cycle cycle cost of the cycle cycl	nment and logistics analysis; information support			
FY 2014 Plans: Update developmental planning products: Systems engineering strategy and a concept definition, requirements analysis and trade studies; test and evaluation and logistics analysis; information support and network analysis; technology an planning.	strategy; life cycle cost estimates; sustainment			
<b>FY 2015 Plans:</b> N/A				
	Accomplishments/Planned Programs Subtot	als 7.247	6.153	-

## C. Other Program Funding Summary (\$ in Millions)

			FY 2015	FY 2015	FY 2015					<b>Cost To</b>	
<u>Line Item</u>	FY 2013	FY 2014	<u>Base</u>	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	<b>Complete</b>	<b>Total Cost</b>
<ul><li>RDTE: BA07: PE0401319F:</li></ul>	-	-	11.006	-	11.006	103.302	490.794	518.092	527.951	Continuing	Continuing

## Presidential Aircraft Recap (PAR)

#### Remarks

FY15 and beyond PAR costs now contained in PE 0401319F.

# D. Acquisition Strategy

Acquisition strategy dependent on Milestone Decision Authority approval.

## E. 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.

PE 0401314F: Operational Support Airlift

Air Force Page 4 of 14 R-1 Line #235

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air Force

Appropriation/Budget Activity
3600 / 7

R-1 Program Element (Number/Name)
PE 0401314F / Operational Support Airlift
Recapitalization

Date: March 2014

Project (Number/Name)
675355 / Presidential Aircraft
Recapitalization

Product Developme	nt (\$ in M	illions)		FY 2	2013	FY 2	2014	FY 2 Ba		FY 2	2015 CO	FY 2015 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
Government Studies	Various	AFLCMC/WLVA : Dayton, OH	11.661	7.132	Feb 2013	5.863	Feb 2014	-		-		-	Continuing	Continuing	-
		Subtotal	11.661	7.132		5.863		_		_		_	_	_	_

#### Remarks

Costs associated with development planning, risk reduction and preliminary planning activities including systems engineering strategy and analysis; risk reduction analysis and management; concept definition, requirements analysis and trade studies; test and evaluation strategy; life cycle cost estimates; sustainment and logistics analysis; information support and network analysis; technology and manufacturing maturity analysis; and acquisition planning.

Support (\$ in Millior	ıs)			FY 2	2013	FY 2	2014		2015 ase		2015 CO	FY 2015 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
		Subtotal	-	-		-		-		-		-	-	-	-
Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY 2	2014		2015 ase		2015 CO	FY 2015 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
		Subtotal	-	-		-		-		-		-	-	-	-
Management Servic	es (\$ in M	illions)		FY 2	2013	FY 2	2014		2015 ase		2015 CO	FY 2015 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
Program Management	Various	AFLCMC/WLVA :	0.092	0.115		0.290		-		-		-	-	0.497	-

#### Remarks

Activities

Program Management Administration enables operation of program office management and oversight to support PAR. Management activities include travel to support developmental planning efforts.

0.115

PE 0401314F: Operational Support Airlift
Air Force

Dayton, OH

Subtotal

0.092

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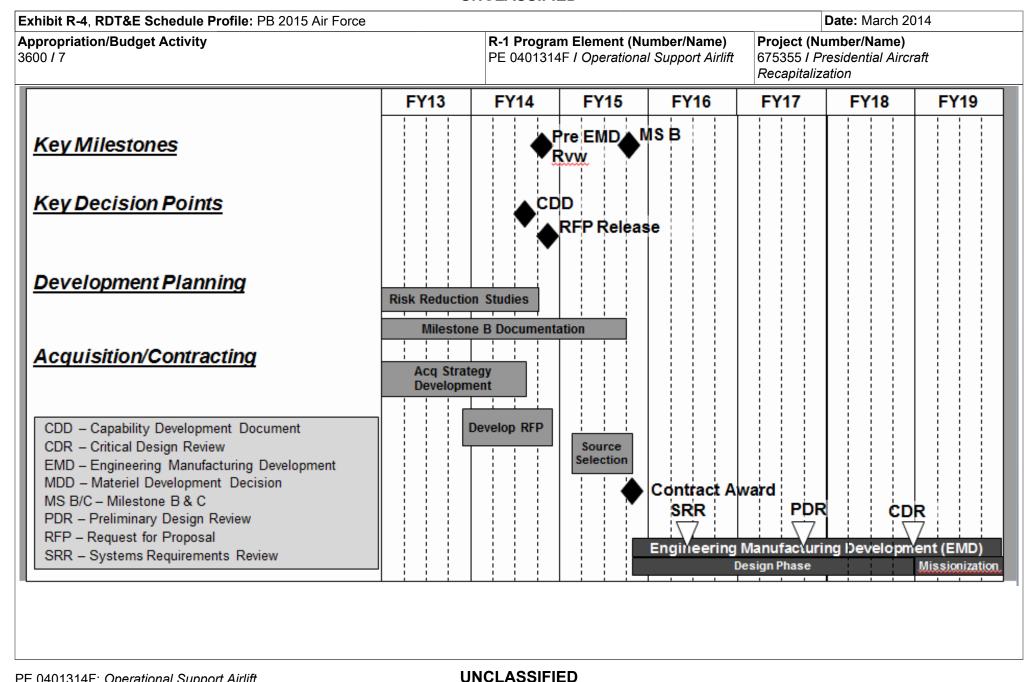
0.290

R-1 Line #235

0.497

Exhibit R-3, RDT&E Project Cost Analysis: PB 2	2015 Air Fo	orce						Date:	March 20	14			
<b>Appropriation/Budget Activity</b> 3600 / 7					nent (Number/N erational Suppo	•	67535	ject (Number/Name) 355 I Presidential Aircraft capitalization					
	Prior Years	FY 2013	FY 201	4	FY 2015 Base	1 -	2015 CO	FY 2015 Total	Cost To	Total Cost	Target Value of Contract		
Project Cost Totals	11.753	7.247	6.153		-	-		-	-	-	-		

PE 0401314F: Operational Support Airlift



PE 0401314F: Operational Support Airlift Air Force

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force			Date: March 2014
1	PE 0401314F / Operational Support Airlift	- , \	umber/Name) Presidential Aircraft cation

# Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
Acquisition Strategy Development	1	2013	4	2014
Develop RFP	4	2013	4	2014
CDD	4	2013	3	2014
Release RFP	4	2014	4	2014
Source Selection	1	2015	4	2015
MS B	4	2015	4	2015
Design Contract Award	4	2015	4	2015
Engineering/Design	4	2015	4	2018
SRR	2	2016	2	2016
PDR	3	2017	3	2017
CDR	4	2018	4	2018

PE 0401314F: Operational Support Airlift

Exhibit R-2A, RDT&E Project Ju	stification:	PB 2015 A	ir Force							Date: Mar	ch 2014	
Appropriation/Budget Activity 3600 / 7			R-1 Program Element (Number/Name) PE 0401314F / Operational Support Airlift Project (Number/Name) 676024 / VC-25 Avionics Normalist Program				,	zation				
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
676024: VC-25 Avionics Modernization Program	38.145	10.274	32.385	27.784	-	27.784	38.376	16.283	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

### A. Mission Description and Budget Item Justification

VC-25A Avionics Modernization Program (AMP) assures unrestricted global access to civilian and military airspace to support the President of the United States as Head of State, Chief Executive, and Commander in Chief. AMP upgrades use a systems approach to aid pilot awareness and alleviate task saturation enhancing safety in a high technology concentrated airspace environment. VC-25A AMP is a required modification to ensure the viability of the Presidential support airlift fleet until the Presidential Aircraft Recapitalization (PAR) program is fielded.

If not installed, the VC-25A will not be upgraded with modern flight deck avionics and safety of flight equipment and the President of the United States, while aboard the VC-25A, may encounter routing, timing, or other airspace restrictions, impeding the safe and effective transport of the President.

AMP complies with mandates for Automatic Dependent Surveillance-Broadcast (ADS-B) Out and Identification Friend or Foe (IFF) Mode 5 as well as a Coupled Vertical Navigation (VNAV) capability. It will incorporate multiple subsystems, to include, but not limited to, maneuver camera system, large cockpit displays, and navigation radios to increase the utility and safety of the VC-25A. Installations are aligned with the aircraft heavy maintenance schedule.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Design and Test	10.274	32.385	27.784
<b>Description:</b> Design and Test efforts include stand-up of a Systems Integration Laboratory (SIL), non-recurring engineering, material buys for the SIL, as well as design, test and evaluation, and installation of the avionics systems. All modifications to be performed on the aircraft must be proven on the ground prior to installation.			
FY 2013 Accomplishments: Congressional add funded SIL design efforts, non-recurring engineering efforts for the avionics systems.			
FY 2014 Plans: Funding will be used for continuing non-recurring engineering, material buys and testing of the SIL; as well as funding Preliminary Design Review (PDR).			
FY 2015 Plans:			

PE 0401314F: Operational Support Airlift

Air Force

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force		,	Date: N	March 2014	
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401314F / Operational Support Airlift			Name) vionics Moder	nization
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2013	FY 2014	FY 2015

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Funding will be used for Critical Design Review (CDR). SIL engineering and test continues for Flight Management System (FMS) software.			
Accomplishments/Planned Programs Subtotals	10.274	32.385	27.784

## C. Other Program Funding Summary (\$ in Millions)

			FY 2015	FY 2015	FY 2015					Cost To	
Line Item	FY 2013	FY 2014	<b>Base</b>	OCO	<u>Total</u>	FY 2016	FY 2017	<b>FY 2018</b>	FY 2019	Complete	<b>Total Cost</b>
• APAF: BA05:	0.670	0.263	1.072	-	1.072	18.873	30.340	53.306	40.515	Continuing	Continuing

# PE0401314F: VC-25A

# Remarks

## **D. Acquisition Strategy**

VC-25A AMP is accomplished by developmental integration of commercial off-the-shelf systems, hardware procurement and installation is accomplished to align with heavy maintenance depot schedules. An Undefinitized Contract Action (UCA) was issued in Jun 12. The UCA will be definitized with a Cost Plus Incentive Fee (CPIF) type contract. The CPIF contract covers the engineering RDT&E effort through completion in FY16. The remaining RDT&E effort including the first kit, install and flight test will be awarded in FY14 and conclude in FY18 with delivery of the first aircraft.

#### E. 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.

PE 0401314F: Operational Support Airlift

Air Force Page 10 of 14 R-1 Line #235

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air Force

Appropriation/Budget Activity
3600 / 7

R-1 Program Element (Number/Name)
PE 0401314F / Operational Support Airlift
Program
Program
Program
Program

Product Developmen	nt (\$ in Mi	illions)		FY 2	2013	FY 2	2014	FY 2 Ba			2015 CO	FY 2015 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
Engineering	SS/CPIF	Oklahoma City : Tinker, AFB, OK	38.128	10.274	Jun 2013	32.355	Dec 2013	27.755	Nov 2014	-		27.755	Continuing	Continuing	-
		Subtotal	38.128	10.274		32.355		27.755		-		27.755	-	-	-

#### Remarks

Product Development costs include modification engineering design, first modification kit, Systems Integration Laboratory design and development, ground and flight testing and certification.

Support (\$ in Million	s)			FY 2	2013	FY 2	2014	FY 2 Ba	2015 ise		2015 CO	FY 2015 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
		Subtotal	-	-		-		-		-		-	-	-	-

Test and Evaluation	(\$ in Milli	ions)		FY 2	2013	FY 2	2014	_	2015 ise		2015 CO	FY 2015 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
		Subtotal	-	-		-		-		-		-	-	-	-

Management Service	s (\$ in M	illions)		FY 2	2013	FY 2	2014	FY 2 Ba		FY 2	2015 CO	FY 2015 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
Program Management Activities	SS/CPIF	OC-ALC : Oklahoma City, OK	0.017	-		0.030	Dec 2013	0.029	Nov 2014	-		0.029	Continuing	Continuing	-
		Subtotal	0.017	-		0.030		0.029		-		0.029	-	-	-

#### Remarks

Program Management Administration enables operation of program office management and oversight to support VC-25A AMP efforts. Management Services include travel to support Critical Design Review, engineering oversight, and depot visit support.

PE 0401314F: Operational Support Airlift

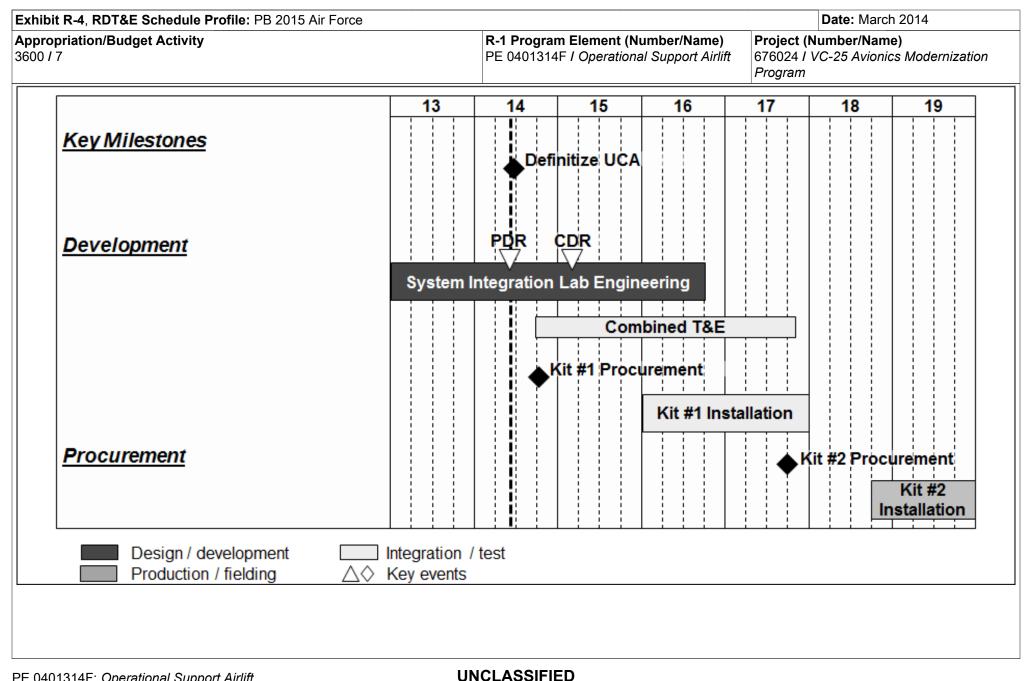
Air Force

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2	015 Air F	orce							Date:	March 20	14		
Appropriation/Budget Activity 3600 / 7				I	_	Element (N Operation		,	 ct (Number/Name) 24 / VC-25 Avionics Modernizati am				
	Prior Years	FY 2	2013	FY:	2014	FY 2	2015 se	FY 2	 FY 2015 Total	Cost To	Total Cost	Target Value of Contract	
Project Cost Totals	38.145	10.274		32.385		27.784		-	27.784	-	-	-	

Remarks

PE 0401314F: Operational Support Airlift



PE 0401314F: Operational Support Airlift Air Force

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force			Date: March 2014
11 1	,	- 3 (	umber/Name) /C-25 Avionics Modernization

# Schedule Details

	Sta	art	Er	nd
Events	Quarter	Year	Quarter	Year
Systems Integration Labratory engineering	1	2013	2	2016
Definitize UCA	1	2014	1	2014
Kit #1 Procurement	3	2014	3	2014
Critical Design Review	1	2015	1	2015
Kit #1 Installation	1	2016	4	2017
Test and Evaluation	4	2014	3	2017
Kit #2 Procurement	4	2017	4	2017
Kit #2 Installation	4	2018	4	2018

PE 0401314F: Operational Support Airlift