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PE NUMBER: 0401318F

PE TITLE: CV-22

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0401318F CV-22

Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	53.459	16.295	39.532	6.635	29.470	47.143	56.792	61.654	Continuing	TBD
4103 CV-22	53.459	16.295	39.532	6.635	29.470	47.143	56.792	61.654	Continuing	TBD

(U) **A. Mission Description and Budget Item Justification**

The CV-22 is a Special Operations Forces (SOF) variant of the V-22 vertical lift, multi-mission aircraft. The CV-22 will provide critical capability to insert, extract, and resupply special operation forces into politically or militarily denied areas, not currently provided by existing aircraft. The CV-22 configuration adds terrain following radar, additional fuel tanks, additional radios, flare/chaff dispensers, a RF warning receiver and jammer, and infrared countermeasures to the MV-22 aircraft (CV-22 Block 10 configuration).

Funding is required for Block 10 to continue the design, integration, testing and certification of Communication Navigation Surveillance/ Air Traffic Management (CNS/ATM) components for compliance with the CNS/ATM Capstone Requirements Document for worldwide deployment; to continue the development, test, and test support of two Production Representative Test Vehicles (PRTV) used in Initial Operational Test and Evaluation (IOT&E); and to integrate the Navy and Air Force maintenance information systems used on the V-22.

Funding is required for Block C to incorporate the baseline V-22 improvements developed by the lead Service (USMC) into the CV-22 variant. This funding is required to maximize commonality between the MV-22 and CV-22 and optimize long term affordability. Block C is scheduled for inline production incorporation in FY09.

Funding is required for Block 20 to design, integrate, and test improvements to enhance the CV-22 ability to execute the SOF mission as well as comply with OSD mandated interoperability requirements. Initial risk reduction and trade studies will be pursued prior to starting System Development and Demonstration in FY08.

(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	65.703	16.439	56.648	6.512
(U) Current PBR/President's Budget	53.459	16.295	39.532	6.635
(U) Total Adjustments	-12.244	-0.144		
(U) Congressional Program Reductions				
Congressional Rescissions	-1.676	-0.144		
Congressional Increases				
Reprogrammings	-8.883			
SBIR/STTR Transfer	-1.685			

(U) **Significant Program Changes:**

- FY06 RDT&E requirement was reduced due to a 6 month slip in the flight test schedule. Funding was used to fully fund procurement requirements including initial spares

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1233 - Amended 3/2/05

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Exhibit R-2a, RDT&E Project Justification

DATE

February 2005

BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
05 System Development and Demonstration (SDD)					0401318F CV-22			4103 CV-22		
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
4103 CV-22	53.459	16.295	39.532	6.635	29.470	47.143	56.792	61.654	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

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(U) **B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Accomplishment/Planned Program				
(U) Continue Navy/Air Force maintenance information system integration (Block 10)	2.567	2.451	1.800	
(U) Continue development of CNS/ATM/TCAS for CV-22 including integration and test (Block 10)	5.762	5.095	6.880	6.635
(U) Complete development of two PRTVs (Block 10)	45.130			
(U) Support for operational test and evaluation of CV-22 (Block 10)		8.749	27.640	
(U) Risk reduction studies (Block 20)			3.212	
(U) Total Cost	53.459	16.295	39.532	6.635

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

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E										
(U) Other APPN										
(U) 3010 BP10/11/16/AP, PE	191.311	355.468	271.777	303.807	586.856	538.754	542.816	464.988	1,479.056	4,734.833

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1234 - Amended 3/2/05

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Exhibit R-2a, RDT&E Project Justification

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February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0401318F CV-22

PROJECT NUMBER AND TITLE

4103 CV-22

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

0401318F

Total Cost number does not include 226.819M procurement funding prior to FY04.

(U) D. Acquisition Strategy

All development activities for the V-22 program have been performed by the prime contractor (a consortium of the Bell and Boeing companies) selected on a sole source basis.

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1235 - Amended 3/2/05

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Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2005

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0401318F CV-22

PROJECT NUMBER AND TITLE

4103 CV-22

(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Award</u> <u>Date</u>	<u>FY 2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Award</u> <u>Date</u>	<u>FY 2006</u> <u>Cost</u>	<u>FY 2006</u> <u>Award</u> <u>Date</u>	<u>FY 2007</u> <u>Cost</u>	<u>FY 2007</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
(U) <u>Product Development</u>														
Development of 2 PRTVs (Block10)	SS, CPIF	Bell-Boeing	140.292	45.130	May-04							0.000	185.422	185.422
Development CNS/ATM/TCAS (Block 10)	SS, CPAF	Bell-Boeing	6.704	5.762	May-04	5.095	Oct-04	6.880	Oct-05	6.635	Oct-06	0.000	31.076	31.076
Development of Navy/Air Force maintenance information system integration (Block 10)	MIPR	TBD	3.000	2.567	Feb-04	2.451	Dec-04	1.800	Dec-05			0.000	9.818	9.818
Block C incorporation	TBD	TBD										Continuing	TBD	
Block 20 development and integration	TBD	TBD										Continuing	TBD	
Subtotal Product Development			149.996	53.459		7.546		8.680		6.635		Continuing	TBD	226.316
Remarks:														
(U) <u>Support</u>														
Logistics and technical support of operational test and evaluation	SS, CPAF	Bell-Boeing	0.000	0.000	Jan-04	7.600	Dec-04	25.660	Dec-05			Continuing	TBD	
Logistics and technical support of operational test and evaluation	SS, CPFF	Rolls Royce		0.000		1.149	Oct-04	1.980	Oct-05			Continuing	TBD	
Technical Support	TBD	TBD		0.000		0.000		3.212	Feb-06			Continuing	TBD	
Subtotal Support			0.000	0.000		8.749		30.852		0.000		Continuing	TBD	0.000
Remarks:														
(U) <u>Test & Evaluation</u>														
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
Remarks:														
(U) <u>Management</u>														
Subtotal Management			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
Remarks:														
(U) Total Cost			149.996	53.459		16.295		39.532		6.635		Continuing	TBD	226.316

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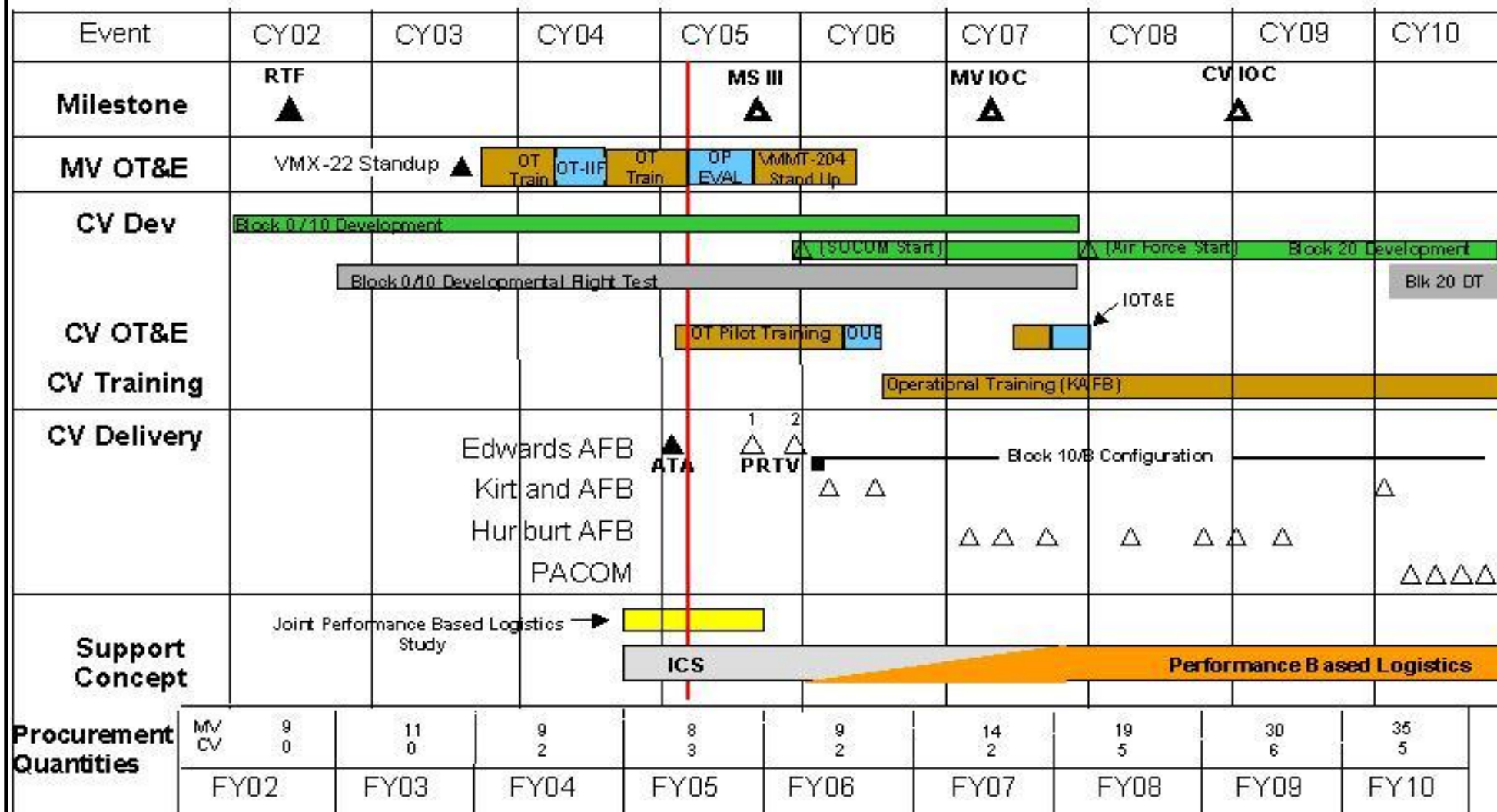
1236 - Amended 3/2/05

05 System Development and Demonstration (SDD)

0401318F CV-22

4103 CV-22

CV-22 Program Schedule



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Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2005

BUDGET ACTIVITY

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0401318F CV-22

PROJECT NUMBER AND TITLE

4103 CV-22

(U) Schedule ProfileFY 2004FY 2005FY 2006FY 2007

(U) Production Representative Test Vehicle contract

2Q

(U) CNS/ATM/TCAS development cotntract (incremental funding)

3Q

1-2Q

1-2Q

1-2Q

(U) Navy/Air Force maintenance information system development contract (incremental funding)

2Q

1-2Q

1-2Q

(U) Support for operational test and evaluation contract

1-2Q

1-2Q

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1238 - Amended 3/2/05