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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0401318F: CV-22							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	17.992	19.640	18.270	0.000	18.270	21.983	18.277	18.237	37.891	Continuing	Continuing
654103: CV-22	17.992	19.640	18.270	0.000	18.270	21.983	18.277	18.237	37.891	Continuing	Continuing
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. CV-22 RDT&E provides development, integration, testing and enhancement of critical capability to insert, extract, and re-supply special operation forces into politically or militarily denied areas. The CV-22 Block 10 configuration adds terrain following radar, additional fuel tanks, additional radios, flare/chaff dispensers, RF warning receiver and jammer, infrared countermeasures, weapons, situational awareness improvements, and Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) to the V-22 Block B aircraft.											
Block 20 development includes, but is not limited to improved brakes, communications, situational awareness, software, and other requirements specified in the V-22 Block C/20 Capabilities Development Document. The V-22 Joint Program Office is developing improved operational safety, suitability, and effectiveness capabilities in block increments. Ongoing planning and associated activities will take place to prevent diminishing manufacturing resources and obsolescence issues, as required.											
USSOCOM and USAF jointly fund correction of deficiencies and Block 20 development. USSOCOM funds the development, integration and testing of SOF unique mission capability, while USAF funds interoperability, basic air vehicle enhancements, integration of Air Force and Navy maintenance and information systems used with the V-22, support for operational testing, and CV-22 implementation and testing of MV-22 Block B and Block C changes. USSOCOM and USAF jointly fund development projects to meet operational safety, suitability, and effectiveness mission needs. This includes designing, prototyping, integrating, testing and fielding proposed solutions to emerging warfighter issues.											

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
3600: Research, Development, Test & Evaluation, Air Force		PE 0401318F: CV-22			
BA 5: Development & Demonstration (SDD)					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	18.512	19.640	0.000	0.000	0.000
Current President's Budget	17.992	19.640	18.270	0.000	18.270
Total Adjustments	-0.520	0.000	18.270	0.000	18.270
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.520	0.000			
• Other Adjustments	0.000	0.000	18.270	0.000	18.270
Change Summary Explanation					
FY 2009: SBIR/STTR Transfer					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force									DATE: February 2010														
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0401318F: CV-22				PROJECT 654103: CV-22															
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost												
654103: CV-22	17.992	19.640	18.270	0.000	18.270	21.983	18.277	18.237	37.891	Continuing	Continuing												
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0														
<p>A. Mission Description and Budget Item Justification</p> <p>The CV-22 is a Special Operations Forces (SOF) variant of the V-22 vertical lift, multi-mission aircraft. CV-22 RDT&E provides development, integration, testing and enhancement of critical capability to insert, extract, and re-supply special operation forces into politically or militarily denied areas. The CV-22 Block 10 configuration adds terrain following radar, additional fuel tanks, additional radios, flare/chaff dispensers, RF warning receiver and jammer, infrared countermeasures, weapons, situational awareness improvements, and Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) to the V-22 Block B aircraft.</p> <p>Block 20 development includes, but is not limited to improved brakes, communications, situational awareness, software, and other requirements specified in the V-22 Block C/20 Capabilities Development Document. The V-22 Joint Program Office is developing improved operational safety, suitability, and effectiveness capabilities in block increments. Ongoing planning and associated activities will take place to prevent diminishing manufacturing resources and obsolescence issues, as required.</p> <p>USSOCOM and USAF jointly fund correction of deficiencies and Block 20 development. USSOCOM funds the development, integration and testing of SOF unique mission capability, while USAF funds interoperability, basic air vehicle enhancements, integration of Air Force and Navy maintenance and information systems used with the V-22, support for operational testing, and CV-22 implementation and testing of MV-22 Block B and Block C changes. USSOCOM and USAF jointly fund development projects to meet operational safety, suitability, and effectiveness mission needs. This includes designing, prototyping, integrating, testing and fielding proposed solutions to emerging warfighter issues.</p>																							
<p>B. Accomplishments/Planned Program (\$ in Millions)</p> <table border="1"> <tr> <td></td> <td>FY 2009</td> <td>FY 2010</td> <td>FY 2011 Base</td> <td>FY 2011 OCO</td> <td>FY 2011 Total</td> </tr> <tr> <td>MAJOR THRUST: Develop, test, and evaluate additional capabilities for the CV-22 aircraft. The V-22 Joint Program Office is developing improved operational safety, suitability, and effectiveness.</td> <td align="right">17.992</td> <td align="right">19.640</td> <td align="right">18.270</td> <td align="right">0.000</td> <td align="right">18.270</td> </tr> </table>													FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	MAJOR THRUST: Develop, test, and evaluate additional capabilities for the CV-22 aircraft. The V-22 Joint Program Office is developing improved operational safety, suitability, and effectiveness.	17.992	19.640	18.270	0.000	18.270
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B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
<p><i>FY 2009 Accomplishments:</i> In FY 2009, RDT&E activities continued on Block 20. Block 20 development includes, but is not limited to communications, situational awareness, software, and other requirements specified in the V-22 Block C/20 Capabilities Development Document. Initiate Block 20 Increment 2 and continue Increment 1 efforts.</p> <p><i>FY 2010 Plans:</i> In FY 2010, RDT&E activities will continue on Block 20. Block 20 development includes, but is not limited to improved brakes, communications, software, and other requirements specified in the V-22 Block C/20 Capabilities Development Document. Initiate Block 20 Increment 3 and continue Increment 1 & 2 efforts.</p> <p><i>FY 2011 Base Plans:</i> In FY 2011, RDT&E activities will continue on Block 20. Block 20 development includes, but is not limited to improved brakes, communications, software, and other requirements specified in the V-22 Block C/20 Capabilities Development Document. Continue Increment 1, 2 & 3 efforts.</p> <p><i>FY 2011 OCO Plans:</i> In FY 2011 OCO: N/A</p>											
Accomplishments/Planned Programs Subtotals						17.992	19.640	18.270	0.000	18.270	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 1160421BB: RDT&E	30.970	12.687	14.476	0.000	14.476	9.589	0.000	0.000	0.000	0.000	518.719
Defense-wide											
• PE 1160421BB (1): Procurement	155.030	114.553	124.648	0.000	124.648	108.679	114.998	84.848	6.366	0.000	0.000
Defense-wide											

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C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0401318F: Aircraft Procurement Air Force	494.800	597.331	529.275	0.000	529.275	470.789	427.633	334.108	135.913	0.000	0.000
D. Acquisition Strategy											
The V-22 Program Office (NAVAIR PMA-275) ensures that CV-22 changes are incorporated into the ongoing V-22 production line with minimal impact. The JPO is developing new capabilities for the V-22 in blocks. Block 0 and Block 10 have completed development, and the Block 20 is currently underway. NAVAIRSYSCOM awarded a cost plus fixed fee contract with the prime contractor in Dec 2007 for Block 20 development and test. Future Block 20 increments will use a similar acquisition strategy but will use a cost plus incentive fee contract.											
Development activities for the V-22 program are performed by the prime contractor selected on a sole-source basis. Bell-Boeing is a strategic partnership between Bell Helicopter and Boeing Integrated Defense Systems.											
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.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force											DATE: February 2010																																																																																																												
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0401318F: CV-22				PROJECT 654103: CV-22																																																																																																															
Product Development (\$ in Millions) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th rowspan="2">Cost Category Item</th> <th rowspan="2">Contract Method & Type</th> <th rowspan="2">Performing Activity & Location</th> <th rowspan="2">Total Prior Years Cost</th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th rowspan="2">Cost To Complete</th> <th rowspan="2">Total Cost</th> <th rowspan="2">Target Value of Contract</th> </tr> <tr> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> </tr> </thead> <tbody> <tr> <td>Development of 2 Production Representative Test Vehicles</td> <td>SS/CPAF</td> <td>Bell Boeing Amarillo TX</td> <td align="right">185.422</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">185.422</td> <td align="right">0.000</td> </tr> <tr> <td>Block 10 Development</td> <td>SS/CPAF</td> <td>Bell Boeing Amarillo TX</td> <td align="right">31.412</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">31.412</td> <td align="right">0.000</td> </tr> <tr> <td>Block 10 Development Technical Support</td> <td>Various</td> <td>Various Various</td> <td align="right">11.886</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">11.886</td> <td align="right">0.000</td> </tr> <tr> <td>Block 20 Development</td> <td>SS/CPFF</td> <td>Bell Boeing Amarillo TX</td> <td align="right">23.078</td> <td align="right">15.866</td> <td align="center">Dec 2009</td> <td align="right">10.938</td> <td align="center">Dec 2010</td> <td align="right">0.000</td> <td></td> <td align="right">10.938</td> <td align="center">Continuing</td> <td align="center">Continuing</td> <td align="right">0.000</td> </tr> <tr> <td>Situational Awareness Hazard Avoidance Federated Terminal (SHAFT) Contractual Engineering Task (CET)</td> <td>TM</td> <td>Manufacturing Technology Inc Fort Walton Beach FL</td> <td align="right">5.000</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">5.000</td> <td align="right">0.000</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td><td align="right">256.798</td><td align="right">15.866</td><td></td><td align="right">10.938</td><td></td><td align="right">0.000</td><td></td><td align="right">10.938</td><td></td><td></td><td align="right">0.000</td> </tr> </tbody> </table>															Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Development of 2 Production Representative Test Vehicles	SS/CPAF	Bell Boeing Amarillo TX	185.422	0.000		0.000		0.000		0.000	0.000	185.422	0.000	Block 10 Development	SS/CPAF	Bell Boeing Amarillo TX	31.412	0.000		0.000		0.000		0.000	0.000	31.412	0.000	Block 10 Development Technical Support	Various	Various Various	11.886	0.000		0.000		0.000		0.000	0.000	11.886	0.000	Block 20 Development	SS/CPFF	Bell Boeing Amarillo TX	23.078	15.866	Dec 2009	10.938	Dec 2010	0.000		10.938	Continuing	Continuing	0.000	Situational Awareness Hazard Avoidance Federated Terminal (SHAFT) Contractual Engineering Task (CET)	TM	Manufacturing Technology Inc Fort Walton Beach FL	5.000	0.000		0.000		0.000		0.000	0.000	5.000	0.000	Subtotal			256.798	15.866		10.938		0.000		10.938			0.000
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Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Interim Contractor Support	SS/CPAF	Bell Boeing Amarillo TX	26.889	0.000		0.000		0.000		0.000	0.000	26.889	0.000	
Contractor Logistics Support for Test Aircraft	Various	Various Various	6.775	2.543	Dec 2009	3.958	Dec 2010	0.000		3.958	Continuing	Continuing	0.000	
Subtotal			33.664	2.543		3.958		0.000		3.958			0.000	
Remarks														
Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Test & Evaluation	SS/CPFF	Bell Boeing Amarillo TX	20.631	1.231	Feb 2010	3.374	Feb 2011	0.000		3.374	Continuing	Continuing	0.000	
Test & Evaluation Technical Support	MIPR	Various Various	3.539	0.000		0.000		0.000		0.000	0.000	3.539	0.000	
Subtotal			24.170	1.231		3.374		0.000		3.374			0.000	
Remarks														

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Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Support	MIPR	TBD Lakehurst NJ	2.119	0.000		0.000		0.000		0.000	0.000	2.119	0.000
Subtotal			2.119	0.000		0.000		0.000		0.000	0.000	2.119	0.000
Remarks													
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			316.751	19.640		18.270		0.000		18.270			0.000
Remarks Total Prior Years Cost may include only FY 2009 data.													

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

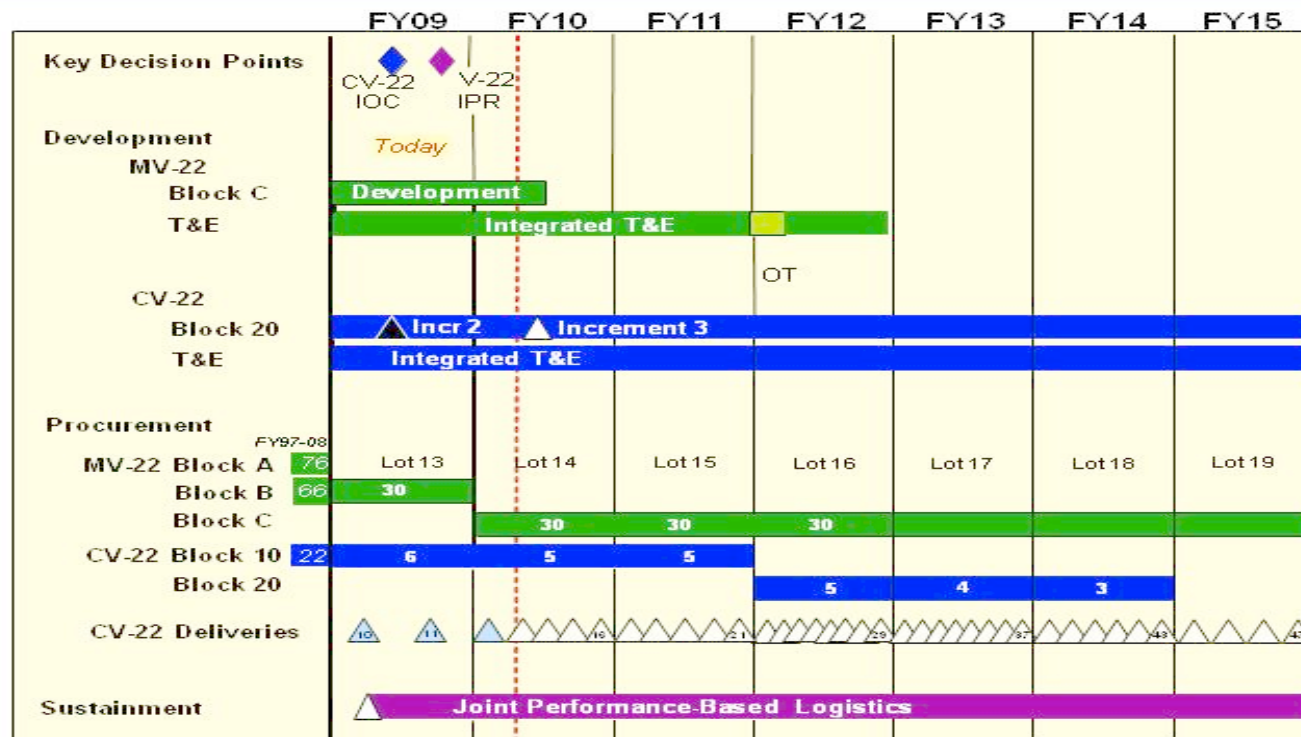
PE 0401318F: CV-22

PROJECT

654103: CV-22



CV-22 Schedule



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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force			DATE: February 2010
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Block 20 Development/Test	1	2009	4	2011
Aircraft Deliveries	1	2009	4	2011
CV-22 IOC	2	2009	2	2009

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