RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE FEBRUARY 2006
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7	R-1 ITEM NOMENCLATURE / P PE 1160421BB S	ROJECT NO. Special Operations CV-22 Development/SF200

COST (Dollars in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	Cost to Complete	Total Cost
PE1160421BB	53.059	29.526		31.660	28.551	37.635	69.028	Cont.	Cont.
SF200 CV-22	53.059	29.526		31.660	28.551	37.635	69.028	Cont.	Cont.

A. Mission Description and Budget Item Justification: The CV-22 is a Special Operations Forces (SOF) variant of the V-22 vertical lift, multimission aircraft. The CV-22 will provide long range, high speed infiltration, exfiltration, and resupply to Special Forces teams in hostile, denied, and politically sensitive areas. This is a capability not currently provided by existing aircraft. The CV-22 acquisition program delayed incorporation of some operational capabilities until the completion of a Block 10 (formerly Pre-Planned Product Improvement) CV-22 program. This strategy was agreed to by the Department of the Navy and the USSOCOM Acquisition Executive.

Block 10: Integrate and test the Directional Infrared Countermeasures (DIRCM), a system that protects against infrared guided missiles; design, integrate and validate of the Troop Commander Situational Awareness station to provide the embarked troop commander access to the CV-22's communication, navigation and mission management system; relocate the ALE-47 chaff and flare dispenser control head to allow any cockpit crew member to activate defensive countermeasures; add a second forward firing chaff and flare dispenser to provide an adequate quantity of consumable countermeasures for the extended duration of SOF infiltration/exfiltration/resupply missions; and incorporate a dual access feature to the Digital Map System to allow both the pilot and co-pilot to independently access and control the digital map display from the mission computer.

Block 20: Design, integrate, test, and validate enhancements required to meet SOF unique mission requirements and correction of deficiencies identified in previous testing. This block will provide more robust performance of the CV platform in navigation, maneuverability and mission deployment. Initial risk reduction and trade studies will be pursued prior to starting System Development and Demonstration.

Block 30: Design, integrate, test, and validate enhancements required to meet SOF unique mission requirements to maintain performance against the evolving threat environment. This block will enhance survivability and performance against potential threats through reduction in electronic

RDT&E BUDGET ITEM JUSTIFICATION SHEE	DATE	
		FEBRUARY 2006
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7	R-1 ITEM NOMENCLATURE / P PE 1160421BB S	ROJECT NO. special Operations CV-22 Development/SF200

signature emissions and improved countermeasures. Initial risk reduction and trade studies will be pursued prior to starting System Development and Demonstration.

B. Program Change Summary:

	FY2005	FY2006	FY2007
Previous President's Budget	62.806	29.954	14.234
Current President's Budget	53.059	29.526	
Total Adjustments	-9.747	-0.428	-14.234
Congressional Program Reductions		-0.428	
Congressional Rescissions			
Congressional Increases			
Congressional Transfer			
Reprogrammings	-9.747		-14.234
SBIR Transfer			

Funding:

FY05: Decrease of (-\$9.747M) reflects reprogrammings to PE 1160403BB, Aviation Systems Advanced Development (+\$4.197M) to CAAP and (+\$5.000M) to GMS-2.

FY06: Congressional reductions include (-\$0.298M) for global 1% reduction and (-\$0.130M) for Section 8125 reduction.

FY07

- RDT&E program was restructured to better align funds with execution.

Exhibit R-2a, RDT&E Project Justificati	ion Date: FEBRUARY 2006
Appropriation/Budget Activity RDT&E BA # 7	CV-22/Project SF200

Cost (\$ in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
CV-22	53.059	29.526		31.660	28.551	37.635	69.038
RDT&E Articles Quantity							

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 long range, high speed infiltration, exfiltration, and resupply to Special Forces teams in hostile, denied, and politically sensitive areas. This is a capability not currently provided by existing aircraft. The CV-22 acquisition program delayed incorporation of some operational capabilities until the completion of a Block 10 (formerly Pre-Planned Product Improvement) CV-22 program. This strategy was agreed to by the Department of the Navy and the USSOCOM Acquisition Executive.

Block 10: Integrate and test the Directional Infrared Countermeasures (DIRCM), a system that protects against infrared guided missiles; design, integrate and validate of the Troop Commander Situational Awareness station to provide the embarked troop commander access to the CV-22's communication, navigation and mission management system; relocate the ALE-47 chaff and flare dispenser control head to allow any cockpit crew member to activate defensive countermeasures; add a second forward firing chaff and flare dispenser to provide an adequate quantity of consumable countermeasures for the extended duration of SOF infiltration/exfiltration/resupply missions; and incorporate a dual access feature to the Digital Map System to allow both the pilot and co-pilot to independently access and control the digital map display from the mission computer.

Block 20: Design, integrate, test, and validate enhancements required to meet SOF unique mission requirements and correction of deficiencies identified in previous testing. This block will provide more robust performance of the CV platform in navigation, maneuverability and mission deployment. Initial risk reduction and trade studies will be pursued prior to starting System Development and Demonstration.

Block 30: Design, integrate, test, and validate enhancements required to meet SOF unique mission requirements to maintain performance against the evolving threat environment. This block will enhance survivability and performance against potential threats through reduction in electronic signature emissions and improved countermeasures. Initial risk reduction and trade studies will be pursued prior to starting System Development and Demonstration.

Exhibit R-2a, RDT&E Project Justi:	Date: FEBRUARY 2006	
Appropriation/Budget Activity RDT&E BA # 7	CV-22/Project SF200	

	FY05	FY06	FY07	
Block 10	44.943	22.776		
RDT&E Articles Quantity				
FY05 Continued development/integration/testing of Block 10 capabilities.	<u>.</u>			
FY06 Continue development/integration/testing of Block 10 capabilities.				
	FY05	FY06	FY07	
		1 107		
Block 20		1.127		
Block 20 RDT&E Articles Quantity				
	ock 20 capabilities. Start d		velopment of I	Block 2
RDT&E Articles Quantity	ock 20 capabilities. Start d		relopment of I	Block 2
RDT&E Articles Quantity		lesign and dev		Block 2

FY05 Continued program office support for Block 10.

FY06 Complete program office support for Block 10 program and begin program office support for Block 20.

	FY05	FY06	FY07	
Engineering and Logistics Support	7.300	5.423		
RDT&E Articles Quantity				

FY05 Continued engineering and logistics support for Block 10.

FY06 Complete engineering and logistics support for Block 10 and begin engineering and logistics support for Block 20.

Exhibit R-2a, RDT&E Project Justificat	ion Date: FEBRUARY 2006
Appropriation/Budget Activity RDT&E BA # 7	CV-22/Project SF200

C. Other Program Funding Summary:

<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	To <u>Complete</u>	Total <u>Cost</u>
117.697	116.341	168.780	247.672	185 009	179.003	169.854	Cont	Cont

D. Acquisition Strategy.

Proc, CV-22 SOF Osprey

The CV-22 program is managed by the Navy V-22 Joint Program Office (NAVAIR PMA-275). This ensures that the CV-22 changes are incorporated into the ongoing V-22 production line with minimum impact. Funding for the baseline CV-22 Engineering Manufacturing and Development, known as Block 0, is embedded in the Navy budget. Block 10 RDT&E funding is sent from USSOCOM to PMA-275 to be placed on contract with the V-22 prime contractor. Block 10 capability is required for full compliance with the Joint Operational Requirements Document. Future Block upgrades are planned to follow the same acquisition strategy, with the PMA-275 ensuring the integration of the SOF unique systems with the ongoing basic vehicle improvements supporting both the CV-22 and the Marine Corps MV-22.

Exhibit R-3 COST ANALY	DATE: FEBRUARY 2006									
APPROPRIATION / BUDGET ACTIVITY			Special Operations CV-22 Development/PE1160421BB							
RDT&E DEFENSE-WIDE	′ 7		CV-22/SF2						F200	
		Actual o	r Budget Value	(\$ in millions))					
Cost Categories	Contract		Total	Budget	Award	Budget	Award			
(Tailor to WBS, or System/	Method	Performing Activity & Location	PYs	Cost	Date	Cost	Date		То	Total
Item Requirements)	& Type		Cost	FY06	FY06	FY07	FY07		Complete	Program
Primary Hardware (H/W) Dev	SS/CPAF	NAVAIR/PMA-275 & Bell-Boeing, Patuxent River, MD	203.604	20.311	Feb-06				Cont.	Cont.
Additional Test Aircraft (ATA) Modification Block 20 Risk Reduction and	SS/CPAF/IF TBD	NAVAIR/PMA-275 & Bell-Boeing, Patuxent River, MD TBD	62.595						0.000	62.595
Development	TBD	ТВО		1.127	Mar-06				Cont.	Cont.
Award/Incentive Fees										
Primary H/W Dev			10.667	2.465	Various				Cont.	Cont.
ATA			6.350						0.000	
Prior Year Completed Efforts	Various	Various	100.521							
Subtotal Product Dev			383.737	23.903		0.000			Cont.	Cont.
Remarks:										
Contractor Engineering Spt	WR	Various	8.052	1.741	Dec-05				Cont.	Cont.
Government Engineering Spt	WR	Various	24.917	3.682	Dec-05				Cont.	Cont
Travel and Logistics			1.100	0.200	Various				Cont.	Cont
Subtotal Management			34.069	5.623		0.000			Cont.	Cont
Remarks:										
Total Cost			417.806	29.526		0.000			Cont.	Cont.
Remarks:				<u></u>						

Exhibit R-4, Schedule Profile							Date:	FEE	BRUA	RY 20	006																		
Appropriation/Budget Activity RDT&E/7	Program E	Program Element Number and Name PE1160421BB/Special Operations CV-22 Development Project Number and Name Project SF200/CV-22																											
Fiscal Year		2005										008 2009						2010				2011							
		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
CV-22 Block 10 Development														_															
Block 0/10 Flight Test															\triangle														
V-22 Acquisition Milestone III					Δ																								
CV-22 IOT&E													4																
CV-22 Block 20 Development/Test							_																						_
CV-22 Deliveries					PRTV	PRTV #2	Lot 8 I	Deliverie	es (2)	Lot 9 I	Deliveri		\triangle		Lot 10	Deliveri	es (2)		Lot 11	Deliver	ies (2)	Lot 12		ries (5)	\triangle	Lot 13	Deliver	ies (6)	\triangle
CV-22 IOC																			Δ										

Exhibit R-4	a, Schedule Profile	Date: FEBRUARY 2006										
Appropriation/Budget Activity RDT&E/7	d Name tions CV-22	Project Number and Name Project SF200/CV-22										
Schedule Profile		FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011				
CV-22 Block 10 Development		1-4Q	1-4Q	1-4Q								
Block 0/10 Flight Test		1-4Q	1-4Q	1-4Q	1-2Q							
V-22 Milestone III		4Q										
CV-22 IOT&E					1Q							
CV-22 Block 20 Development/Test			2-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q				
CV-22 Deliveries		4Q	1-3Q	1-4Q	2Q, 4Q	2Q, 4Q	1-4Q	1-4Q				
CV-22 IOC					~ ~	2Q						
							_					
								_				