

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)					DATE				
					FEBRUARY 2008				
APPROPRIATION / BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE / PROJECT NO.						
RDT&E, DEFENSE-WIDE / 7			PE 1160421BB Special Operations CV-22 Development/SF200						
COST (Dollars in Millions)	FY07	FY08	FY09	FY10	FY11	FY12	FY13	Cost to Complete	Total Cost
PE1160421BB		22.872	38.229	27.140	42.064	29.304	30.491	Cont.	Cont.
SF200 CV-22		22.872	38.229	27.140	42.064	29.304	30.491	Cont.	Cont.
<p>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 CV-22 program. This strategy was agreed to by the Department of the Navy and USSOCOM. The V-22 Joint Program Office is using spiral acquisition to develop improved capabilities in block increments. The Block 10 increment was completed in FY07 and the Block 20 increment starts in FY08.</p> <p>Block 10: Integrate and test Directional Infrared Countermeasures, a system that protects against infrared guided missiles; design, integrate and validate 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, and 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.</p> <p>Block 20: Design, integrate, test, and validate enhancements required to meet SOF unique mission requirements and correct deficiencies identified in previous testing. This block will provide improved capabilities to include, but not limited to, more robust performance in navigation, weapons, avionics, survivability, maneuverability mission deployment and improved reliability and maintainability of the CV platform. Initial risk reduction and trade studies were initiated in FY06, and System Design and Development starts in FY08.</p>									

APPROPRIATION / BUDGET ACTIVITY
RDT&E, DEFENSE-WIDE / 7

R-1 ITEM NOMENCLATURE / PROJECT NO.
PE 1160421BB Special Operations CV-22 Development/SF200

B. Program Change Summary:

	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>
Previous President's Budget		23.473	26.375
Current President's Budget		22.872	38.229
Total Adjustments		-0.601	11.854
Congressional Program Reductions		-0.149	
Congressional Increases			
Reprogrammings			
Other Program Adjustments			11.854
SBIR Transfer		-0.452	

Funding:

FY07: No change.

FY08: Congressional reduction includes (-\$0.038 million) Section 8097 and Section 8104 (-\$0.111 million). Other program adjustments include transfer to Small Business Innovative Research account (-\$0.452 million).

FY09: Increase (\$11.854 million) is due to realignment of funds to meet joint program funding requirements.

Schedule: None.

Technical: None.

Exhibit R-2a, RDT&E Project Justification

Date: FEBRUARY 2008

Appropriation/Budget Activity RDT&E BA # 7	CV-22/Project SF200
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Cost (\$ in millions)	FY07	FY08	FY09	FY10	FY11	FY12	FY13
CV-22		22.872	38.229	27.140	42.064	29.304	30.491
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 CV-22 program. This strategy was agreed to by the Department of the Navy and the USSOCOM. The V-22 Joint Program Office is using spiral acquisition to develop improved capabilities in block increments supported with rapid prototyping. The Block 10 increment is completing in FY 2007 and the Block 20 increment is starting in FY 2008.

Block 10: Integrate and test Directional Infrared Countermeasures, a system that protects against infrared guided missiles; design, integrate and validate 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 correct deficiencies identified in previous testing. This block will provide improved capabilities to include, but not limited to, robust performance in navigation, weapons, avionics, survivability, maneuverability, mission deployment, improved reliability and maintainability of the CV platform. Initial risk reduction and trade studies were initiated in FY 2006, and System Development and Demonstration starts in FY 2008.

Exhibit R-2a, RDT&E Project Justification

Date: FEBRUARY 2008

Appropriation/Budget Activity RDT&E BA # 7	CV-22/Project SF200
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B. Accomplishments/Planned Program

	FY07	FY08	FY09
Block 20		22.872	38.229
RDT&E Articles Quantity			

FY08 Start design and development of Block 20.
 FY09 Continues design and development of Block 20.

C. Other Program Funding Summary:

	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	To <u>Complete</u>	Total <u>Cost</u>
PROC, CV-22 SOF Osprey	195.151	213.759	161.971	152.629	151.910	154.251	175.721	215.359	1,420.745

D. Acquisition Strategy.

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 Research, Development, Testing, and Evaluation funding was 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 and associated Milestone III Capabilities Production Document (CPD). Future Block upgrades are planned to follow the same acquisition strategy, with PMA-275 ensuring the integration of SOF unique systems with the ongoing basic vehicle improvements supporting both the CV-22 and the Marine Corps MV-22.

Exhibit R-3 RDT&E Project Cost Analysis						DATE: FEBRUARY 2008					
APPROPRIATION / BUDGET ACTIVITY				Special Operations CV-22 Development/PE1160421BB							
RDT&E DEFENSE-WIDE / 7				CV-22/SF200							
Actual or Budget Value (\$ in millions)											
Cost Categories (Tailor to WBS, or System/ Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	Budget Cost FY07	Award Date FY07	Budget Cost FY08	Award Date FY08	Budget Cost FY09	Award Date FY09	To Complete	Total Program
Prior Year Completed Efforts (Block 10) Block 20 Development/Flight Test	Various SS/CPAF/IF	Various NAVAIR/PMA-275 & Bell-Boeing, Patuxent River, MD	359.134			13.044	Dec-07, Jun-08	29.677	Dec-08	Cont.	359.134 Cont.
Subtotal Product Dev			359.134	0.000		13.044		29.677		Cont.	Cont.
Remarks:											
Engineering and Logistics Support	Various	Various	39.692			4.350	Various	1.158	Various		45.200
Flight Test Support	Various	Various				5.478	Dec-07	7.394	Dec-08	Cont.	Cont.
Subtotal Management			39.692	0.000		9.828		8.552		Cont.	Cont.
Remarks:											
Total Cost			398.826	0.000		22.872		38.229		Cont.	Cont.
Remarks:											

Exhibit R-4, RDT&E Program Schedule Profile				Date: FEBRUARY 2008																								
Appropriation/Budget Activity RDT&E/7				Program Element Number and Name PE1160421BB/Special Operations CV-22 Development												Project Number and Name SF200/CV-22												
Fiscal Year	2007				2008				2009				2010				2011				2012				2013			
	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	▲	▲	▲	▲																								
CV-22 IOT&E *					▲	▲	▲	▲																				
CV-22 Block 20 Trade Studies & Risk Reduction	▲	▲	▲	▲																								
CV-22 Block 20 Development/Test					▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
CV-22 Deliveries	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
CV-22 IOC									▲																			
* Air Force Funded																												

