

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 United States Special Operations Command **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY

0400: *Research, Development, Test & Evaluation, Defense-Wide*
BA 7: *Operational Systems Development*

R-1 ITEM NOMENCLATURE

PE 1160421BB: *Special Operations CV-22 Development*

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	512.953	10.497	1.822	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	525.272
SF200: SO CV-22	512.953	10.497	1.822	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	525.272

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

Beginning in FY2014, this Program Element has been consolidated into SOCOM Program Element 1160403BB, SO Aviation Systems.

A. Mission Description and Budget Item Justification

The CV-22 is a Special Operations Forces (SOF) variant of the V-22 vertical medium lift, multi-mission aircraft. The CV-22 provides 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 V-22 Joint Program Office is developing improved capabilities in block increments. The funding in this project supports these block increments as well as associated flight test support. The Block 10 increment was completed in FY 2007, and the Block 20 increment started 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, 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.

Block 20: Design, integrate, test, and validate enhancements required to meet SOF-unique mission requirements and correct deficiencies identified in previous testing. This incremental development will provide improved capabilities to include, but not limited to, more robust performance in situational awareness, weapons, avionics, survivability, maneuverability, mission deployment and improved reliability and maintainability of the CV platform.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 United States Special Operations Command	DATE: April 2013
---	-------------------------

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 1160421BB: <i>Special Operations CV-22 Development</i>
---	---

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	10.775	1.822	0.911	-	0.911
Current President's Budget	10.497	1.822	0.000	-	0.000
Total Adjustments	-0.278	0.000	-0.911	-	-0.911
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.278	-			
• Other Adjustments	-	-	-0.911	-	-0.911

Change Summary Explanation

Funding:

FY 2012: Decrease of -\$0.278 million is due to a transfer of funds to Small Business Innovative Research.

FY 2013: None.

FY 2014: Decrease of \$-0.911 million due to this Program Element being consolidated into SOCOM Program Element 1160403BB beginning in FY 2014.

Schedule: None.

Technical: None.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development					PE 1160421BB: Special Operations CV-22 Development				SF200: SO CV-22			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
SF200: SO CV-22	512.953	10.497	1.822	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	525.272
Quantity of RDT&E Articles												
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
A. Mission Description and Budget Item Justification: The CV-22 is a Special Operations Forces (SOF) variant of the V-22 vertical medium 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 V-22 Joint Program Office is developing improved capabilities in block increments supported with rapid prototyping. The funding in this project supports these block increments as well as associated flight test support. The Block 10 increment completed in FY 2007, and the Block 20 increment started 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, 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.												
Block 20: Design, integrate, test, and validate enhancements required to meet SOF-unique mission requirements and correct deficiencies identified in previous testing. This incremental development will provide improved capabilities to include, but not limited to, robust performance in situational awareness, weapons, avionics, survivability, maneuverability, mission deployment, improved reliability and maintainability of the CV platform.												
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
Title: CV-22 Aircraft Block 20										10.497	1.822	0.000
FY 2012 Accomplishments: Continued flight test support, design, and development of Block 20.												
FY 2013 Plans: Continue ESA development providing enhanced, correlated, fusion and display, threat response, training and simulation capabilities.												
Accomplishments/Planned Programs Subtotals										10.497	1.822	0.000

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special Operations Command										DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 1160421BB: Special Operations CV-22 Development				PROJECT SF200: SO CV-22			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• PROC1: 1000CV2200 CV-22 SOF Modification	116.536	139.147	98.927		98.927	19.828	14.203	7.783	6.726	0.000	1,696.207
• PROC2/V022A0: Aircraft Procurement CV-22 (MYP)	429.865	423.475	230.798		230.798	0.000	0.000	0.000	0.000	0.000	4,272.414
• RDT&E1/0401318F: RDT&E, USAF	13.223	28.027	30.438		30.438	25.596	16.524	14.308	14.566	131.500	613.166
• RDT&E/0604262N: V-22 RDT&E, N BA-05	71.938	54.436	30.350		30.350	60.421	54.720	52.202	53.063	273.513	9,363.505
Remarks											
D. Acquisition Strategy											
The CV-22 program is managed by the Navy V-22 Joint Program Office (NAVAIRSYSCOM 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 was sent from USSOCOM to NAVAIRSYSCOM to be placed on contract with the V-22 prime contractor. Block 10 capability is required for compliance with the Joint Operational Requirements Document and associated Milestone III Capabilities Production Document. Block 20 and subsequent block upgrades are planned to follow the same acquisition strategy, with NAVAIRSYSCOM 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.											
E. Performance Metrics											
N/A											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 United States Special Operations Command												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide						PE 1160421BB: Special Operations CV-22				SF200: SO CV-22					
BA 7: Operational Systems Development						Development									
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Integration, Assembly, Test and Checkout (Block 20)	SS/CPFF	Bell-Boeing:Amarillo, TX	52.687	7.717	Dec 2011	-		-		-		-	0.000	60.404	
Systems Engineering	SS/CPFF	Raytheon:Indianapolis, IN	5.465	-		-		-		-		-	0.000	5.465	
Enhanced Situational Awareness	SS/TBD	TBD:TBD	0.000	-		1.822	Feb 2013	-		-		-	0.000	1.822	
Prior Year Funding - Completed Efforts	SS/ Various	Various:Various	389.472	-		-		-		-		-	0.000	389.472	
Subtotal			447.624	7.717		1.822		0.000		0.000		0.000	0.000	457.163	
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Test and Evaluation (Block 20)	SS/ Various	Bell-Boeing; 413FLTS:Amarillo, TX; Hurlburt Field, FL	8.506	1.795	Nov 2011	-		-		-		-	0.000	10.301	
System Test and Evaluation	SS/ Various	Bell-Boeing; DynCorp:Amarillo, TX; Fort Worth, TX	13.241	0.985	Dec 2011	-		-		-		-	0.000	14.226	
Prior Year Funding - Completed Efforts	SS/ Various	Various:Various	43.582	-		-		-		-		-	0.000	43.582	
Subtotal			65.329	2.780		0.000		0.000		0.000		0.000	0.000	68.109	
			All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			512.953	10.497		1.822		0.000		0.000		0.000	0.000	525.272	
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2014 United States Special Operations Command										DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>					R-1 ITEM NOMENCLATURE PE 1160421BB: <i>Special Operations CV-22 Development</i>					PROJECT SF200: SO CV-22			

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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																												
CV-22 Block 20 Development/Test																												
CV-22 Aircraft Deliveries (PROC)																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2014 United States Special Operations Command			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 1160421BB: <i>Special Operations CV-22 Development</i>	PROJECT SF200: SO CV-22	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
CV-22				
CV-22 Block 20 Development/Test	1	2012	4	2015
CV-22 Aircraft Deliveries (PROC)	1	2012	4	2016