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Exhibit R-2, RDT&E Budget Item Justification					Date: February 2004	
APPROPRIATION/BUDGET ACTIVITY DEFENSE WIDE RDT&E BA 4			R-1 ITEM NOMENCLATURE J-UCAS Advanced Component and PE 0604400D8Z Prototype Development			
COST (\$ in millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
PE 0604400D8Z	-	422.873	667.307	380.105	1043.498	986.156

A. Mission Description and Budget Item Justification:

The Joint Unmanned Combat Air Systems (J-UCAS) program is a joint DARPA, Air Force, and Navy effort to develop and demonstrate unmanned combat capabilities for high-threat Suppression of Enemy of Air Defense (SEAD), Surveillance/Reconnaissance, and related strike missions within the emerging global command and control architecture. The J-UCAS program combines the efforts that were previously conducted under the DARPA/Air Force Unmanned Combat Air Vehicle (UCAV) program and the DARPA/Navy Naval UCAV (UCAV-N) program. Although these efforts were targeted towards service-specific needs, the Department recognized the potential for significant synergy by combining the programs. The accomplishments and ongoing efforts of the X-45A technology demonstrator, as well as the development of the X-47A demonstrator, will reduce the risk of the system being developed for the joint early operational assessment. The J-UCAS concept incorporates the next generation Boeing X-45C family and Northrop Grumman X-47B family of air vehicles, together with a common architecture and subsystems (e.g. sensors, communications, and command & control software). These common system elements will maximize system flexibility and operational versatility, while reducing overall costs and maintaining schedule toward a joint early operational assessment planned for the FY07-09 timeframe. The J-UCAS Office integrates DARPA, Air Force, and Navy personnel, operating in close coordination with Service users and other components. The program is focused on achieving a joint early operational assessment that supports both Services and enables an operational system development decision by the end of the decade. PE 0604400D8Z is for J-UCAS Advanced Component and Prototype Development, which funds development of the common systems and technologies and the demonstration systems for the joint early operational assessment.

B. Program Change Summary:

	FY 2003	FY 2004	FY 2005
Previous President's Budget	-	-	-
Current FY 2005 President's Budget	-		422.873
Total Adjustments			
Congressional program reductions			
Congressional rescissions			
Congressional increases			
Reprogrammings			
SBIR/STTR Transfer			

C. Other Program Funding Summary:

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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
PE 0603400D8Z, OSD	-	-	284.617
PE 0603114N, Navy	-	117.865	-
PE 0604731F, Air Force	-	174.449	-
PE 0207256F, Air Force	-	2.305	-
PE 0603285E, DARPA	-	38.385	-

D. Acquisition Strategy:

The J-UCAS Advanced Component and Prototype Development acquisition strategy is to build on the work being conducted under PE 0603400D8Z (J-UCAS Advanced Technology Development and Risk Reduction) and prove the operational value of the J-UCAS concept in the joint early operational assessment. The common architecture and subsystems will maximize system flexibility and operational versatility/interoperability.

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Exhibit R-2a, RDT&E Budget Item Justification							Date: February 2004	
APPROPRIATION/BUDGET ACTIVITY DEFENSE WIDE RDT&E BA 4				R-1 ITEM NOMENCLATURE J-UCAS Advanced Component and PE 0604400D8Z Prototype Development				
COST (\$ in millions)			FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
J-UCAS			0.000	422.873	667.307	380.105	1043.498	986.156

A. Mission Description and Budget Item Justification:

The Joint Unmanned Combat Air Systems (J-UCAS) program is a joint DARPA, Air Force, and Navy effort to develop and demonstrate unmanned combat capabilities for high-threat Suppression of Enemy of Air Defense (SEAD), Surveillance/Reconnaissance, and related strike missions within the emerging global command and control architecture. The J-UCAS program combines the efforts that were previously conducted under the DARPA/Air Force Unmanned Combat Air Vehicle (UCAV) program and the DARPA/Navy Naval UCAV (UCAV-N) program. Although these efforts were targeted towards service-specific needs, the Department recognized the potential for significant synergy by combining the programs. The accomplishments and ongoing efforts of the X-45A technology demonstrator, as well as the development of the X-47A demonstrator, will reduce the risk of the system being developed for the joint early operational assessment. The J-UCAS concept incorporates the next generation Boeing X-45C family and Northrop Grumman X-47B family of air vehicles, together with a common architecture and subsystems (e.g. sensors, communications, and command & control software). These common system elements will maximize system flexibility and operational versatility, while reducing overall costs and maintaining schedule toward a joint early operational assessment planned for the FY07-09 timeframe. The J-UCAS Office integrates DARPA, Air Force, and Navy personnel, operating in close coordination with Service users and other components. The program is focused on achieving a joint early operational assessment that supports both Services and enables an operational system development decision by the end of the decade. PE 0604400D8Z is for J-UCAS Advanced Component and Prototype Development, which funds development of the common systems and technologies and the demonstration systems for the joint early operational assessment.

B. Accomplishments/Planned Program

	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.000	0.000	422.873

Planned Program:

- Continue development of J-UCAS systems, specifically the Boeing X-45C and Northrop Grumman X-47B air vehicles as well as the common operating system and sensors.
- Prepare for joint early Operational Assessment (OA).

C. Other Program Funding Summary:

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	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
PE 0603400D8Z, OSD	-	284.617	77.785	-	-	-
PE 0603114N, Navy	117.865	-	-	-	-	-
PE 0604731F, Air Force	174.449	-	-	-	-	-
PE 0207256F, Air Force	2.305	-	-	-	-	-
PE 0603285E, DARPA	38.385	-	-	-	-	-

D. Acquisition Strategy:

The J-UCAS Advanced Technology Development and Risk Reduction acquisition strategy is to prove the basic technological feasibility of the J-UCAS concept with the X-45A technology demonstrator and to prove the military utility through the next generation demonstrators – the X-45C and the X-47B demonstrators. This effort is tightly coupled with PE 0604400D8Z (J-UCAS Advanced Component and Prototype Development), which complements the work under this program element to deliver systems for the joint early operational assessment, using a common architecture and subsystems.

E. Major Performers:

The Boeing Company, St. Louis, MO
 The Boeing Company, Seattle, WA
 Northrop Grumman Corporation, El Segundo, CA
 Northrop Grumman Corporation, Rancho Bernardo, CA
 Northrop Grumman Corporation, Palmdale, CA

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Exhibit R-3 Cost Analysis					Date: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-wide/BA 4			PROGRAM ELEMENT 0603851D8Z			PROJECT NAME AND NUMBER Environmental Security Technology Certification Program (ESTCP) 0603851D8Z	
Cost Categories	Contract Method & Type	Performing Activity & Location	FY 2003 Cost	FY 2004 Cost	FY 2005 Cost	Cost to Complete	Total Cost
Product Development:							Continuing
X-45	OTA	Boeing Phantom Works, St. Louis MO			137.599	650.662	
X-47	OTA	Northrop Grumman, El Segundo, CA			116.835	885.852	
Common Systems	TBD				150.243	1033.238	Continuing
Subtotal Product Development					404.677	2569.752	
T&E:							
Operational Assessment (OA)					0.100	372.740	
Subtotal T&E					0.100	372.740	
Management Services:					18.096	134.574	
Subtotal Management Services					18.096	134.574	
Total Cost					422.873	3077.066	
Remarks							

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Exhibit R-4a, Schedule Detail			Date: February 2004						
Appropriation/Budget Activity	Program Element Number and Name	Project Number and Name							
DEFENSE WIDE RDT&E/B.A. 4	PE 0604400D8Z – J-UCAS Advanced Component and Prototype Development	J-UCAS							
		FY 2002	FY 2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009
Common Systems Development Begins				3Q					
X-45A Flight Demonstrations Conclude					2Q				
J-UCAS Flight Demonstrations Begin						3Q			
J-UCAS Flight Demonstrations Conclude							4Q		
Joint Early Operational Assessment Begins								1Q	