Fiscal Year (FY) 2006 Budget Estimates Exhibit R-2, RDT&E Budget Item Justification						Date: February 2005		
Appropriation/Budget Activity Defense Wide RDT&E, BA3				R-1 ITEM NOMENCLATURE J-UCAS Advanced Technology Development and Risk Reduction		PE-0603400D8Z		
COST ($ in millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
J-UCAS PE-0603400D8Z	0.000	354.794	0.000	0.000	0.000	0.000	0.000	0.000

A. Mission Description and Budget Item Justification:

The Joint Unmanned Combat Air Systems (J-UCAS) program is a joint effort to develop and demonstrate unmanned combat capabilities for high-threat Suppression of Enemy of Air Defense (SEAD), Information Operations/ Electronic Attack, Persistent Surveillance/Reconnaissance, and related strike missions within the emerging global command and control architecture for the warfighting community. The J-UCAS program combines and expands 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. These efforts were targeted towards service-specific needs, however 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, are reducing the risk of the "operationalized" demonstration system being developed for a joint operational assessment (OA) planned for the FY 2007-2010 timeframe. The J-UCAS concept incorporates the next generation family of demonstrator air vehicles, together with common subsystems (e.g. sensors, payloads, communications) and a Common Operating System to achieve the system's diverse mission functionality. These common system elements will maximize mission flexibility and operational versatility, while reducing overall costs and maintaining schedule toward a joint OA. The J-UCAS Office operates in close coordination with Service users and other operational components. The program is focused on demonstrating capabilities that support both Services and enable an operational system development decision by the end of the decade. PE 0603400D8Z is for Advanced Technology Development and Risk Reduction. These funds are used for the completion of demonstrations of the X-45A technology demonstrator, continued development of the Boeing and Northrop Grumman demonstrator programs, and the development of common systems technology elements.

B. Program Change Summary:

	FY 2004	FY 2005	FY 2006	FY 2007
Previous President's Budget:	0.000	284.617	77.785	0.000
Current FY2006 President's Budget Submission:	0.000	354.794	0.000	0.000
Adjustments to Appropriated Value:		+70.177		
Congressional Program Reductions:		-8.823		
Congressional Rescissions:				
Congressional Increases:		+79.000		
Reprogrammings:			-77.785	
SBIR/STTR Transfers:				
Other:				

C. Other Program Funding Summary:

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
PE 0604400D8Z, OSD	0.000	217.401	0.000	0.000	0.000	0.000	0.000
PE 0603114N, Navy	117.865	0.000	0.000	0.000	0.000	0.000	0.000
PE 0604731F, Air Force	160.551	0.000	0.000	0.000	0.000	0.000	0.000
PE 0207256F, Air Force	2.305	0.000	0.000	0.000	0.000	0.000	0.000
PE 0603285E, DARPA	41.385	0.000	0.000	0.000	0.000	0.000	0.000
PE 0603400F, Air Force	0.000	0.000	77.800	0.000	0.000	0.000	0.000
PE 0604400F, Air Force	0.000	0.000	272.300	400.100	554.100	780.500	955.200

D. Acquisition Strategy:

The J-UCAS program blends the advantages of both the Advanced Technology Demonstration (ATD) and the Advanced Concept Technology Demonstration (ACTD) concepts to facilitate rapid development and integration of advanced technologies in an experimental system that addresses operational needs. Using the next generation demonstrator air vehicle families, together with common subsystems and a Common Operating System, this nontraditional approach also incorporates key acquisition considerations (i.e., user requirements, comprehensive system lifecycle perspective, and rigorous risk mitigation processes) to provide the necessary insights, operational data and identified options for the services to make an informed decision for accelerated acquisition near the end

of the decade. 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 operational assessment.

E. Performance Metrics:

2Q FY 2006 Delivery of 'Build 0', Basic Services Build of the Common Operating System (COS).
2Q FY 2007 Delivery of 'Build 1', Single Ship Build of the Common Operating System (COS).

Fiscal Year (FY) 2006 Budget Estimates Exhibit R-2a, RDT&E Budget Item Justification							Date: February 2005	
APPROPRIATION/BUDGET ACTIVITY DEFENSE WIDE RDT&E BA 3				R-1 ITEM NOMENCLATURE J-UCAS Advanced Technology Development and Risk Reduction		PE-0603400D8Z		
COST ($ in millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
J-UCAS PE-0603400D8Z	0.000	354.794	0.000	0.000	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program

	FY 2004	FY 2005	FY 2006
Accomplishment/Effort/Subtotal Cost	0.000	354.794	0.000

FY 2005 and FY 2006 Planned Program:

- Continue development of J-UCAS systems, specifically the Boeing and Northrop Grumman demonstrator programs as well as the common operating system and sensors.
- Prepare for joint Operational Assessment (OA).

C. Other Program Funding Summary:

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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
Lockheed Martin, Palmdale, CA
The Johns Hopkins University, Baltimore, MD