

UNCLASSIFIED

PE NUMBER: 0207256F

PE TITLE: Joint Unmanned Combat Air System (J-UCAS)

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207256F Joint Unmanned Combat Air System (J-UCAS)

Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	2.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
5118 Joint Unmanned Combat Air Systems. (J-UCAS)	2.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD

Note: In FY06 the Joint Unmanned Combat Air Systems (J-UCAS) program was transferred from the Defense Advanced Research Projects Agency (DARPA) to be a joint program led by the Air Force with Navy representation. The program is undergoing a restructure and will realign the adjusted resources in the next budget cycle to advance the J-UCAS program. Funding is being realigned from PEs 0603400D8Z and 0604400D8Z to PEs 0603400F and 0604400F, respectively.

(U) 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. 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, are reducing the risk of the "operationalized" demonstration system being developed for a joint early operational assessment (OA) planned for the FY07-10 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 early 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.

This PE only has FY 2004 funding. In FY 2005 funding was moved to PEs 0603400D8Z and 0604400D8Z. This program will be moving to PEs 0603400F and 0604400F in FY 2006.

This is a BA 05 program, System Development and Demonstration, to develop and demonstrate unmanned combat air system capabilities.

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207256F Joint Unmanned Combat Air System (J-UCAS)

(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	2.372	2.911		
(U) Current PBR/President's Budget	2.300	0.000		
(U) Total Adjustments	-0.072	-2.911		
(U) Congressional Program Reductions		-2.911		
Congressional Rescissions				
Congressional Increases				
Reprogrammings				
SBIR/STTR Transfer	-0.072			

(U) **Significant Program Changes:**

FY06: The program is undergoing a restructure and will realign the adjusted resources in the next budget cycle to advance the J-UCAS program. Funding is being realigned from PEs 0603400D8Z and 0604400D8Z to PEs 0603400F and 0604400F, respectively.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification

DATE

February 2005

BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
05 System Development and Demonstration (SDD)					0207256F Joint Unmanned Combat Air System (J-UCAS)			5118 Joint Unmanned Combat Air Systems. (J-UCAS)		
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
5118 Joint Unmanned Combat Air Systems. (J-UCAS)	2.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

Note: In FY06 the Joint Unmanned Combat Air Systems (J-UCAS) program was transferred from the Defense Advanced Research Projects Agency (DARPA) to be a joint program led by the Air Force with Navy representation. The program is undergoing a restructure and will realign the adjusted resources in the next budget cycle to advance the J-UCAS program. Funding is being realigned from PEs 0603400D8Z and 0604400D8Z to PEs 0603400F and 0604400F, respectively.

(U) **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. 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, are reducing the risk of the "operationalized" demonstration system being developed for a joint early operational assessment (OA) planned for the FY07-10 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 early 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.

This PE only has FY 2004 funding. In FY 2005 funding was moved to PEs 0603400D8Z and 0604400D8Z. This program will be moving to PEs 0603400F and 0604400F in FY 2006.

This is a BA 05 program, System Development and Demonstration, to develop and demonstrate unmanned combat air system capabilities.

(U) **B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U)				
(U) Accomplishments/Planned Program	0.000	0.000		
(U) Other Government Cost	2.300	0.000		
-Mission support of the Joint Program Office, travel, computer costs, misc contracts, etc.				
(U) Total Cost	2.300	0.000	0.000	0.000

Exhibit R-2a, RDT&E Project Justification

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207256F Joint Unmanned Combat
Air System (J-UCAS)

PROJECT NUMBER AND TITLE

5118 Joint Unmanned Combat Air
Systems. (J-UCAS)(U) C. Other Program Funding Summary (\$ in Millions)

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF S&T (PE0603333F)										
(U) DARPA (PE0603765E)										
(U) DARPA (PE0603285E)	41.385	0.000								
(U) AF RDT&E (PE0604731F)	160.551	0.000	0.000	0.000	0.000	0.000	0.000	0.000		TBD
(U) Navy RDT&E (PE0603114N)	117.865	0.000	0.000	0.000	0.000	0.000	0.000	0.000		TBD
(U) Navy RDT&E (PE0604731N)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		TBD
(U) Navy RDT&E (PE0603111N)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		TBD
(U) Aircraft Procurement (PE0207255F)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		TBD
(U) Defense-wide RDT&E (PE0603400D8Z)	0.000	354.794	0.000	0.000	0.000	0.000	0.000	0.000		TBD
(U) Defense-wide RDT&E (PE0604400D8Z)	0.000	217.401	0.000	0.000	0.000	0.000	0.000	0.000		TBD
(U) AF (0603400F)	0.000	0.000	77.800	0.000	0.000	0.000	0.000	0.000		
(U) AF (0604400F)	0.000	0.000	272.300	400.100	554.100	785.500	955.200	1064.100	Continuing	TBD

(U) 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 of 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.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207256F Joint Unmanned Combat
Air System (J-UCAS)

PROJECT NUMBER AND TITLE

5118 Joint Unmanned Combat Air
Systems. (J-UCAS)

(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Award</u> <u>Date</u>	<u>FY 2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Award</u> <u>Date</u>	<u>FY 2006</u> <u>Cost</u>	<u>FY 2006</u> <u>Award</u> <u>Date</u>	<u>FY 2007</u> <u>Cost</u>	<u>FY 2007</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
(U) <u>Product Development</u>														
Subtotal Product Development			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
Remarks:														
(U) <u>Support</u>														
Various				2.300		0.000						Continuing	TBD	
Subtotal Support			0.000	2.300		0.000		0.000		0.000		Continuing	TBD	0.000
Remarks:														
(U) <u>Test & Evaluation</u>														
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
Remarks:														
(U) <u>Management</u>														
Subtotal Management			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
Remarks:														
(U) Total Cost			0.000	2.300		0.000		0.000		0.000		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207256F Joint Unmanned Combat
Air System (J-UCAS)

PROJECT NUMBER AND TITLE

5118 Joint Unmanned Combat Air
Systems. (J-UCAS)

N/A – This PE provides funds for system development and demonstration of unmanned combat capabilities for high-threat missions.

UNCLASSIFIED

Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207256F Joint Unmanned Combat
Air System (J-UCAS)

PROJECT NUMBER AND TITLE

5118 Joint Unmanned Combat Air
Systems. (J-UCAS)(U) Schedule ProfileFY 2004FY 2005FY 2006FY 2007

(U) Stand up Joint Program Office

1Q

This PE only has FY 2004 funding. In FY06 program funding is being realigned from PEs 0603400D8Z and 0604400D8Z to PEs 0603400F and 0604400F, respectively.

The program is undergoing a restructure and will realign the adjusted resources in the next budget cycle to advance the J-UCAS program.