

UNCLASSIFIED

PE NUMBER: 0604740F
 PE TITLE: Integrated Command & Control Applications

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2008
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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604740F Integrated Command & Control Applications
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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	26.507	26.593	0.177	0.182	0.205	0.209	0.213	Continuing	TBD
2523 Product Lines	0.150	0.160	0.177	0.182	0.205	0.209	0.213	Continuing	TBD
2524 Reuse and Component Support	26.357	26.433	0.000	0.000	0.000	0.000	0.000	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

The goal of the Integrated Command & Control Applications (IC2A) program is to reduce the development time, costs, and risks associated with the acquisition and development of an enterprise oriented Command & Control (C2) capability by defining a reference architecture to enhance common application use and reuse.

Project 2523, Product Lines, minimizes development cost and time by defining a C2 architecture approach consistent with net-centric principles and guidance to ensure compliance and interoperability using standards based service oriented architecture components. The use of web services as a common product line on a C2 reference architecture improves software quality, interoperability and reliability while reducing fielding times and overall life cycle costs.

Project 2524, Reuse and Component Support (RCS), identifies, develops, tests and provides re-useable software components and products to the IC2A program and to other programmed Systems of Record. The RCS project is developing re-useable software components based current on Service Oriented Architectures and web services that will allow the AF to achieve a net-centric operations and warfare capability.

This program is categorized as Budget Activity (BA) 5 to reflect a program in System Demonstration and Development (SD&D).

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	23.664	0.189	0.179
(U) Current PBR/President's Budget	26.507	26.593	0.177
(U) Total Adjustments	2.843	26.404	
(U) Congressional Program Reductions		-0.028	
Congressional Rescissions		-0.168	
Congressional Increases		26.600	
Reprogrammings	3.500		
SBIR/STTR Transfer	-0.657		

(U) Significant Program Changes:

FY07: An increase between the previous and current President's Budget is due to the reprogramming of funds for C-NAF Commander's Dashboard to ensure effective execution.

FY08: Changes in President's Budget due to Congressional increases and technical adjustments from program elements 0207601F and 0303150F.

Exhibit R-2a, RDT&E Project Justification

DATE
February 2008

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604740F Integrated Command & Control Applications		PROJECT NUMBER AND TITLE 2523 Product Lines		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
2523 Product Lines	0.150	0.160	0.177	0.182	0.205	0.209	0.213	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

The software architecture, developed by the Product Lines Project, forms a vital component of the Integrated Command and Control Applications (IC2A) program by providing pre-defined reference architecture as a foundation for a DoD enterprise C2 capability. Using rapid prototyping techniques, a contractor can quickly tailor a reference architecture-based C2 component to the warfighter's needs and deliver an integrated, combat-ready system. All product lines and components are based on net-centric principles, service oriented architecture and Core Enterprise Services to ensure joint compliance and interoperability; make maximum use of open system architectures, industry standards, Commercial off-the-shelf (COTS) products, and government furnished equipment; and incorporate multilevel security (MLS) features. This effort ensures that components and systems are developed with a view of operating within a C2 enterprise instead of stovepipe functionality. Contractors develop and maintain a common integrated infrastructure in a collaborative, synergistic environment using validated, mature software engineering processes to help ensure the quality of the designs and components. Reference architecture based designs and tested software components reduce development costs, risks and time for the user. New technologies, capabilities, and incremental developments are assessed and integrated into the architecture and components design as part of the product line development process to minimize any impact to the user.

This program is categorized as Budget Activity (BA) 5 to reflect a program in System Demonstration and Development (SD&D).

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Qualify components for product lines/program management support	0.150	0.160	0.177
(U) Total Cost	0.150	0.160	0.177

(U) C. Other Program Funding Summary (\$ in Millions)

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</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>Complete</u>	
(U) Not applicable									

(U) D. Acquisition Strategy

All major contracts were awarded after full and open competition.

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Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2008

BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
05 System Development and Demonstration (SDD)				0604740F Integrated Command & Control Applications					2523 Product Lines			
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>												
Subtotal Product Development			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Support</u>												
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	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
Remarks:												
(U) <u>Management</u>												
Program Office Support	ITSP	ESC Hanscom AFB, MA		0.150	Oct-06	0.160	Oct-07	0.177	Oct-08	Continuing	TBD	TBD
Subtotal Management			0.000	0.150		0.160		0.177		Continuing	TBD	TBD
Remarks:												
(U) Total Cost			0.000	0.150		0.160		0.177		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2008

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604740F Integrated Command & Control Applications

PROJECT NUMBER AND TITLE

2523 Product Lines

IC2A Schedule – Product Lines

As of: 9 Jan 08

	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
PROGRAM MANAGEMENT SUPPORT								

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Exhibit R-4a, RDT&E Schedule Detail	DATE February 2008
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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604740F Integrated Command & Control Applications	PROJECT NUMBER AND TITLE 2523 Product Lines
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(U) <u>Schedule Profile</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Qualify components for product lines/program management support	1-4Q	1-4Q	1-4Q

Exhibit R-2a, RDT&E Project Justification

DATE
February 2008

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604740F Integrated Command & Control Applications			PROJECT NUMBER AND TITLE 2524 Reuse and Component Support		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
2524 Reuse and Component Support	26.357	26.433	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

Reuse and Component Support (RCS) identifies, develops, tests and provides reuseable software components and products to the IC2A program and to other programmed Systems of Record. The RCS project is developing reuseable software components based on Service Oriented Architectures and Web Services that will allow the AF to achieve a netcentric operations and warfare capability.

The President's budget for FY08 has no requirements for this project.

This program is categorized as Budget Activity (BA) 5 to reflect a program in System Demonstration and Development (SD&D)

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Distributed Mission Interoperability Toolkit (DMIT)	2.228	3.944	0.000
(U) Enterprise Services for Reach Back Capabilities (ESRBC)	1.453	2.958	0.000
(U) Data Fusion and Integration of the Net-centric Force Protection Enterprise Services (DFFP)	1.356	0.000	0.000
(U) Airborne Web Services (AWS) Spiral 3	1.356	0.792	0.000
(U) Global Awareness Presentation System (GAPS) for USSTRATCOM	0.970	2.366	0.000
(U) Asset/eWing	3.873	3.944	0.000
(U) Command and Control Service Level Management (C2SLM)	6.293	8.000	0.000
(U) Defense Energy Awareness and Management Center (DEAMC)	1.550	0.000	0.000
(U) Program Engineering Interoperability Framework (PEIF)	1.550	1.578	0.000
(U) Medical Data Storage and Retrieval System (MEDSTARS)	2.228	1.651	0.000
(U) C-NAF Commander's Dashboard	3.500		
(U) Research Visualization Facility (RVF)		1.200	
(U) Total Cost	26.357	26.433	0.000

(U) C. Other Program Funding Summary (\$ in Millions)

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to Complete</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) Not applicable									

(U) D. Acquisition Strategy

All major contracts for Reuse and Component Support development will be awarded after full and open competition.

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Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2008

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604740F Integrated Command & Control Applications	PROJECT NUMBER AND TITLE 2524 Reuse and Component Support
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<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>(U) Product Development</u>												
Distributed Mission Interoperability Toolkit (DMIT)	C/FFP	Gestalt, Pennsylvania		2.228	Feb-07	3.550	Mar-08			Continuing	TBD	TBD
Enterprise Services for Reach Back Capabilities (ESRBC)	C/FFP	Gestalt, Pennsylvania		1.453	Feb-07	2.662	Mar-08			Continuing	TBD	TBD
Integration of Force Protection Enterprise Services (DFFP)	C/FFP	Fenwick Tech Inc. West Virginia		1.208	Mar-07					Continuing	TBD	TBD
JSTARS/Airborne Web Services (AWS) Spiral 3	C/FFP	SAIC West Virginia		1.208	Feb-07	0.786	Feb-08			Continuing	TBD	TBD
Global Awareness Presentation System for USSTRATCOM	C/FFP	ProLogic, West Virginia		0.852	Mar-07	2.177	Feb-08			Continuing	TBD	TBD
Asset/eWing	C/FFP	Fenwick, West Virginia		3.446	Aug-07	3.550	Mar-08			Continuing	TBD	TBD
Command and Control Service Level Management (C2SLM)	C/FFP	Gestalt, PA/NAVAIR, FL		5.287	Mar-07	7.200	Mar-08			Continuing	TBD	TBD
Defense Energy Awareness and Management Center (DEAMC)	C/FFP	Gestalt, Pennsylvania		1.395	Apr-07					Continuing	TBD	TBD
Program Engineering Interoperability Framework (PEIF)	C/FFP	Parametric Technology Corp, Mass		1.394	Aug-07	1.451	Feb-08			Continuing	TBD	TBD
MEDSTARS	C/FFP	ProLogic, West Virginia		2.009	Feb-07	1.451	Feb-08			Continuing	TBD	TBD
C-NAF Commander's Dashboard	C/FFP	Gestalt, Pennsylvania		3.500	Dec-07					Continuing	TBD	
Research Visualization Facility (RVF)	C/FFP	University of Nevada Las Vegas, Nevada				1.104	May-08			Continuing	TBD	
Subtotal Product Development			0.000	23.980		23.931		0.000		Continuing	TBD	TBD
Remarks:	Congressional budget line for ASSET/eWing was split between Airborne Web Services (AWS) and Integration of Force Protection Enterprise (Data Fusion and Net Centric Force Protection).											
<u>(U) Support</u>												
Contractor Support	T&M	ESC Hanscom AFB, MA		2.377	Mar-07	2.502	Mar-08			Continuing	TBD	TBD
Subtotal Support			0.000	2.377		2.502		0.000		Continuing	TBD	TBD
Remarks:												
<u>(U) Test & Evaluation</u>												0.000

R-1 Line Item No. 78

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Exhibit R-3 (PE 0604740F)

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Exhibit R-3, RDT&E Project Cost Analysis						DATE February 2008		
BUDGET ACTIVITY			PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
05 System Development and Demonstration (SDD)			0604740F Integrated Command & Control Applications			2524 Reuse and Component Support		
Subtotal Test & Evaluation	0.000		0.000		0.000	0.000	0.000	0.000
Remarks:								
(U) <u>Management</u>								
Program Management Support						0.000	0.000	TBD
Subtotal Management	0.000		0.000		0.000	0.000	0.000	TBD
Remarks:								
(U) <u>Not applicable.</u>								
(U) Total Cost	0.000		26.357		26.433	0.000	Continuing	TBD
Remarks:								

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2008

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604740F Integrated Command & Control Applications

PROJECT NUMBER AND TITLE

2524 Reuse and Component Support

a/o JAN 08

IC2A Schedule

	FY07	FY08	FY09	FY10	FY11	FY12	FY13
AWS	▲ ▲	▲ ▲					
DMIT	▲ ▲	▲ ▲					
ESRBC	▲ ▲	▲ ▲					
GAPS	▲ ▲	▲ ▲					
DFFP	▲ ▲						
ASSET/eWing	▲ ▲	▲ ▲					
C2SLM		▲					
DEAMC	▲ ▲						
PEIF		▲ ▲					
MEDSTARS	▲ ▲	▲ ▲					
C-NAF Cmdr's Dashboard		▲					
Research VIZ Facility		▲ ▲					

Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2008

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604740F Integrated Command & Control Applications

PROJECT NUMBER AND TITLE

2524 Reuse and Component Support

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Schedule Profile			
(U) JSTARS/AWS Spiral 3	2-4Q	2-4Q	
(U) DMIT	2-4Q	2-4Q	
(U) Enterprise Services for Reach Back Capabilities (ESRBC)	2-4Q	2-4Q	
(U) Global Awareness Presentation System (GAPS) for USSTRATCOM	2-4Q	2-4Q	
(U) Integration of Force Protection Enterprise Services (DFFP)	2-4Q		
(U) ASSET/eWing	2-4Q	2-4Q	
(U) C2SLM	4Q	4Q	
(U) Defense Energy Awareness and Mgmt Center (DEAMC)	2-4Q		
(U) Program Engineering Interoperability Framework (PEIF)	2-4Q	2-4Q	
(U) MEDSTARS	2-4Q	2-4Q	
(U) C-NAF Commander's Dashboard	4Q	1Q	
(U) Research Visualization Facility (RVF)		2-4Q	