

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2007
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BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207449F C2 Constellation
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Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	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	39.123	43.686	45.049	46.119	47.075	47.685	48.605	49.590	Continuing	TBD
5078 Horizontal Integration	10.362	11.465	11.857	12.122	12.421	12.680	12.923	13.184	Continuing	TBD
5140 Joint Expeditionary Force Experiments	28.761	32.221	33.192	33.997	34.654	35.005	35.682	36.406	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

Command and Control Constellation (C2C) efforts provide strategic, operational, and tactical direction for doctrine, organization, training, materiel, leadership/education, personnel and facilities (DOTMLPF) solutions to facilitate the horizontal flow of Warfighter Domain C2ISR information. In-depth analyses of C2C operational, systems, and technical architecture are geared to generate specifications, standards and solutions to support joint material and non-material solutions. The C2C incorporates rapidly developing technologies to promote common standards, data sharing and information services across Air Force and Joint warfighting applications to support a network-centric, joint enterprise solution. Through rigorous architecture analysis, C2C also allows for existing C2 structures to be streamlined to facilitate future joint command and control capabilities provided to the Joint Forces Commander.

Project 5078, Horizontal Integration (HI) is responsible for delivering integrated capabilities within the Command and Control, Intelligence, Surveillance and Reconnaissance (C2ISR) warfighting domain of the Air Force enterprise. The Command and Control Constellation (C2C) identifies, prioritizes, develops and delivers horizontally integrated solutions--across the Services--into the hands of the joint warfighter. C2C Program funds are applied toward identifying and delivering these horizontally integrated capabilities to the warfighter.

Project 5140, Joint Expeditionary Force Experiments (JEFX), are large-scale warfighting experiments that address emerging operational challenges and are part of the total Air Force (AF) experimentation effort. They combine live-fly forces and simulations into an operationally representative warfighter environment. These experiments provide a vehicle for experimentation with operational concepts and attendant new technologies to evolve and transform our aerospace forces and capabilities for the 21st century. They are part of a broader effort to implement the Joint Vision 2020, exploit the Revolution in Military Affairs, demonstrate emerging Air Force capabilities to deploy and employ decisive aerospace power for the Joint Force Commander, and are important enablers of innovation and transformation.

This program is in Budget Activity 7- Operational System Development because it provides a vehicle for developers, testers, and warfighters to experiment, analyze, and explore operational concepts and new technologies to enhance operational system developments and improve capabilities of the 21st century aerospace force.

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07 Operational System Development

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	40.334	44.027	56.663	56.317
(U) Current PBR/President's Budget	39.123	43.686	45.049	46.119
(U) Total Adjustments	-1.211	-0.341		
(U) Congressional Program Reductions		-0.175		
Congressional Rescissions		-0.166		
Congressional Increases				
Reprogrammings	-0.078			
SBIR/STTR Transfer	-1.133			

(U) **Significant Program Changes:**

The change between the previous and current FY08 and FY09 President's Budgets are due to the reprogramming of funds to meet higher AF priorities.

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BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT NUMBER AND TITLE			
07 Operational System Development				0207449F C2 Constellation				5078 Horizontal Integration			
Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total	
5078 Horizontal Integration	10.362	11.465	11.857	12.122	12.421	12.680	12.923	13.184	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0			

(U) A. Mission Description and Budget Item Justification

Project 5078, Horizontal Integration, is established to develop an integrated capability to support network centric operations. Project 5078 defines the Command and Control Constellation (C2C) through six thrust areas: first, Operational Requirements and Planning documentation will be created/updated; second, Systems Engineering Policy & Guidance, Education and Architecture will be developed to further refine the C2C and provide baseline data for more detailed analysis; third, operators and systems engineers will perform analyses to validate and prioritize the major issues facing the C2C and develop net-centric roadmaps; fourth, various Modeling & Simulation and experimentation methods will be used to test both non-materiel and materiel solutions; fifth, Joint Integration/applicability will be researched and applied; and sixth, Horizontal Integration Initiatives will be built and transitioned to the warfighter as the final step in the C2C systems engineering process. Program specifics are:

1) Operational Requirements documents (e.g., Program Management Directive, Concept of Employment, Initial Capability Document and C2C Architecture) will be published/revise. A FYDP Implementation plan identifying the most significant C2C net-centric integration issues will continue to be developed.

(2) Systems Engineering and Architecture Development is the 'glue' which will hold C2C elements together, and close the seams in the Command, Control Communications Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) architecture. C2C system and technical architectures, cross program requirements allocation, key cost drivers, risk assessments and corresponding risk mitigation strategies will be examined. The C2C architecture provides a framework for conducting analyses to identify capability gaps, compare alternatives for improving Joint warfighting capabilities and to identify associated resource implications. Capability analyses employ the C2C architecture to identify areas where interoperability can be improved within the Air Force, among Joint Services, and among coalition partners. Once capability issues are identified through the architecture analyses, they are prioritized and Capability Roadmaps are developed to prioritize and provide solutions to the Warfighter that resolve the capability gaps.

(3) Operational Integration and System Engineering Analysis for Net-centric capability across C4ISR programs will continue. The resulting Net-centric Strategic Plan will impact C4ISR program roadmaps and feed directly into the Command and Control, Intelligence, Surveillance, and Reconnaissance (C2ISR) and C4ISR Net-centric Flight Plans. Provides Air Staff with issue development, data collection, data analysis, mapping of capabilities to system functions, and supports the ability to develop trade space recommendations through use of a Capability Evolution Methodology assessment tool.

(4) Modelling and Simulation (M&S) and Experimentation will leverage existing government/industry development and simulation sites to allow 'virtual' assessments of the C2 Constellation. Facility network architecture management, new or improved communications linkages between the various government and industry simulation sites, with the required accreditation and encryption systems will be developed. A series of experiments, exercises and simulations will provide alternatives and targets of opportunity for further engineering improvements and integration.

(5) C4ISR Joint Interoperability/Integration initiatives will mitigate the synchronization of Air Force and Joint nodes bridging the C2 Constellation enterprise.

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Focuses on supporting several major venues including: Joint Battle Management Command and Control (JBMC2) Roadmap, Joint Forces Command (JFCOM) Board of Directors and the Multi - Service Working Group.

(6) Horizontal Integration Initiatives will capitalize on near-term opportunities to eliminate known horizontal integration deficiencies in the seamless C4ISR network vision. These initiatives will become integral to weapon systems' configuration controlled baselines.

This program is in Budget Activity 7 - Operational System Development because it provides horizontal integration and provides developers, testers and warfighters a way to experiment, analyze, and explore operational concepts and new technologies to enhance operational system developments and improve capabilities of the 21st century aerospace force.

(U) B. Accomplishments/Planned Program (\$ in Millions)	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Operational Requirements/Planning documents creation/update	0.920	0.990	1.000	1.050
(U) Systems Engineering Policy/Guidance and Architecture Education Development	3.800	4.004	4.356	4.462
(U) Operational Analysis supporting Net-Centric Integration	1.906	2.671	2.681	2.700
(U) M&S Infrastructure and Operational Experimentation	2.000	2.000	2.000	2.000
(U) Joint Interoperability/Integration Efforts	0.764	0.800	0.820	0.860
(U) Horizontal Integration Initiative focused on warfighting capability development	0.972	1.000	1.000	1.050
(U) Total Cost	10.362	11.465	11.857	12.122

(U) C. Other Program Funding Summary (\$ in Millions)	<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>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) Not applicable										

(U) **D. Acquisition Strategy**
This project uses full and open competition for one or more operational requirements document creation, systems engineering & architecture development, modeling & simulation and experimentation, joint interoperability/integration, and horizontal integration approaches.

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Exhibit R-3, RDT&E Project Cost Analysis

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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 2006 Cost</u>	<u>FY 2006</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2009</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
				<u>Cost</u>	<u>Award Date</u>									
Capability Based Planning (CBP)	FFRDC	MITRE Corp, ESC, Hanscom AFB, MA		0.319	Nov-05	0.335	Nov-06	0.351	Nov-07	0.367	Nov-08	Continuing	TBD	TBD
Architecture development	C/CPAF	ManTech ITSP, ESC, Hanscom AFB, MA		0.100	Dec-05	0.105	Dec-06	0.110	Dec-07	0.115	Dec-08	Continuing	TBD	TBD
	FFRDC	MITRE Corp, ESC, Hanscom AFB, MA		1.276	Nov-05	1.191	Nov-06	1.530	Nov-07	1.629	Nov-08	Continuing	TBD	TBD
Capability Roadmaps	C/CPAF	Lockheed Martin, ESC, Hanscom AFB, MA		0.360	Dec-05	0.378	Dec-06	0.396	Dec-07	0.414	Dec-08	Continuing	TBD	TBD
	C/CPAF	Lockheed Martin, ESC, Hanscom AFB, MA		0.789	Dec-05	0.828	Dec-06	0.868	Dec-07	0.907	Dec-08	Continuing	TBD	TBD
	C/CPAF	ManTech ITSP, ESC, Hanscom AFB, MA		0.150	Dec-05	0.158	Dec-06	0.165	Dec-07	0.173	Dec-08	Continuing	TBD	TBD
Operational Requirements Planning Documents, System Engineering, Operation Integration Analysis, and Joint Interoperability Integration efforts	FFRDC	MITRE, ESC, Hanscom AFB, MA		0.700	Nov-05	0.735	Nov-06	0.770	Oct-07	0.805	Nov-08	Continuing	TBD	TBD
	MIRP	AFC2ISRC/CX		1.945	Oct-05	2.776	Oct-06	2.611	Oct-07	2.451	Oct-08	Continuing	TBD	TBD
Subtotal Product Development			0.000	5.639		6.506		6.801		6.861		Continuing	TBD	TBD
Remarks:														
(U) <u>Support</u> Misc/Program Management Office	Various	ESC, Hanscom AFB, MA		1.411	Dec-05	1.482	Dec-06	1.413	Dec-07	1.452	Dec-08	Continuing	TBD	TBD
Subtotal Support			0.000	1.411		1.482		1.413		1.452		Continuing	TBD	TBD

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Remarks:														
(U)	<u>Test & Evaluation</u>													
	Engineering Analysis and Assessment	C/CPAF	Lockheed Martin, ESC, Hanscom AFB, MA	1.886	Dec-05	1.980	Dec-06	2.075	Dec-07	2.169	Dec-08	Continuing	TBD	TBD
		C/CPAF	ManTech ITSP, ESC, Hanscom AFB, MA	0.100	Dec-05	0.105	Dec-06	0.110	Dec-07	0.115	Dec-08	Continuing	TBD	TBD
		FFRDC	MITRE Corp, ESC, Hanscom AFB, MA	1.176	Nov-05	1.235	Nov-06	1.294	Nov-07	1.352	Nov-08	Continuing	TBD	TBD
	Subtotal Test & Evaluation			0.000	3.162	3.320		3.479		3.636		Continuing	TBD	TBD
Remarks:														
(U)	<u>Management</u>													
	Program Management Support	C/CPAF	ManTech ITSP, ESC Hanscom AFB, MA	0.150	Nov-05	0.157	Nov-06	0.164	Nov-07	0.173	Nov-08	Continuing	TBD	TBD
	Subtotal Management			0.000	0.150	0.157		0.164		0.173		Continuing	TBD	TBD
Remarks:														
(U)	Total Cost			0.000	10.362	11.465		11.857		12.122		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

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PROJECT NUMBER AND TITLE
5078 Horizontal Integration



U.S. AIR FORCE

Horizontal Integration Schedule



	FY06	FY07	FY08	FY09	FY10	FY11
1) Operational Requirements (PMD, EMA, ICD, etc.)	Updates	Updates	Updates	Updates	Updates	Updates
2) Systems Engineering & Architecture Development	Version 3.0	Version 4.0	Version 5.0	Version 6.0		
3) Operational Integration Analysis (Capability Assessment Team, Requirements Assessment Team, Capabilities Review Risk Assessment)	CAT RAT	CAT RAT	RAT	CAT RAT	CAT RAT CRRA	CAT RAT CRRA
4) Experimentation (Joint Expeditionary Force Experiment, Net Enabled Command Capability)	JEFX NECC	APTX/LOE NECC	JEFX NECC	APTX/LOE NECC	JEFX NECC	APTX/LOE NECC
5) Joint Interoperability / Integration (Identify gaps)	Gap Analysis	Gap Analysis	Gap Analysis	Gap Analysis	Gap Analysis	Gap Analysis
6) Horizontal Integration Initiatives	TST	ICAS	Implementation Updates	Implementation Updates	Implementation Updates	Implementation Updates
				Next Joint Mission Thread		

Integrity - Service - Excellence

As of: 5 Jan 07

Exhibit R-4a, RDT&E Schedule Detail

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(U) <u>Schedule Profile</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Operational Requirements Documents	1-4Q	1-4Q	1-4Q	1-4Q
(U) Systems Engineering & Architecture	1-4Q	1-4Q	1-4Q	1-4Q
(U) Operational Integration Analysis	1-4Q	1-4Q	1-4Q	1-4Q
(U) M&S Infrastructure and Experimentation	2-3Q	2-3Q	2-3Q	2-3Q
(U) Joint Interoperability/Integration	3-4Q	3-4Q	3-4Q	3-4Q
(U) Horizontal Integration Initiatives	1-4Q	1-4Q	1-4Q	1-4Q

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BUDGET ACTIVITY 07 Operational System Development					PE NUMBER AND TITLE 0207449F C2 Constellation			PROJECT NUMBER AND TITLE 5140 Joint Expeditionary Force Experiments		
Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
5140 Joint Expeditionary Force Experiments	28.761	32.221	33.192	33.997	34.654	35.005	35.682	36.406	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

The Joint Expeditionary Force Experiments (JEFX) and Advanced Process Technology Experiments (APT)/Limited Objective Experiments (LOE) are large-scale warfighter experiments that address emerging operational challenges and are part of the total Air Force (AF) experimentation effort. JEFX and APT/LOE explore significant capability gaps across the range of AF Concept of Operations (CONOPS) and address critical lessons learned from recent operations. They combine live-fly forces and simulations into an operationally representative warfighter environment. JEFX, spirally conducted, and APT/LOE provide a multi-dimensional, multi-national, multi-service environment for an end-to-end process of exploration, assessment, and transition of capabilities that will provide joint and coalition warfighters with solutions to gaps identified in the Capability Review and Risk Assessment (CRRA) process and through lessons learned in recent and current operations. They are part of a broader effort to implement the Joint Vision 2020, demonstrate emerging Air Force capabilities to deploy and employ decisive aerospace power for the Joint Force Commander, and are important enablers of innovation and transformation. The integration of systems and process is the major reason JEFX is an experiment and not simply a demonstration or exercise. JEFX occurs on even years and APT/LOE on odd years.

This program is in Budget Activity 7 - Operational System Development because it provides horizontal integration, developers, testers, and warfighters to experiment, analyze, and explore operational concepts and new technologies to enhance operational system developments and improve capabilities of the 21st century aerospace force.

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Spiral develop systems architecture, systems engineering, and integration of initiatives into a cohesive system of systems process	3.580	5.906	6.654	6.773
(U) Plan, design, coordinate, assess and report the APTX/LOE and JEFX experiments, provide expertise to support initiative selection, acquisition, program management, communications and systems planning	4.480	6.762	7.100	7.150
(U) Develop initiatives to introduce new technologies and operational capabilities into the Aerospace Expeditionary Force (AEF) Concept of Operations (CONOPS)	5.731	6.235	6.350	6.410
(U) Implement architectural configuration, conduct M&S, install and the test the communications infrastructure and execute the experiment	14.970	3.318	13.088	3.664
(U) Transition successful JEFX assessed and CSAF approved warfighting capabilities for fielding into an integrated C2ISR baseline	0.000	10.000	0.000	10.000
(U) Total Cost	28.761	32.221	33.192	33.997

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5140 Joint Expeditionary Force Experiments

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

	<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>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							

(U) Not applicable

(U) **D. Acquisition Strategy**

JEFX supports evolutionary acquisition of multiple programs by providing a venue to experiment new and emerging technologies to be integrated into other systems-of-record.

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PE NUMBER AND TITLE 0207449F C2 Constellation						PROJECT NUMBER AND TITLE 5140 Joint Expeditionary Force Experiments								
<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 2006 Cost</u>	<u>FY 2006 Cost</u>	<u>FY 2006 Award Date</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> Experimentation	FFRDC	MITRE, ESC Hanscom AFB, MA		2.400	Nov-05	2.000	Nov-06	2.700	Nov-07	2.700	Nov-08	Continuing	TBD	TBD
Experimentation	C/IDIQ	ACS Defense, ESC, Hanscom AFB, MA		1.461	Nov-05	1.000	Nov-06	1.600	Nov-07	1.600	Nov-08	Continuing	TBD	TBD
Experimentation	C/IDIQ	GEMINI, ESC, Hanscom AFB, MA		0.300	Dec-05	0.250	Nov-06	0.300	Nov-07	0.300	Nov-08	Continuing	TBD	TBD
Experimentation	C/IDIQ	PTI, ESC, Hanscom AFB, MA		0.180	Nov-05	0.130	Nov-06	0.200	Nov-07	0.200	Nov-08	Continuing	TBD	TBD
Experimentation	C/IDIQ	Titan, ESC, Hanscom AFB, MA		0.003	Dec-05	0.000		0.000		0.000		Continuing	TBD	TBD
Experimentation	C/CPAF	Lockheed Martin, ESC, Hanscom AFB, MA		1.750	Nov-05	1.600	Nov-06	1.700	Nov-07	1.700	Nov-08	Continuing	TBD	TBD
Experimentation	Various	ESC Hanscom AFB, MA		0.650	Oct-05	0.120	Oct-06	0.200	Oct-07	0.200	Oct-08	Continuing	TBD	TBD
Experimentation	C/T&M	Lockheed Martin, ESC, Hanscom AFB, MA		0.050	Jul-06	0.000		0.000		0.000		0.000	0.050	TBD
Experimentation	C/T&M	Northrop Grumman, ESC, Hanscom AFB, MA		0.094	Dec-05	0.000		0.000		0.000		0.000	0.094	TBD
Various	C/T&M	Northrop Grumman, AFRL,		0.554	Dec-05	0.000		0.000		0.000		0.000	0.554	TBD

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Various	C/T&M	Rome, NY Titan, NAWC, St Inigoes, MD	0.075	Mar-06	0.000	0.000	0.000	0.000	0.075	TBD
Various	MIPR	NAWC, China Lake, CA	0.100	Dec-05	0.000	0.000	0.000	0.000	0.100	TBD
Experimentation	C/T&M	Dolphin Tech, AFRL, Rome, NY	0.116	May-06	0.000	0.000	0.000	0.000	0.116	TBD
Experimentation	C/T&M	NCI Info Sys, AFRL, Rome, NY	0.005	May-06	0.000	0.000	0.000	0.000	0.005	TBD
Experimentation	MIPR	SAF/MBMB , Washington DC	0.028	Feb-06	0.000	0.000	0.000	0.000	0.028	TBD
Experimentation	C/T&M	SAIC, WR-ALC, GA	0.011	May-06	0.000	0.000	0.000	0.000	0.011	TBD
Experimentation	FFP	Trusted Comp Sol, AFRL, Rome, NY	0.042	Mar-06	0.000	0.000	0.000	0.000	0.042	TBD
Experimentation	FFP	Lockheed Martin, ESC, Hanscom AFB, MA	0.199	Nov-05	0.000	0.000	0.000	0.000	0.199	TBD
Experimentation	FFP	General Dynamics, ESC, Hanscom AFB, MA	0.015	Dec-05	0.000	0.000	0.000	0.000	0.015	TBD
Experimentation	FFP	Multimax, ESC, Hanscom AFB, MA	0.041	Nov-05	0.000	0.000	0.000	0.000	0.041	TBD
Experimentation	FFP	Ezenia, ESC, Hanscom AFB, MA	0.026	Dec-05	0.000	0.000	0.000	0.000	0.026	TBD
Experimentation	C/T&M	Alion, AFC2ISRC, Langley AFB, VA	1.516	Nov-05	0.000	0.000	0.000	0.000	1.516	TBD

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Experimentation	C/T&M	SAIC, AFC2ISRC, Langley AFB, VA	1.029	Nov-05	0.000	0.000	0.000	0.000	1.029	TBD			
Experimentation	C/T&M	L3-Com, AFC2ISRC, Langley AFB, VA	1.197	Nov-05	0.000	0.000	0.000	0.000	1.197	TBD			
Experimentation	C/T&M	Northrop Grumman, AFC2ISRC, Langley AFB, VA	0.216	Nov-05	0.000	0.000	0.000	0.000	0.216	TBD			
Experimentation	C/T&M	Lockheed Martin, AFC2ISRC, Langley AFB, VA	0.484	Nov-05	0.000	0.000	0.000	0.000	0.484	TBD			
Experimentation	Various	Various, AFC2ISRC, Langley AFB, VA	0.000		5.245	Nov-06	5.802	Nov-07	5.802	Nov-08	Continuing	TBD	TBD
Experimentation	MIPR	L-3 Com, 505CCW	1.050	Dec-05	1.050	Dec-06	1.130	Dec-07	1.130	Dec-08	Continuing	TBD	TBD
Experimentation	C/GSA	Sverdrup, 505CCW	0.175	Oct-05	0.175	Oct-06	0.180	Oct-07	0.180	Oct-08	Continuing	TBD	TBD
Experimentation	C/GSA	Northrup Grumman, 505CCW	0.250	Oct-05	0.250	Oct-06	0.250	Oct-07	0.250	Oct-08	Continuing	TBD	TBD
Experimentation	Various	505CCW	7.225	Mar-06			1.831	Jan-08	1.831	Jan-09	Continuing	TBD	TBD
Experimentation	MIPR	Various	7.208	Jan-06	20.401	Jan-07	17.299	Nov-07	18.104	Nov-08	Continuing	TBD	TBD
Subtotal Product Development			0.000	28.450	32.221		33.192		33.997		Continuing	TBD	TBD
Remarks:													
(U) <u>Test & Evaluation</u>													
T&E	MIPR	46th Test Squadron	0.311	Jan-06							Continuing	TBD	TBD
Subtotal Test & Evaluation			0.000	0.311	0.000		0.000		0.000		Continuing	TBD	TBD
Remarks:													
(U) Total Cost			0.000	28.761	32.221		33.192		33.997		Continuing	TBD	TBD

R-1 Line Item No. 156

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Project 5140

Exhibit R-3 (PE 0207449F)

Exhibit R-4, RDT&E Schedule Profile

DATE
February 2007

BUDGET ACTIVITY
07 Operational System Development

PE NUMBER AND TITLE
0207449F C2 Constellation

PROJECT NUMBER AND TITLE
5140 Joint Expeditionary Force Experiments

JEFX Timeline

 Conference
 Event

FY06 FY07 FY08 FY09 FY10 FY11
Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1

	FY06 Q4	FY06 Q1	FY06 Q2	FY06 Q3	FY06 Q4	FY07 Q1	FY07 Q2	FY07 Q3	FY07 Q4	FY08 Q1	FY08 Q2	FY08 Q3	FY08 Q4	FY09 Q1	FY09 Q2	FY09 Q3	FY09 Q4	FY10 Q1	FY10 Q2	FY10 Q3	FY10 Q4	FY11 Q1
Assessment		▲▲								▲▲												▲▲
Integration of Initiatives		▲▲								▲▲												▲▲
Call for Initiatives & Selection	▲▲				▲▲			▲▲		▲▲	▲▲						▲▲		▲▲	▲▲		
Architecture Development	▲▲	▲▲								▲▲	▲▲									▲▲	▲▲	▲▲
Initial Experiment Conference	▲▲									▲▲										▲▲		
Level of Effort (LOE)		▲▲	▲▲	▲▲						▲▲	▲▲	▲▲										▲▲
Main Experiment Conference			▲▲											▲▲								
Live Fly Initial Protocol Conf				▲▲											▲▲							
JEFX Spiral 1					▲▲											▲▲						
Live Fly Main Protocol Conf					▲▲											▲▲						
Final Experiment Conference					▲▲											▲▲						
JEFX Spiral 2						▲												▲				
JEFX Spiral 3							▲▲												▲▲			
JEFX Main Experiment									▲												▲	

As of: 10 Jan 07

Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2007

BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207449F C2 Constellation	PROJECT NUMBER AND TITLE 5140 Joint Expeditionary Force Experiments
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(U) <u>Schedule Profile</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Assessment		1Q		1Q
(U) Integration of Initiatives		1Q		1Q
(U) JEFX/APTX/LOE Initiatives & Selection	3-4Q	4Q	3-4Q	4Q
(U) Architecture Development	4Q	1Q	4Q	1Q
(U) APTX/LOE		1-3Q		1-3Q
(U) JEFX Spiral 1		4Q		4Q
(U) JEFX Spiral 2	1Q		1Q	
(U) JEFX Spiral 3	2Q		2Q	
(U) JEFX Main Experiment	3Q		3Q	