PE NUMBER: 0605011F
PE TITLE: RDT&E For Aging Aircraft

Exhibit R-2, RDT&E Budget Item Justification

DATE: February 2006

BUDGET ACTIVITY: 05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE: 0605011F RDT&E For Aging Aircraft

Cost ($ in Millions)	FY 2005 Actual	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	25.249	41.090	25.490	26.039	26.335	26.832	27.185	Continuing	TBD
4685 Aging Aircraft	25.249	41.090	25.490	26.039	26.335	26.832	27.185	Continuing	TBD

Note: Funds for the FY 2006 Congressionally-directed Non-Destructive Testing Corrosion Detection in the amount of $1.0 million are in the process of being moved to PE 0603112F, Project 633153, Advanced Materials for Weapon Systems, from PE 0605011F, Project 654685, RDT&E for Aging Aircraft, for execution. Funds for the FY 2006 Congressionally-directed Electro-Magnetic In-Flight Propeller Balancing System in the amount of $1.5 million are in the process of being moved to PE 0401115F, Project 674885, C-130 Modifications, from PE 0605011F, Project 654685, RDT&E for Aging Aircraft, for execution.

(U) A. Mission Description and Budget Item Justification

This program develops cross-cutting technologies to extend the service life, ensure flight safety, control rapidly rising sustainment costs, and retain the operational capability of the aging aircraft fleet. The program identifies these cross-cutting technologies through detailed business case analyses identifying opportunities to reduce total ownership costs and improve reliability, availability, and maintainability. The program then develops and delivers solutions (to include prototype hardware and software) to address cross-cutting platform deficiencies. The program also analyzes and recommends changes to existing sustainment processes such as field and depot repair processes. Additionally, the program develops and delivers tools to facilitate system/subsystem management, including the sharing of aging aircraft information and knowledge among the Air Logistics Centers, Product Centers, acquisition organizations, other Services and government agencies, and industry, as well as providing senior decision makers with a common, comprehensive understanding of program areas such as corrosion, fatigue, wiring, subsystems, etc. Note: In FY 2006, Congress added $0.5 million for Advanced Avionics Insertion for Legacy Aircraft, $1.0 million for Aging Aircraft Structural Repair Facility Study, $4.2 million for Aging Landing Gear Life Extension (ALGLE), $2.5 million for Improved Fleet Readiness and 3-D Modeling, $4.2 million for Productivity Improvements for Landing Gear Overhaul Technologies, $1.0 million for Skill Kitting Inventory Tracking and Technology for Oklahoma City ALC, and $1.4 million for Smart Weapons Triple Ejection Rack Development. This program is in Budget Activity 5, System Demonstration and Development, since projects/capabilities will be developed in this program and then made available for procurement by already operational systems.

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

		FY 2005	FY 2006	FY 2007
(U)	Previous President's Budget	31.783	24.384	25.597
(U)	Current PBR/President's Budget	25.249	41.090	25.490
(U)	Total Adjustments	-6.534	16.706	
(U)	Congressional Program Reductions			
	Congressional Rescissions	-0.024	-0.594	
	Congressional Increases		17.300	
	Reprogrammings	-5.698		
	SBIR/STTR Transfer	-0.812		
(U)	Significant Program Changes:			

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2006
BUDGET ACTIVITY **05 System Development and Demonstration (SDD)**	PE NUMBER AND TITLE **0605011F RDT&E For Aging Aircraft**

C. Not Applicable.

Exhibit R-2a, RDT&E Project Justification

DATE: February 2006

BUDGET ACTIVITY: 05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE: 0605011F RDT&E For Aging Aircraft

PROJECT NUMBER AND TITLE: 4685 Aging Aircraft

Cost ($ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
4685 Aging Aircraft	25.249	41.090	25.490	26.039	26.335	26.832	27.185	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

Note: Funds for the FY 2006 Congressionally-directed Non-Destructive Testing Corrosion Detection in the amount of $1.0 million are in the process of being moved to PE 0603112F, Project 633153, Advanced Materials for Weapon Systems, from PE 0605011F, Project 654685, RDT&E for Aging Aircraft, for execution. Funds for the FY 2006 Congressionally-directed Electro-Magnetic In-Flight Propeller Balancing System in the amount of $1.5 million are in the process of being moved to PE 0401115F, Project 674885, C-130 Modifications, from PE 0605011F, Project 654685, RDT&E for Aging Aircraft, for execution.

(U) A. Mission Description and Budget Item Justification

This program develops cross-cutting technologies to extend the service life, ensure flight safety, control rapidly rising sustainment costs, and retain the operational capability of the aging aircraft fleet. The program identifies these cross-cutting technologies through detailed business case analyses identifying opportunities to reduce total ownership costs and improve reliability, availability, and maintainability. The program then develops and delivers solutions (to include prototype hardware and software) to address cross-cutting platform deficiencies. The program also analyzes and recommends changes to existing sustainment processes such as field and depot repair processes. Additionally, the program develops and delivers tools to facilitate system/subsystem management, including the sharing of aging aircraft information and knowledge among the Air Logistics Centers, Product Centers, acquisition organizations, other Services and government agencies, and industry, as well as providing senior decision makers with a common, comprehensive understanding of program areas such as corrosion, fatigue, wiring, subsystems, etc. Note: In FY 2006, Congress added $0.5 million for Advanced Avionics Insertion for Legacy Aircraft, $1.0 million for Aging Aircraft Structural Repair Facility Study, $4.2 million for Aging Landing Gear Life Extension (ALGLE), $2.5 million for Improved Fleet Readiness and 3-D Modeling, $4.2 million for Productivity Improvements for Landing Gear Overhaul Technologies, $1.0 million for Skill Kitting Inventory Tracking and Technology for Oklahoma City ALC, and $1.4 million for Smart Weapons Triple Ejection Rack Development. This program is in Budget Activity 5, System Demonstration and Development, since projects/capabilities will be developed in this program and then made available for procurement by already operational systems.

(U) B. Accomplishments/Planned Program ($ in Millions)	FY 2005	FY 2006	FY 2007
(U) MAJOR THRUST: Aging Aircraft Structures Projects. Transitions cross-cutting technologies for aircraft structures to weapon systems, field and depot maintainers, and Air Logistics Center engineers and managers to ensure continued airworthiness, control sustainment cost growth, and improve aircraft availability. Note: Increase in FY 2006 funding is due to increased emphasis on Structures Projects.	2.969	5.352	3.138

(U) In FY 2005: Identified common requirements and developed implementation strategies for delivery of cross-cutting solutions for aircraft and depots. Focused on maintaining aircraft safety, increasing aircraft readiness, mission capability, and supporting the extension of aircraft service life with decreased operations and support cost (includes Air Vehicle Health Management project). Improved fleet management software tools for Air Logistics Center Aircraft Structural Integrity Program Managers by integrating analyses for fatigue and corrosion detection, quantification, and repair analyses to determine effect of current and anticipated damage on structural integrity. Enhanced structural analysis and developed advanced software code for structural assessments, damage rate

Exhibit R-2a, RDT&E Project Justification		DATE February 2006
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0605011F RDT&E For Aging Aircraft	PROJECT NUMBER AND TITLE 4685 Aging Aircraft

(U) B. Accomplishments/Planned Program ($ in Millions) FY 2005 FY 2006 FY 2007

calculations, and predictions. Transitioned advanced non-destructive inspection capabilities and provided hidden corrosion and sub-layer crack detection, damage quantification, structural degradation monitoring, and data management for predictive analyses. Delivered enhanced hardware for detecting additional forms of corrosion (exfoliation and pitting). Developed technologies to upgrade repair and replacement methodologies. Provided new or improved repair methodologies, material processes, and design and repair selection software. Delivered repair and design analysis software (includes Composite Repair of Aircraft Structures Design and Analysis Software project), freeform fabrication of replacement structural components (includes thermal additive manufacturing project), material substitution guidelines for multi-year delivery, and evaluation of ten year-old composite repair patches to determine if patch bond process adjustments are necessary. Delivered an advanced aircraft corrosion protection system that will transition an environmentally benign, long-life aircraft coating system with chromate-free surface preparation.

(U) In FY 2006: Continue to identify common requirements and develop implementation strategies for delivery of cross-cutting solutions for aircraft sustainment and depots. Focus on maintaining aircraft safety, increasing aircraft readiness, mission capability, and supporting the extension of aircraft service life with decreased operations and support cost. Further improve fleet management software tools for Air Logistics Center Aircraft Structural Integrity Program managers by integrating analyses for fatigue and corrosion detection, quantification, and repair analyses to determine effect of current and anticipated damage on structural integrity. Enhance structural analysis and develop advanced software code for structural assessments, damage rate calculations, and predictions. Continue to transition advanced non-destructive inspection capabilities and provide hidden corrosion and sub-layer crack detection, damage quantification, structural degradation monitoring, and data management for predictive analyses. Develop enhanced capability to inspect for delaminations in metal and composite structures. Develop additional technologies to upgrade repair and replacement methodologies. Continue to provide new or improved repair methodologies, material processes, and design and repair selection software. Enhance fatigue and corrosion prevention and control techniques.

(U) In FY 2007: Continue to identify common requirements and develop implementation strategies for delivery of cross-cutting solutions for aircraft and depots. Focus on maintaining aircraft safety, increasing aircraft readiness, mission capability, and supporting the extension of aircraft service life with decreased operations and support cost. Further improve fleet management software tools for Air Logistics Center Aircraft Structural Integrity Program managers by integrating analyses for fatigue and corrosion detection, quantification, and repair analyses to determine effect of current and anticipated damage on structural integrity. Continue to enhance structural analysis and develop advanced software code for structural assessments, damage rate calculations, and predictions. Develop non-destructive inspection capabilities, damage quantification, structural degradation, and data management for

Exhibit R-2a, RDT&E Project Justification		DATE February 2006
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0605011F RDT&E For Aging Aircraft	PROJECT NUMBER AND TITLE 4685 Aging Aircraft

(U) B. Accomplishments/Planned Program ($ in Millions)	FY 2005	FY 2006	FY 2007
honeycomb composites. Provide repair methodologies, material processes, and design and repair selection software. Enhance fatigue and corrosion prevention and control techniques.			
(U)			
(U) MAJOR THRUST: Aging Aircraft Avionics Projects. Establishes enabling avionics capabilities that can be affordably inserted into the legacy force structure, facilitating a force multiplier combat capability across diverse platforms. Institutionalize Viable Combat Avionics (VCA), the use of affordable tools and techniques, including change management roadmaps, to manage avionics upgrades while keeping pace with technology and prevailing threat conditions in a dynamic environment. Tools range from a Best Value Methodology for evaluation of competitive source selections to a web-based Integrated Change Roadmap process that enables the acquisition organizations to baseline the fielded platforms and merge the upgrades into the program's life cycle planning. Planned investments will establish enabling cross-cutting solutions that can facilitate the affordable insertion of mission enabling capabilities into fielded systems, extending their useful operational life and ensuring their combat superiority. Note: Increase in FY 2006 and out funding is due to greater focus on Avionics Projects.	4.999	13.012	17.914
(U) In FY 2005: Established the enabling technology to affordably upgrade over 3,000 fielded triple ejection bomb racks (TER-9As) used for gravity munitions carriage, so that they can alternately support precision guided munitions carriage. Planned effort will potentially establish 300 percent increase in smart munitions (1760 connectivity) carriage capabilities over existing bomb racks and avoid imposed aircraft reconfiguration changes that burden flight line personnel. Leveraging upon MIL-STD 1553 databus technology development activities, built flight capable hardware, and performed integration activities to demonstrate the technology/hardware on the F-16 aircraft. Began updating MIL-STD 1553B. Maximized VCA toolsets through two initiatives: the development of an Integrated Change Roadmap (ICR) cross-cutting tool that identifies the platforms and services that have common avionics upgrade requirements; and the design and development of a functional technology for affected platforms having common requirements. Initiatives will enable the VCA program to advance towards establishing a strategic capabilities investment process, integrating the ICR cross-cutting tool that identifies common avionics upgrade requirements with the design and development of comparable enabling capabilities required by diverse platforms. Emphasis was placed on identifying opportunities to accelerate capability deployment to the warfighter. Planned efforts linked functional technologies and common requirements, establishing integrated investment strategies focused on facilitating reduced cycle-time and expanded mission capability for the same total resources expenditure.			
(U) In FY 2006: Develop an affordable F-15 Heads Up Display (HUD) cathode ray tube (CRT) replacement item that can be transparently inserted into fielded assets as part of the normal repair cycle. Planned CRT advancements will eliminate an inherent F-15 failure mode, increasing the incurred CRT mean time between failure rate from under 400 hours to over 3,000 hours, and will be transferable to alternate platforms experiencing marginal HUD CRT reliability			

Exhibit R-2a, RDT&E Project Justification		DATE February 2006
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0605011F RDT&E For Aging Aircraft	PROJECT NUMBER AND TITLE 4685 Aging Aircraft

	B. Accomplishments/Planned Program ($ in Millions)	FY 2005	FY 2006	FY 2007
	performance. Establish an upgraded 1553 chipset, possessing 200 times increased bandwidth capabilities over current 1553 aircraft/munitions interface capabilities. Continue MIL-STD 1553B update activity to define capabilities of 1553 chipset, as well as how to validate and test those capabilities. Planned efforts include first release of extended MIL-STD 1553C. Emphasis will be placed on identifying opportunities to accelerate capability deployment to the warfighter. Maintain the Viable Combat Avionics toolsets, enabling the VCA program to continue to advance towards establishing a strategic capabilities investment process. Planned efforts will link functional technologies and common requirements, establishing integrated investment strategies focused on facilitating reduced cycle-time and expanded mission capability for the same total resources expenditure.			
(U)	In FY 2007: Continue efforts to provide an affordable F-15 HUD CRT replacement item. Planned activities include F-15 flight testing and migration of HUD CRT to another aircraft platform. Provide additional 1553 data bus, capabilities, functionality, and enhanced performance and incorporate them into updates/revisions of MIL-STD 1553. Maintain the Viable Combat Avionics toolsets, enabling the VCA program to continue to advance towards establishing a strategic capabilities investment process. Emphasis will be placed on identifying opportunities to accelerate capability deployment to the warfighter. Planned efforts will link functional technologies and common requirements, establishing integrated investment strategies focused on facilitating reduced cycle-time and expanded mission capability for the same total resources expenditure. Provide development upgrade functions for all Universal Armament Interface (UAI) products to include document revisions and distribution for configuration management using the secure WEB site application. Provide UAI support to twenty-two platform and stores program offices during implementation. Provide for the development of optional air-to-air weapons, training and targeting pods, and sensors to the UAI interface. Further develop modification of existing conventional Triple Ejection Rack (TER) to allow delivery of both conventional and smart weapons, and integrate the Smart TER onto fighter platforms.			
(U)				
(U)	MAJOR THRUST: Aging Aircraft Subsystems Projects. Extends the service life, controls the rapidly rising sustainment costs, and retains the operational capability of the aging aircraft fleet through aircraft subsystems improvement. Cross-cutting opportunities which will reduce total ownership costs are identified using business case analyses. Note: Increase in FY 2006 funding is due to greater emphasis on Subsystems Projects.	1.147	5.672	4.438
(U)	In FY 2005: Integrated the Air Force Wire Integrity Program (AFWIP) web-based data collection system with the Air Force Knowledge database system. Formally integrated the AFWIP wire awareness computer-based training to field units. Developed wire troubleshooting fault isolation process procedures and incorporated in general series technical manual. Spiral-developed validated wiring diagnostic equipment to meet the demands of the maintenance community.			
(U)	In FY 2006: Continue demonstration and development of wiring diagnostic equipment and data collection effort.			

Exhibit R-2a, RDT&E Project Justification		DATE February 2006
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0605011F RDT&E For Aging Aircraft	PROJECT NUMBER AND TITLE 4685 Aging Aircraft

	B. Accomplishments/Planned Program ($ in Millions)	FY 2005	FY 2006	FY 2007
(U)	Perform initial aircraft wire characterization evaluation of conductive path material, insulation, and arc fault protection systems.			
(U)	In FY 2007: Continue demonstration and development of wiring diagnostic equipment and data collection effort. Continue to perform initial aircraft wire characterization evaluation of conductive path material, insulation, and arc fault protection systems.			
(U)				
(U)	MAJOR THRUST: Enterprise Knowledge Management. Utilizes and enhances the advanced collaborative tools embedded in the Enterprise Knowledge Management (EKM) program. Facilitates the extraction, integration, and sharing of aging aircraft information, knowledge, technology, and solutions among Air Logistics Centers, Product Centers, System Program Offices, other Services and government agencies, and industry. Provides a knowledge capture/management system with collaboration capability for understanding the overall scope of aging aircraft problems, developing an integrated strategic plan for corrective actions, and using decision tools for the aging aircraft fleet. Supports the Capabilities Review and Risk Assessment in identifying and resolving capability gaps by capturing and automating the Roadmap Integration processes used by the Aeronautical, Air Armament, command and control, and space enterprises. Provides participants the ability to quickly see the impact of funding decisions on warfighting capability. Development completes after FY 2004 and EKM management transitions to fee for service.	0.305	0.000	0.000
(U)	In FY 2005: Facilitated transition of EKM to fee for service.			
(U)	In FY 2006: Not Applicable.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)				
(U)	CONGRESSIONAL ADD: Aging Landing Gear Life Extension.	4.442	4.140	0.000
(U)	In FY 2005: Continued to integrate the elements of emerging materials/technologies, improved designs, state-of-the-art repair/overhaul technologies, and optimized business data processes for the purpose of extending the life of aging landing gear systems.			
(U)	In FY 2006: Conduct Congressionally-directed effort for Aging Landing Gear Life Extension (ALGLE).			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: Academic Center for Aging Aircraft (ACAA).	4.054	0.000	0.000
(U)	In FY 2005: Continued to facilitate new partnerships with agencies and organizations to work aging fleet needs; focusing on delivery of products in narrow problem areas, providing the greatest benefit to the joint community, and which act as pilot programs to exercise and prove out the infrastructure and methodologies established by the			

Exhibit R-2a, RDT&E Project Justification		DATE February 2006
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0605011F RDT&E For Aging Aircraft	PROJECT NUMBER AND TITLE 4685 Aging Aircraft

	B. Accomplishments/Planned Program ($ in Millions)	FY 2005	FY 2006	FY 2007
	Academic Center for Aging Aircraft institutions.			
(U)	In FY 2006: Not Applicable.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: Enterprise Availability and Cost Optimization System.	0.965	0.000	0.000
(U)	In FY 2005: Provided warfighter aging aircraft availability and investment optimization tools for B-2 fleet and Air Combat Command cross-fleet modernization and sustainment.			
(U)	In FY 2006: Not Applicable.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: Fleet Capability Assessment Process.	1.254	0.000	0.000
(U)	In FY 2005: Determined the risks in effectiveness, availability, deployability, sustainability, and readiness of the aeronautical fleet. Provided rapid impact assessments on planned or proposed operations.			
(U)	In FY 2006: Not Applicable.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: Fleet Readiness	1.254	0.000	0.000
(U)	In FY 2005: Pursued additional improvements to fleet readiness in the areas of fleet management/structural analysis, non-destructive evaluation and health management, prevention, and repair/replacement by: enhanced structural analysis of aircraft center wing box structure, corrosion measurements on aircraft structural materials, and non-destructive inspection of aircraft structural components.			
(U)	In FY 2006: Not Applicable.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: LEAN Depot Engine Repair/Skill Kitting Inventory Tracking and Technology for Oklahoma City ALC.	1.254	0.986	0.000
(U)	In FY 2005: Pursued improvements to reduce man-hours and increase production throughput on turbine engines to include prototyping engine fuel nozzle cleaning and testing equipment in the engine overhaul facilities at Oklahoma City-Air Logistics Center.			
(U)	In FY 2006: Conduct Congressionally-directed effort for Skill Kitting Inventory Tracking and Technology for Oklahoma City ALC.			
(U)	In FY 2007: Not Applicable.			

Exhibit R-2a, RDT&E Project Justification		DATE February 2006
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	B. Accomplishments/Planned Program ($ in Millions)	FY 2005	FY 2006	FY 2007
(U)				
(U)	CONGRESSIONAL ADD: TER-O MIL-STD-1760 ("SMART") Modification.	1.641	0.000	0.000
(U)	In FY 2005: Pursued modification of existing conventional Triple Ejection Rack (TER) to allow delivery of both conventional and smart weapons. Modification will potentially provide each weapon station with increased smart weapon load capability over standard pylon carry.			
(U)	In FY 2006: Not Applicable.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: Advanced Aircraft Avionics and Electronics Insertion/Advanced Avionics Insertion for Legacy Aircraft.	0.965	0.493	0.000
(U)	In FY 2005: Identified and analyzed the use of advanced avionics thermal management technology from diverse military and commercial derivative aircraft. Conducted an architecture definition study focused on establishing an infrastructure that is easily integrated with existing airframe technology and supports long-term commercial technology compatibility and growth. Established qualification testing requirements.			
(U)	In FY 2006: Conduct Congressionally-directed effort for Advanced Avionics Insertion for Legacy Aircraft.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: Aging Aircraft Structural Repair Facility Study.	0.000	0.986	0.000
(U)	In FY 2005: Not Applicable.			
(U)	In FY 2006: Conduct Congressionally-directed effort for Aging Aircraft Structural Repair Facility Study.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: Improved Fleet Readiness and 3-D Modeling.	0.000	2.464	0.000
(U)	In FY 2005: Not Applicable.			
(U)	In FY 2006: Conduct Congressionally-directed effort for Improved Fleet Readiness and 3-D Modeling.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: Productivity Improvements for Landing Gear Overhaul Technologies.	0.000	4.140	0.000
(U)	In FY 2005: Not Applicable.			
(U)	In FY 2006: Conduct Congressionally-directed effort for Productivity Improvements for Landing Gear Overhaul Technologies.			
(U)	In FY 2007: Not Applicable.			

Exhibit R-2a, RDT&E Project Justification		DATE February 2006
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	B. Accomplishments/Planned Program ($ in Millions)	FY 2005	FY 2006	FY 2007
(U)				
(U)	CONGRESSIONAL ADD: Smart Weapons Triple Ejection Rack Development.	0.000	1.380	0.000
(U)	In FY 2005: Not Applicable.			
(U)	In FY 2006: Conduct Congressionally-directed effort for Smart Weapons Triple Ejection Rack Development.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: Electro-Magnetic In-Flight Propeller Balancing System.	0.000	1.479	0.000
(U)	In FY 2005: Not Applicable.			
(U)	In FY 2006: Funds for the FY 2006 Congressionally-directed Electro-Magnetic In-Flight Propeller Balancing System are in the process of being moved to PE 0401115F, Project 674885, C-130 Modifications.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	CONGRESSIONAL ADD: Non-Destructive Testing Corrosion Detection.	0.000	0.986	0.000
(U)	In FY 2005: Not Applicable.			
(U)	In FY 2006: Funds for the FY 2006 Congressionally-directed Non-Destructive Testing Corrosion Detection are in the process of being moved to PE 0603112F, Project 633153, Advanced Materials for Weapon Systems.			
(U)	In FY 2007: Not Applicable.			
(U)				
(U)	Total Cost	25.249	41.090	25.490

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

	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
(U) Related Activities:									

(U) D. Acquisition Strategy

Funding may be executed internally within the Agile Combat Support Systems Wing via full and open competition or released to other organizations for projects for which they are the Office of Primary Responsibility (OPR). The OPRs will determine the most appropriate contract vehicle, Design and Engineering Support Program (DESP) contract or full and open competition, to accomplish the project.

Exhibit R-3, RDT&E Project Cost Analysis

DATE: **February 2006**

BUDGET ACTIVITY: **05 System Development and Demonstration (SDD)**

PE NUMBER AND TITLE: **0605011F RDT&E For Aging Aircraft**

PROJECT NUMBER AND TITLE: **4685 Aging Aircraft**

(U) Cost Categories (Tailor to WBS, or System/Item Requirements) ($ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2005 Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) Product Development												
S&K Technologies, Inc.	IDIQ			1.722		1.185					2.907	
Edgewater	IDIQ			3.185		6.765					9.950	
Anteon	Cost Plus			0.716							0.716	
Raytheon/Northrop Grumman/Boeing/Lockheed	CPFF					3.600					3.600	
United States Air Force Academy	N/A					1.300					1.300	
S&K Technologies, Inc. (here on down are Congressional Adds)	IDIQ			1.141		2.185					3.326	
Alion Science & Tech	T&M			1.141							1.141	
Northrop Grumman IT	T&M			0.878							0.878	
UDRI/GTRI/TAMUS	DESP			3.689							3.689	
General Atomics	T&M			5.183		8.218					13.401	
Raytheon	CPFF			1.493							1.493	
Numerous	Various			6.101		17.837		25.490			49.428	
Subtotal Product Development			0.000	25.249		41.090		25.490		0.000	91.829	0.000
Remarks:												
(U) Support												
None											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Test & Evaluation												
None											0.000	
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Management												
											0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			0.000	25.249		41.090		25.490		0.000	91.829	0.000

Exhibit R-4, RDT&E Schedule Profile		DATE February 2006
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0605011F RDT&E For Aging Aircraft	PROJECT NUMBER AND TITLE 4685 Aging Aircraft

Aging Aircraft Schedule

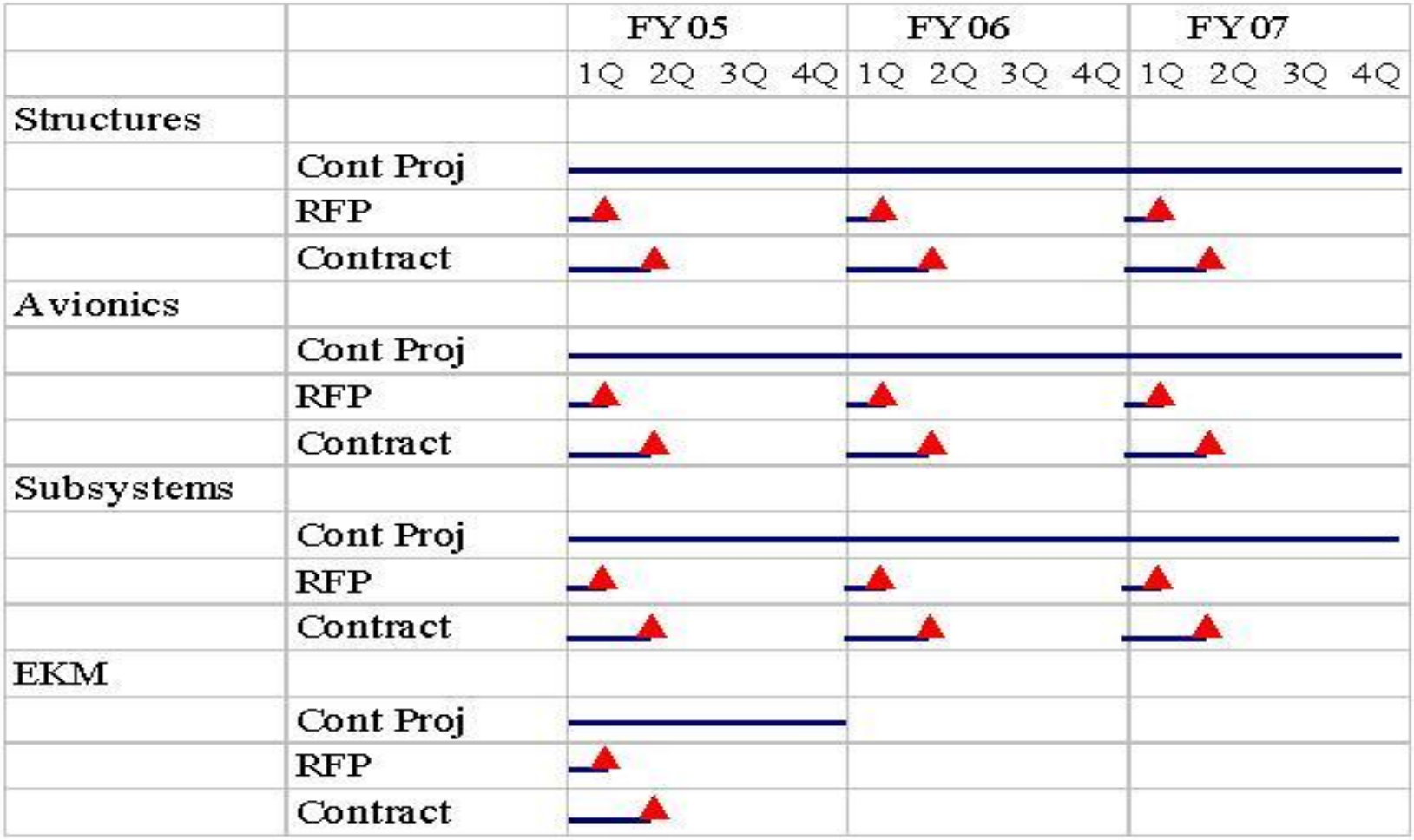

Exhibit R-4a, RDT&E Schedule Detail		DATE February 2006
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0605011F RDT&E For Aging Aircraft	PROJECT NUMBER AND TITLE 4685 Aging Aircraft

(U) Schedule Profile	FY 2005	FY 2006	FY 2007
(U) Aging Aircraft Structures Projects	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	1Q	1Q	1Q
(U) Contract Award	2Q	2Q	2Q
(U) Aging Aircraft Avionics Projects	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	1Q	1Q	1Q
(U) Contract Award	2Q	2Q	2Q
(U) Aging Aircraft Subsystems Projects	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	1Q	1Q	1Q
(U) Contract Award	2Q	2Q	2Q
(U) Enterprise Knowledge Management	1-4Q		
(U) Request for Proposal Release	1Q		
(U) Contract Award	2Q		