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

Exhibit R-2, RDT&E Budget Item Justification

DATE: February 2004

BUDGET ACTIVITY: 05 System Development and Demonstration (SDD)

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

	Cost ($ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
	Total Program Element (PE) Cost	32.081	40.615	15.665	24.922	25.387	25.794	26.194	0.000	0.000
4685	Aging Aircraft	32.081	40.615	15.665	24.922	25.387	25.794	26.194	0.000	0.000

(U) A. Mission Description and Budget Item Justification

This program develops technologies to extend the service life, ensure flight safety, control the rapidly rising sustainment costs, and retains the operational capability of the aging aircraft fleet. Using business case analyses, cross-cutting opportunities to reduce total ownership costs and improve productivity, reliability, availability, and maintainability are identified. The program develops tools to facilitate the sharing of aging aircraft information, knowledge, technology, and solutions among the Air Logistics Centers, Product Centers, System Program Offices, other Services and government agencies, and industry. The program provides senior Air Force decision makers with a common, comprehensive understanding of program areas such as corrosion, wiring, etc. The program also analyzes and recommends changes to existing sustainment processes such as field and depot repair processes. Note: In FY 2003, Congress added $1.8 million for Aging Aircraft Enterprise Knowledge Portal and $1.8 million for Viable Combat Avionics Initiative.

This program is in Budget Activity 5, System Demonstration and Development, because projects/capabilities will be developed in this program, then made available for procurement by already operational systems.

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

		FY 2003	FY 2004	FY 2005
(U)	Previous President's Budget	32.894	24.063	15.806
(U)	Current PBR/President's Budget	32.081	40.615	15.665
(U)	Total Adjustments	-0.813	16.552	
(U)	Congressional Program Reductions			
	Congressional Rescissions		-0.348	
	Congressional Increases		16.900	
	Reprogrammings	-0.042		
	SBIR/STTR Transfer	-0.771		
(U)	Significant Program Changes:			
	Not applicable.			

Exhibit R-2a, RDT&E Project Justification

DATE: February 2004

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 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
4685	Aging Aircraft	32.081	40.615	15.665	24.922	25.387	25.794	26.194	0.000	0.000
	Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

This program develops technologies to extend the service life, ensure flight safety, control the rapidly rising sustainment costs, and retains the operational capability of the aging aircraft fleet. Using business case analyses, cross-cutting opportunities to reduce total ownership costs and improve productivity, reliability, availability, and maintainability are identified. The program develops tools to facilitate the sharing of aging aircraft information, knowledge, technology, and solutions among the Air Logistics Centers, Product Centers, System Program Offices, other Services and government agencies, and industry. The program provides senior Air Force decision makers with a common, comprehensive understanding of program areas such as corrosion, wiring, etc. The program also analyzes and recommends changes to existing sustainment processes such as field and depot repair processes. Note: In FY 2003, Congress added $1.8 million for Aging Aircraft Enterprise Knowledge Portal and $1.8 million for Viable Combat Avionics Initiative.

This program is in Budget Activity 5, System Demonstration and Development, because projects/capabilities will be developed in this program, then made available for procurement by already operational systems.

(U) B. Accomplishments/Planned Program ($ in Millions)	FY 2003	FY 2004	FY 2005
(U) MAJOR THRUST: Aging Aircraft Structures Projects -- This project transitions crosscutting technologies for aircraft structures to weapon systems, field and depot maintainers, and air logistics center engineers and managers that will ensure continued airworthiness, control sustainment cost growth, and improve aircraft availability.	10.265	11.686	9.154

(U) In FY 2003: Completed initial corrosion maintenance improvements. Developed corrosion abatement techniques, procedures, and temporary repairs. Expanded the range of available repair technologies for eliminating aircraft structu corrosion. Reduced the cost and man-hours associated with corrosion maintenance actions by providing automated corrosion detection technologies. Completed development and integration of software and analytical tools to support corrosion management workload prediction. Shortened detection time for flaws and damage due to fatigue cracking, corrosion, composite material delaminations, and trapped moisture. Sponsored technology advancements to enable ea damage detection. Completed work on non-destructive inspection techniques to detect cracks without removing fasteners to reduce inspection time and eliminate the potential for further damage by removing fasteners. Broadened t application of ultrasonic inspection techniques to detect fatigue cracks in internal wing structure from the outside of th aircraft to eliminate fuel tank entry requirements and potential damage caused by rivet removal.

(U) In FY 2004: Continue corrosion maintenance improvements. Continue to develop and transition corrosion abatement techniques, procedures, and temporary repairs. Expand the range of available repair technologies for eliminating aircr structural corrosion. Continue to reduce the cost and man-hours associated with corrosion maintenance actions and minimizing aircraft downtime by providing automated corrosion detection technologies. Continue development and

Exhibit R-2a, RDT&E Project Justification		DATE February 2004
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

integration of software and analytical tools to support corrosion management workload prediction (e.g., environmental exposure models and corrosion damage analyses). Continue work on improved non-destructive inspection techniques, deployment of corrosion and crack detection capabilities, and ongoing evaluation of new and more cost-effective techniques. Continue work to shorten detection time for flaws and damage due to fatigue cracking, corrosion, composi material delaminations, and trapped moisture. Continue sponsoring technology advancements to enable early damage detection. Continue to develop and refine the Depot Technology Modernization Plan process and implement this process. The plan will be integrated into the Air Force Long-Range Depot Strategy.

(U) In FY 2005: Identify common requirements and develop implementation strategies for delivery of crosscutting solutio 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 (includes Air Vehicle Healt Management project). 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. Advance non-destructiv inspection capabilities and provide hidden corrosion and sub layer crack detection, damage quantification, structural degradation monitoring, and data management for predictive analyses. Deliver enhanced hardware for detecting additional forms of corrosion (exfoliation and pitting). Develop technologies to upgrade repair and replacement methodologies. Provide new or improved repair methodologies, material processes, and design and repair selection software. Deliver repair and design analysis software (includes Composite Repair of Aircraft Structures Design & Analysis Software project), freeform fabrication of replacement structural components (includes laser additive manufacturing project), material substitution guidelines for multiyear delivery, and evaluation of ten year-old composi repair patches to determine if patch bond process adjustments are necessary: Enhance fatigue and corrosion preventio and control techniques. Provide new or improved products and processes that delay or suppress onset of structural damage (corrosion, fatigue, etc.) (includes retrogression and re-aging project). Deliver an advanced aircraft corrosion protection system that will transition an environmentally benign, long-life aircraft coating system with chromate-free surface preparation. Transition next generation fatigue life enhancement techniques (laser shock processing, plastic burnishing) for delivery.

(U)

(U)	MAJOR THRUST: Aging Aircraft Avionics Projects -- 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 system program offices to baseline the fielded platforms and merge the upgrades into the programs' life cyc planning. Planned investments will establish enabling crosscutting solutions that can facilitate the affordable insertion of mission enabling capabilities into fielded systems, extending their useful operational life and ensuring their combat	2.916	4.568	1.100

Exhibit R-2a, RDT&E Project Justification		DATE February 2004
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

	superiority.			
(U)	In FY 2003: Completed initial work on technologies to maintain the structural integrity of aging weapon systems to ensure continued flight safety. Leveraged viable combat avionics work into common integrated aging avionics solutic (e.g., modular open systems architectures).			
(U)	In FY 2004: Continue work on technologies to maintain the structural integrity of aging weapon systems to ensure continued flight safety. Continue techniques to incorporate bonded repairs into legacy airframes.			
(U)	In FY 2005: Maximize (VCA) tool sets through two initiatives: the development of an Integrated Change Roadmap (ICR) crosscutting 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. Initiative will enable the VCA program to advance towards establishing a strategic capabilities investment process, integrating tl ICR crosscutting tool that identifies common avionics upgrade requirements with the design and development of comparable enabling capabilities required by diverse platforms. Emphasis will be placed on identifying opportunities 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.			
(U)				
(U)	MAJOR THRUST: Aging Aircraft Subsystems Projects -- Extend the service life, control the rapidly rising sustainme costs, and retain the operational capability of the aging aircraft fleet through aircraft subsystems improvement. Crosscutting opportunities which will reduce total ownership costs are identified using business case analyses.	2.465	2.118	4.441
(U)	In FY 2003: Developed a tool that analyzes electrical signatures of aircraft electrical components to allow technicians monitor changes that signify impending failure, and replace components before failure thus avoiding further damage. Air Force Wire Integrity Program -- Provided wiring system integrity diagnostic/prognostic equipment and predictive analysis capability. Developed maintenance procedures for preventing and abating corrosion of aircraft fuel tanks caused by contaminants. Hydraulic Fluid Purification project. Developed hydraulic fluid purification standards to reduce waste and mobility footprint.			
(U)	In FY 2004: Second year of a two-year project to systematically dissemble the actuators from aging systems and determine wear and damage mechanisms in order to improve reliability in legacy actuators and overall performance in new systems. Evaluate replacement materials identified in the project to increase component life-cycle. Research and collect data on aircraft fuel systems to identify warfighter needs and drive technology improvement in the aircraft fuel leak detection and repair process. Continue work on identifying and analyzing aging wiring problems in fighter, cargo and tanker aircraft fleets to minimize diagnostic and repair time improving aircraft availability. Develop an Air Force Wire Integrity project to enable early detection and classification of failing aircraft wiring. Enhance current database system to enable capture of all maintenance actions on aircraft wiring systems. Foster the development and application of a 'tool set' which addresses the entire set of aging wiring issues, to include: circuit analyzers; fault detection and location; safety analysis; automated test generation; and trending capabilities. Provide wiring system awareness traini			

Exhibit R-2a, RDT&E Project Justification		DATE February 2004
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

across all maintenance disciplines. Continue to develop viable procedures to correct the delamination of aging integral fuel tank coatings for improved corrosion protection and elimination of wing skin replacements. Continue efforts to evaluate material improvement in crack detection support tools.

(U) In FY 2005: Universal Electrical Signature Analysis System -- Third year of a three-year project to develop electronic signatures of various aircraft electrical components to monitor changes that signify impending failure, the allowing for the replacement of components before failure. Provide five production units to the warfighter to collect real-time data operating weapon systems. Provide training and user manuals on the equipment.

(U)

(U) MAJOR THRUST: Enterprise Knowledge Management -- Utilize and enhance the advanced collaborative tools embedded in the Enterprise Knowledge Management (EKM) program. Facilitate the extraction, integration, and sharin of aging aircraft information, knowledge, technology, and solutions among Air Logistics Centers, Product Centers, System Program Offices, other Services and government agencies, and industry. Provide a knowledge capture/management system with collaboration capability for understanding the overall scope of aging aircraft problem developing an integrated strategic plan for corrective actions, and using decision tools for the aging aircraft fleet. Support 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. Provide participants the ability to quickly see the impact of funding decisions on Warfighting capability.	3.293	5.487	0.970

(U) In FY 2003: Developed partnerships with government and commercial industry to foster shared technologies and processes and developed an information/knowledge portal tool to share aging aircraft technology and solutions across the aeronautical community. Identified existing databases which contain aging aircraft information, and connected the to a single web portal. Developed web-based data mining views that turn the raw data into information to facilitate strategic planning and trend analysis for reducing total ownership costs.

(U) In FY 2004: Continue to develop partnerships with government and commercial industry to foster shared technologies and processes and an information/knowledge portal tool to share aging aircraft technology and solutions across the aeronautical community. Continue identifying existing databases which contain aging aircraft information, and contin connecting them to a single web portal. Continue web-based data mining views that turn the raw data into information to facilitate strategic planning and trend analysis for reducing total ownership costs. Continue to leverage knowledge c existing/legacy avionics issues (diminishing manufacturing sources, software languages, unique military interfaces, etc Analyze the gathered data and initiate/continue cross-cutting solutions in data acquisition/recorders, displays, expande aircraft internal data transfer techniques, and other similar efforts. Develop business strategies to address Aging Aircra subsystem issues. Perform business case analyses to support subsystem design integrity decisions. Develop suite of analysis tools for predicting imminent failure of aircraft systems. Develop analysis tool to support diminishing manufacturing source issues and analysis, identification and management of cross-cutting issues. Develop data mining tool specifically designed to extract and analyze crosscutting issues data from existing data systems. Foster cross

Exhibit R-2a, RDT&E Project Justification		DATE February 2004
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

program sharing of information within both Department of Defense and industry.

(U) In FY 2005: Cross enterprise support and knowledge capture. Support Fleet Viability Board with automated Economi Service Life Study. Provide a system to enable an integrated approach to support the rapid identification, development integration, coordination, implementation, and evaluation of crosscutting solutions, systems-of-systems architectures, and common system requirements within the Aeronautical Enterprise, the major commands, and higher headquarters.

(U)

(U) CONGRESSIONAL ADD: Aging Landing Gear Life Extension.	9.664	1.487	0.000

(U) In FY 2003: Developed and completed engineering tasks associated with Aging Landing Gear Life Extension progran such as redesigning the KC-135 main landing gear piston to preclude a recurring sudden extension problem.

(U) In FY 2004: Develop and complete additional engineering tasks associated with Aging Landing Gear Life Extension program.

(U) In FY 2005: Not Applicable.

(U)

(U) CONGRESSIONAL ADD: Aircraft Enterprise Knowledge Portal.	1.739	0.000	0.000

(U) In FY 2003: Developed and completed efforts associated with Aging Aircraft Enterprise Knowledge Portal such as automating Air Combat Command's monthly maintenance performance indicator report to reduce cycle time.

(U) In FY 2004: Not Applicable.

(U) In FY 2005: Not Applicable.

(U)

(U) CONGRESSIONAL ADD: Viable Combat Avionics Initiative.	1.739	0.000	0.000

(U) In FY 2003: Developed and completed efforts associated with the Viable Combat Avionics Initiative. Developed, tested, and implemented a Best Value Methodology template into the source selection process. Developed an Integrate Change Roadmap discipline for fielded systems. Automated and established an on-line, real-time capability for all 88 fielded avionics systems. Merged Legacy Viable Combat Avionics toolset data with planned avionics upgrades to crea a total platform Integrated Change Roadmap that addresses both sustainment and acquisition.

(U) In FY 2004: Not Applicable.

(U) In FY 2005: Not Applicable.

(U)

(U) CONGRESSIONAL ADD: Academic Center for Aging Aircraft (ACAA)	0.000	4.164	0.000

(U) In FY 2003: Not Applicable.

(U) In FY 2004: Establish an academic center to transition and leverage research in academia to satisfy the Aging Aircraft needs identified by the Joint Council on Aging Aircraft. ACAA will facilitate new partnerships with agencies and organizations to work aging fleet needs. This effort will be two-fold: 1) Catalyze the development of a self-sustaining infrastructure and academic network which can serve the aging aircraft community into the future, and 2) focus on delivery of products in narrow problem areas which act as pilot programs to exercise and prove out the infrastructure a

Exhibit R-2a, RDT&E Project Justification			DATE February 2004
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	

methodologies established by the ACAA institutions.institutions.			
(U) In FY 2005: Not Applicable.			
(U)			
(U) CONGRESSIONAL ADD: Enterprise Availability and Cost Optimization System.	0.000	1.190	0.000
(U) In FY 2003: Not Applicable.			
(U) In FY 2004: Implement a standardized approach to identifying and optimizing aircraft modernization and sustainment program investments with the Enterprise Availability and Cost Optimization System; will focus on investment plans fc the modernization and sustainment of the aging aircraft fleet.			
(U) In FY 2005: Not Applicable.			
(U)			
(U) CONGRESSIONAL ADD: Fleet Capability Assessment Process.	0.000	1.983	0.000
(U) In FY 2003: Not Applicable.			
(U) In FY 2004: Develop methodology to assess the current, programmed, and planned capabilities of the aeronautical fle The assessment will provide information on current problem areas, future aging issues, and cross-cutting opportunities that support modernization and sustainment planning within the aeronautical enterprise. The tool will determine the risks in effectiveness, availability, deployability, sustainability, and readiness of the aeronautical fleet, and assess impacts on planned or proposed operations.			
(U) In FY 2005: Not Applicable.			
(U)			
(U) CONGRESSIONAL ADD: Air Vehicle Health Management Improved Fleet Readiness.	0.000	5.949	0.000
(U) In FY 2003: Not Applicable.			
(U) In FY 2004: Improvements to fleet readiness will be made in the areas of fleet management/structural analysis, non-destructive inspection and health management, prevention, and repair/replacement by accomplishing the following 1) enhance risk assessment capability for the fleet; 2) evaluate state-of-the-art non-destructive inspection equipment fo assessment of damage in buried structure; 3) evaluate environmentally-friendly coating systems; and assess/utilize modern design practices for depot implementation on legacy aircraft.			
(U) In FY 2005: Not Applicable.			
(U)			
(U) CONGRESSIONAL ADD: Advanced Technology Into Legacy Avionics Systems.	0.000	1.983	0.000
(U) In FY 2003: Not Applicable.			
(U) In FY 2004: Affordable aerospace weapon systems require avionics possessing inherent features that can affordably accommodate change and rapidly exploit emerging technology opportunities. Funded investments will establish: 1) software verification and re-verification methods and tools; 2) methodologies and capabilities that can facilitate tighter coupling with commercial practices, processes, and technology, thus reducing incurred avionics cycle upgrade times; a 3) leading edge "design for change" capabilities and tools that will help facilitate long-term avionics viability.			

Exhibit R-2a, RDT&E Project Justification		DATE February 2004
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) In FY 2005: Not Applicable.

(U) Total Cost	32.081	40.615	15.665

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

	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
(U) AF RDT&E									
(U) Other APPN									

(U) Related Activities:

(U) PE 0708026F, Productivity/Reliability/Availability/Maintainability.

(U) D. Acquisition Strategy

Funding may be executed internally within the Aeronautical Enterprise SPO 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 Engineering Program (DEP) contract or full and open competition, to accomplish the project.

Exhibit R-3, RDT&E Project Cost Analysis

DATE: February 2004

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 2003 Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) Product Development												
ARINC/Boeing	T&M		0.000	0.700						0.700	1.400	
Boeing	T&M		1.100	0.950						0.000	2.050	
Southwest Research	T&M		0.250	0.350		0.150				0.000	0.750	
SAIC/Boeing	FFP		0.300	0.400						0.000	0.700	
SAIC	T&M		0.300	0.300						0.000	0.600	
UDRI/S&K Tech	TBD		0.000	0.000						3.720	3.720	
S&K Tech			5.200	9.500		6.979		9.154		0.900	31.733	
UDRI	T&M		0.000	1.000		0.350				0.250	1.600	
UDRI/NASA	T&M		1.190	0.300		0.300				0.000	1.790	
GARCIA	T&M		0.000	0.000						0.000	0.000	
Aging Landing Gear Life Extension	TBD		10.076	8.794		1.500				0.000	20.370	
Aging Wiring and Corrosion Treatment for Aging Aircraft	TBD		6.717	0.000						0.000	6.717	
Aging Propulsion Systems Life Extension	TBD		1.920	0.000				4.441		0.000	6.361	
Aging Aircraft Knowledge Portal	TBD		1.920	1.800		5.528		0.970		0.000	10.218	
Numerous	Various		10.272	6.187		21.657				Continuing	TBD	
Affordable Avionics	Various		1.325	1.800		4.151		1.100			8.376	
None											0.000	
Subtotal Product Development			40.570	32.081		40.615		15.665		Continuing	TBD	0.000
Remarks:												
(U) Support												
In House											0.000	
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

Exhibit R-3, RDT&E Project Cost Analysis

DATE: February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE
05 System Development and Demonstration (SDD)	0605011F RDT&E For Aging Aircraft	4685 Aging Aircraft

	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	40.570	32.081	40.615	15.665	Continuing	TBD	0.000

02/13/2004 13:34 - FY 2005 PB (HQ USAF) Draft

Exhibit R-4, RDT&E Schedule Profile

DATE: **February 2004**

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE
05 System Development and Demonstration (SDD)	**0605011F RDT&E For Aging Aircraft**	**4685 Aging Aircraft**

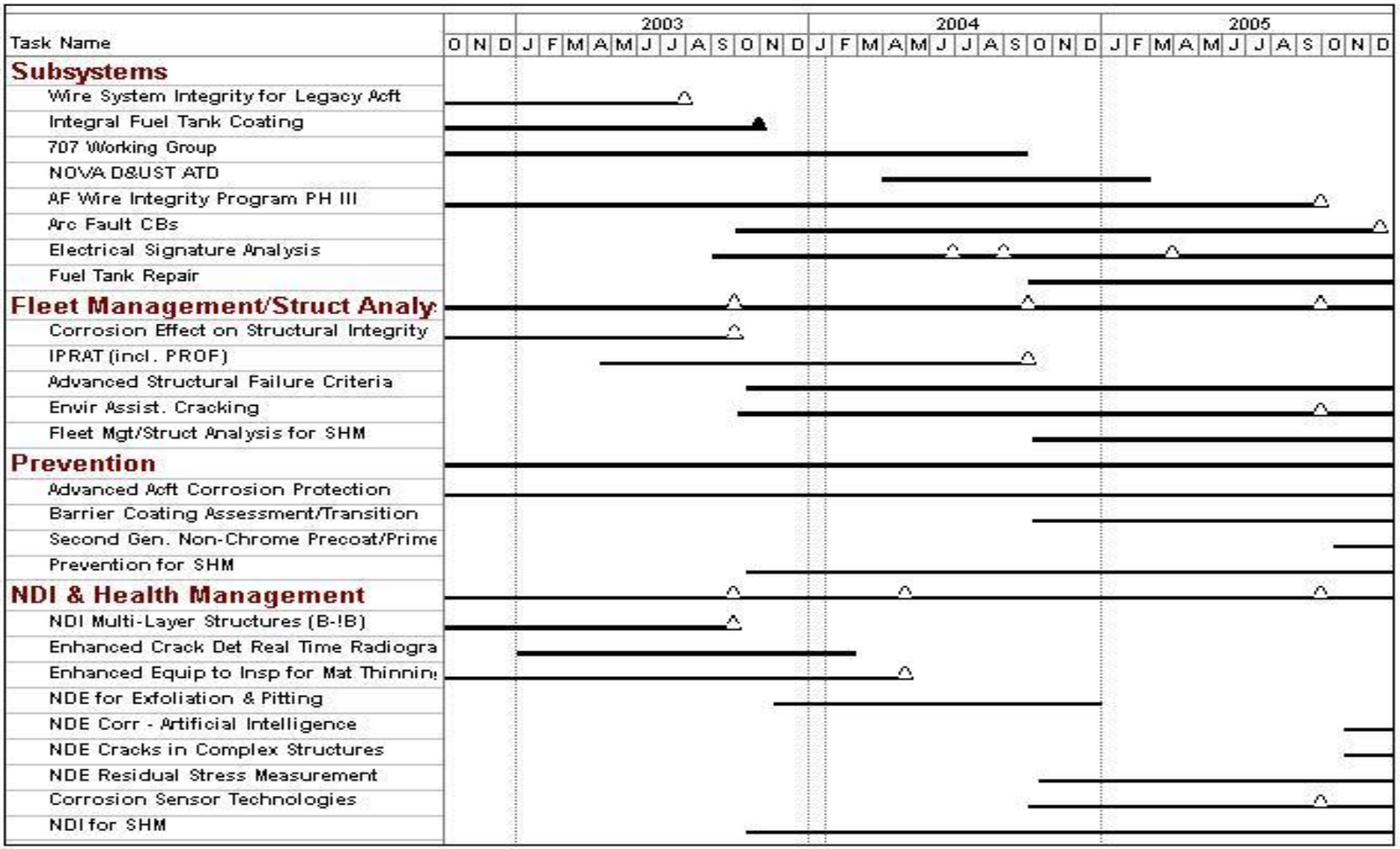

Exhibit R-4, RDT&E Schedule Profile

DATE: **February 2004**

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE
05 System Development and Demonstration (SDD)	**0605011F RDT&E For Aging Aircraft**	**4685 Aging Aircraft**

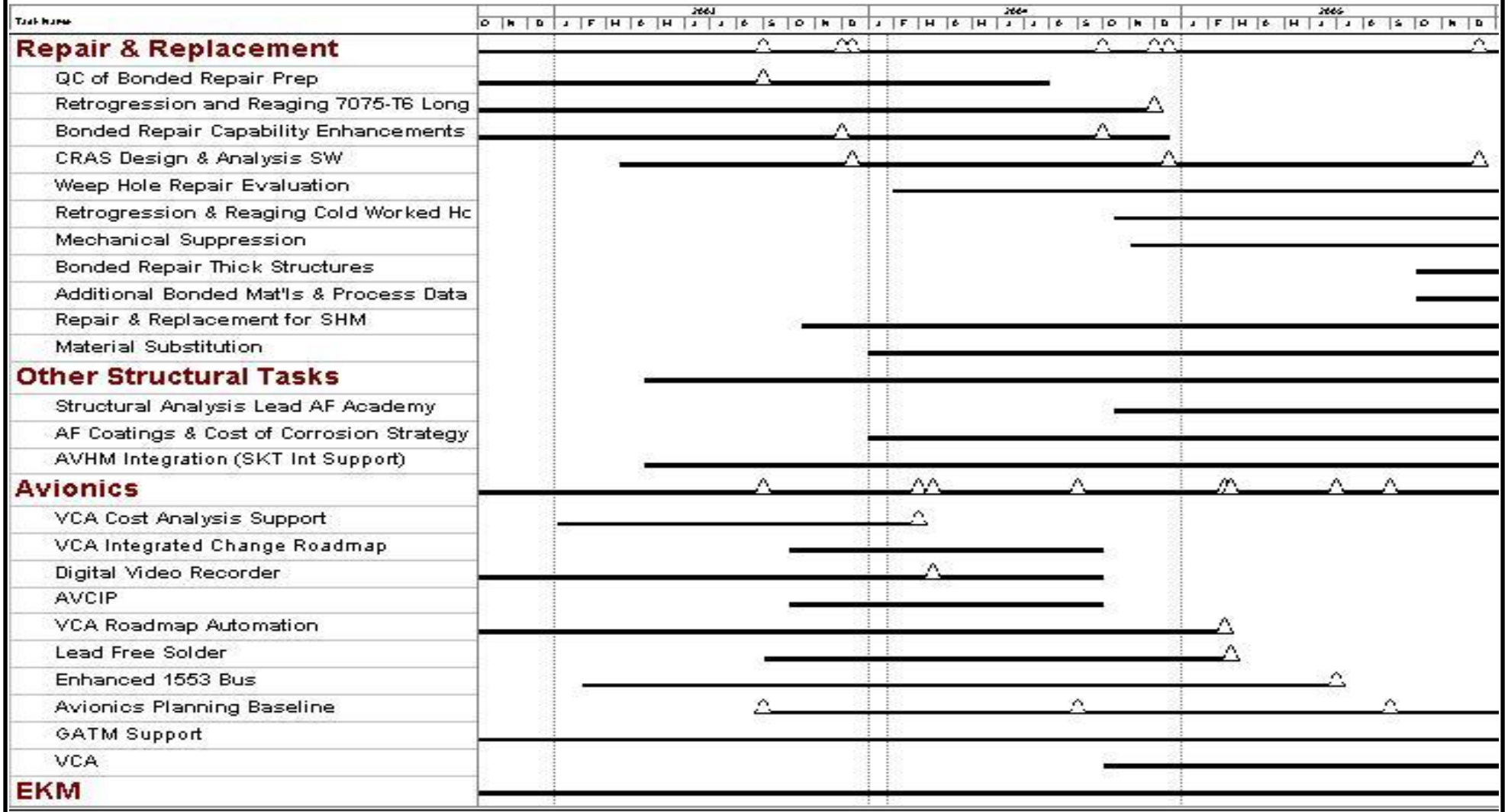

Exhibit R-4a, RDT&E Schedule Detail

DATE: February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE
05 System Development and Demonstration (SDD)	0605011F RDT&E For Aging Aircraft	4685 Aging Aircraft

(U) Schedule Profile	FY 2003	FY 2004	FY 2005
(U) Aging Aircraft Structures Health Management	1-4Q	1-2Q	2Q
(U) Aging Aircraft Subsystems Health Management		2-3Q	2-3Q
(U) Enhanced Avionics Management		2-3Q	2-3Q
(U) Knowledge Management Tools		1-4Q	1-4Q
(U) Depot Technology Modernization Plan		3Q	
(U) Academic Center for Aging Aircraft			4Q