Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0708012F: *Logistic Support Activities*							
COST ($ in Millions)	**FY 2010**	**FY 2011**	**FY 2012 Base**	**FY 2012 OCO**	**FY 2012 Total**	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**	**Cost To Complete**	**Total Cost**
Total Program Element	-	-	0.944	-	0.944	0.299	0.846	0.746	0.696	Continuing	Continuing
673318: *Product Data Systems Modernization (PDSM)*	-	-	0.944	-	0.944	0.299	0.846	0.746	0.696	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Project was set up to fund the development of the Air Force Core Automated Maintenance System (CAMS) which is the standard Air Force base-level automated maintenance information management system for managing weapon systems worldwide. The system supports aircraft, communications-electronics, and support equipment maintenance activities at worldwide operating bases, Air National Guard/AF Reserve sites, and selected North Atlantic Treaty Organization (NATO) locations. CAMS provides on-line remote terminals connected to the Standard Base-Level Computer (SBLC) system throughout the maintenance complexes. CAMS automates aircraft history, aircraft scheduling, aircrew debriefing processes, and provides a common interface for entering base-level maintenance data into other logistics management systems. That development was completed in FY2003. The FY 2007 funds are for a Congressional add for the Reliability and Maintainability Information System (REMIS) and Omnibus add for Cargo Movement Operations System (CMOS). REMIS provides a single, primary Air Force data system for collecting and processing equipment maintenance data which is used to provide information on reliability and maintainability, trend analysis, failure prediction and weapon system availability. REMIS funds are being used to support the migration/modernization of REMIS to Global Combat Support System - Air Force. CMOS is a joint-use system that integrates computer hardware, software, and communications to effectively plan, document and manage outbound and inbound cargo and passengers; and to plan, schedule, and monitor the execution of transportation activities in support of deployment and reception of forces. CMOS provides joint warfighters with an end-to-end distribution capability and real time in-transit visibility during all passenger and cargo movements. CMOS is operational at 247 US Air Force, US Army, US Navy, US Marine Corps, National Security Agency, and Defense Contract Management Agency sites, with plans to activate additional US Army sites. This RDT&E funding will be used primarily to install/implement CMOS software and provide implementation training at new US Army sites. Funding will also be used to develop new software capabilities required by US Army customers. This program is in Budget Activity 7, Operational System Development, because projects are being engineered to support operational weapon systems already in existence.

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force	DATE: February 2011
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B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	-	-	0.697	-	0.697
Current President's Budget	-	-	0.944	-	0.944
Total Adjustments	-	-	0.247	-	0.247
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	0.247	-	0.247

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0708012F: *Logistic Support Activities*	PROJECT 673318: *Product Data Systems Modernization (PDSM)*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
673318: *Product Data Systems Modernization (PDSM)*	-	-	0.944	-	0.944	0.299	0.846	0.746	0.696	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

Aircraft Structual Integrity Management Information System (ASIMIS) serves as a focal point for data that is collected from on-board loads recording systems from each aircraft. The data is checked for validity, and then structural analysis is performed on the aircraft using the information provided. The information is reported to the ASIP manager and OEM via electronic reports or web-reporting tools that are part of ASIMIS. This data is used by the ASIP manager and OEM in planning inspection timing requirements, repair and replacement activities for critical structural components. The Mainframe Modernization effort is intended to improve the method of data storage and processing. The AFGROW and PROF efforts are intended to provide up to date and technically accurate tools for data analysis.

Auomated Computer Program Identification Numbering System (ACPINS) provides a standardized automated information system (AIS) to identify, manage, catalog, requisition and distribute Mission Critical Software (MCS) for National Security Systems (NSS) which supports combat weapons systems, tactical systems, aircraft, missiles, ships, communications, command and control and spacecraft. This system is a management tool for warfighters to determine the software requirements for their users. Software developers/configuration managers, engineers, equipment specialists, TODOs (Technical Order Distribution Offices), and Foreign Disclosure offices can manage up-to-date reports for the customers. The modernization effort will improve the quality, functionality, and update existing technologies of the ACPIN System for all users needing mission-critical software in support of all MAJCOM warfighters.

A. Mission Description and Budget Item Justification

The Aircraft Structural Integrity Management Information System (ASIMIS) and ASIP operate as directed by AFPD 63-10 and MIL-STD-1530C. EMA with AFMC/A4N is signed for FY10. ASIMIS responsibilities include: Receiving, storing and reporting recorder downloads from all aircraft. Track and report quality control data for flight data recorders (Structural Data Recorder, Crash Survivable Flight Data Recorder, etc…), monitor usage, severity and any accumulated damage by plane and base, analyze the data, calculate crack growth in key locations in the airframe structure, project crack growth in order to provide a basis for maintenance scheduling, maintain a complete flight hour and calendar date history of each aircraft. AFI 63-1001 mandates AFMC must sustain and enhance ASIMIS capability as required by participating single managers. There is a vanishing global pool of programmers with expertise in JCL, FORTRAN, ASSEMBLY, COBOL, and FOCUS languages.

This project supports the implementation of the software package Air Force Grow (AFGROW) in the ASIMIS suite of tools to support the Aircraft Structural Integrity Program (ASIP) community. AFGROW is a crack prediction software package owned and operated by LexTech Inc. Originally developed under the name ASDGRO in 1985, AFGROW was owned and operated by the United States Air Force through version 4.0012.15. AFGROW will be used by Air Force structural engineers to predict the life expectancy of a/c components for a variety of weapon systems under cyclic loading under the assumption that defects exist. AFGROW is also used to address maintenance requirements if/when damage is identified within a component. Funding will be used to provide software licenses and training ASIP managers and weapon system engineers. Funding will also be used to provide for the research and development of software upgrades to suit ASIP manager needs. The costs for development of this tool were provided by the Air Force Research Lab. Development is now beyond AFRL scope.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0708012F: *Logistic Support Activities*	**PROJECT** 673318: *Product Data Systems Modernization (PDSM)*

This project supports the implementation of the software package Probability of Failure (PROF) in the ASIMIS suite of tools to support the Aircraft Structural Integrity Program (ASIP) community. PROF is a risk analysis software package owned and distributed by the United States Air Force. PROF is used by Air Force structural engineers to predict the probability of failure of a weapon system under specified usages. PROF provides for the ability to set inspection/maintenance schedules before failure occurs, without creating excess/unnecessary inspections that would impair mission readiness. The costs for development of this tool were provided by the Air Force Research Lab. Development is now beyond AFRL scope.

The Automated Computer Program Identification Numbering System (ACPINS) provides a standardized automated information system (AIS) to identify, manage, catalog, requisition and distribute Mission Critical Software (MCS) for National Security Systems (NSS) which supports combat weapons systems, tactical systems, aircraft, missiles, ships, communications, command and control and spacecraft. This system is a management tool for warfighters to determine the software requirements for their users. Software developers/configuration managers, engineers, equipment specialists, TODOs (Technical Order Distribution Offices), and Foreign Disclosure offices can manage up-to-date reports for the customers.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: ASIMIS Modernization ***Description:*** Mainframe Modernization ***FY 2010 Accomplishments:*** ***FY 2011 Plans:*** ***FY 2012 Base Plans:*** - Mainframe to Server Migration - Web Modernization - Miscellaneous Enhancements ***FY 2012 OCO Plans:***	-	-	0.444	-	0.444
Title: AFGROW ***Description:*** AFGROW ***FY 2010 Accomplishments:*** ***FY 2011 Plans:*** ***FY 2012 Base Plans:*** - Purchase Software Licensing for 4 Sites	-	-	0.100	-	0.100

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
- Provide Funding for Training for 4 Sites - Continue Software Updating ***FY 2012 OCO Plans:***					
Title: PROF ***Description:*** PROF ***FY 2010 Accomplishments:*** ***FY 2011 Plans:*** ***FY 2012 Base Plans:*** - Continue Software Updating ***FY 2012 OCO Plans:***	-	-	0.100	-	0.100
Title: ACPINS Modernization ***Description:*** Modernization ***FY 2010 Accomplishments:*** ***FY 2011 Plans:*** ***FY 2012 Base Plans:*** - Functional Enhancement - Software update ***FY 2012 OCO Plans:***	-	-	0.300	-	0.300
Accomplishments/Planned Programs Subtotals	-	-	0.944	-	0.944

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• ASIMIS: *Operations and Maintenance*	0.101	0.104	0.265	0.000	0.265	0.117	0.123	0.260	0.152	Continuing	Continuing
	0.281	0.270	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0708012F: *Logistic Support Activities*	PROJECT 673318: *Product Data Systems Modernization (PDSM)*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• ACPINS: *Operations and Maintenance*											

D. Acquisition Strategy

ASIMIS will migrate the mainframe code to a new, modern, more manageable, and maintainable language. The acquisition will be a Cost Plus-Fixed Fee (CPFF) contract line item on a competitively awarded contract utilizing Full and Open Competition.

The ACPINS acquisition will be a Cost Plus-Fixed Fee (CPFF) contract line item on a competitively awarded contract utilizing Full and Open Competition.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0708012F: *Logistic Support Activities*	PROJECT 673318: *Product Data Systems Modernization (PDSM)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PDSM	TBD	TBD:TBD,	-	-		0.944	Dec 2012	-		0.944	0.000	0.944	0.000
		Subtotal	-	-		0.944		-		0.944	0.000	0.944	0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-	0.000	0.000	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-	0.000	0.000	0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-	0.000	0.000	0.000

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-		0.944		-		0.944	0.000	0.944	0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0708012F: *Logistic Support Activities*	**PROJECT** 673318: *Product Data Systems Modernization (PDSM)*

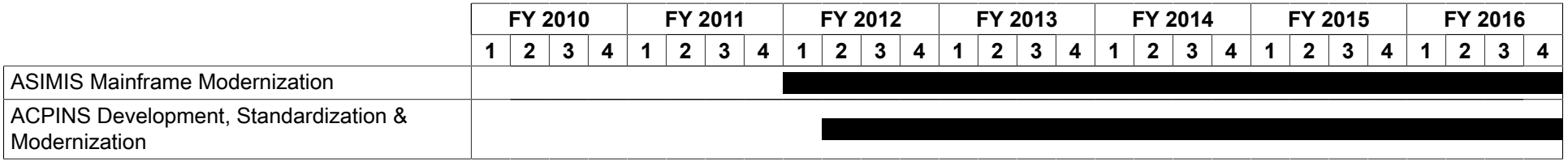

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0708012F: *Logistic Support Activities*	**PROJECT** 673318: *Product Data Systems Modernization (PDSM)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
ASIMIS Mainframe Modernization	1	2012	4	2016
ACPINS Development, Standardization & Modernization	2	2012	4	2016