AIR FORCE WORKING CAPITAL FUND

U.S. AIR FORCE

CAPITAL BUDGET

000077

Capital Budget Summary
Air Force Working Capital Fund
Air Force Supply Management Activity Group
Material Support Division

FUND 9A
(Dollars in Millions)

Fiscal Year (FY) 2005
Budget Estimates
February 2004

Rem Description	FY 2003 Quantity	FY 2003 Total Cost	FY 2004 Quantity	FY 2004 Total Cost	FY 2005 Quantity	FY 2005 Total Cost
ADPE & TELECON	3	8.555	2	1.355	2	1.330
Enterprise Data Warehouse	1	3.465	1	1.155	1	1.180
Keystone	1	0.440	1	0.200	1	0.150
Material Management System	1	4.650	0	0.000	0	0.000
SOFTWARE DEVELOPMENT	11	41.068	10	52.109	11	53.252
Externally Developed	11	41.068	10	52.109	11	53.252
Automated Budget Analysis/Centralized User System (ABACUS)/ERP	1	1.969	1	1.360	1	0.417
Enterprise Data Warehouse/ERP	1	7.690	1	3.085	1	3.170
EXPRESS (D0878X)/ERP	1	1.125	1	1.125	1	0.425
Financial Inventory Accounting and Billing System (FIABS)/ERP	1	0.464	1	3.196	1	8.995
Inventory Valuation	1	0.739	0	0.000	0	0.000
Keystone/ERP	1	0.884	1	1.661	1	1.134
Maintenance Planning and Execution (MP&E)/ERP	1	0.000	1	6.967	1	6.251
Purchase Request Process System (PRPS)/ERP	1	2.275	1	2.680	1	2.683
Requirements Management System (RMS)/ERP	1	6.398	1	12.356	1	9.719
Reformed Supply Support Program (RSSP)/ERP	1	1.880	1	1.800	1	3.140
Stock Control System(SCS)/ERP	1	17.644	1	17.879	1	17.318
Total	14	49.623	12	53.464	13	54.582

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: EDW H/W
Item Description: HQAF00013
Capital Category: ADPE & Telecomm

2003 AC			2004 AP			2005 R		
Item Quantity	Item Cost	Total Cost	Item Quantity	Item Cost	Total Cost	Item Quantity	Item Cost	Total Cost
1	3.465	3.465	1	1.155	1.155	1	1.180	1.180

Item Justification/Impact If Not Provided:

Enterprise Data Warehouse (EDW)

Description and Purpose:
The Enterprise Data Warehouse (EDW) Program is a cross-functional program that encompasses the 23 combat support functions of the Global Combat Support System (GCSS-AF). It will provide the data sharing and functional integration of data required by GCSS-AF in support of the AF Warfighter. Through the use of modern query and data mining tools, the EDW cross-functional data will be transformed into the information required by the war fighters and combat support personnel, accessible via the AF Portal. Gathering and storing enterprise wide data in a secure, reliable and consistent manner, through web accessible portals, the EDW will enable modem decision support tools to quickly provide clear and accurate decision support Information. The Material Support Division (MSD) is the primary functional area with the largest requirement for EDW and has the largest volume of data that will reside in EDW. Other functional areas like Headquarter Air Force, Installation Maintenance & Logistics, have identified their peculiar functional requirements and have provided funding for those EDW requirements. To gain the maximum benefit from an EDW, cross-functional data needs to be loaded into EDW. Currently, REMIS (Reliability and Maintainability Information System) historical aircraft maintenance, comm.-electronics, engine, and airlift data is loaded. The next group of functions; supply chain management, asset visibility, cataloging, mission capable parts, requirements determination, and item management data is being loaded. The aircraft Mission Design Series (MDS) phase (Increment III) will take two years for the initial loading of data and developing the initial capability. This endeavor will significantly enhance the Air Force's ability to improve weapon system availability, asset visibility, operational readiness, contingency planning, and combat operations. Supply data from selected Materiel Support Division (MSD) supply systems like REMIS, SCS (Stock Control System), DO43 (Master Item Identification Control System), D165 (MICAP data), WSMIS (Weapon System Management Information System), and D200 (Requirements Data Bank) are folding into EDW, followed by other logistics and decision support data in FY04/05. The entire combat support enterprise will be covered by the close of FY07.

Current Deficiency and/or Problem:
As EDW development progresses we must purchase additional storage capacity to accomodate planned data systems feeds. The current Teredata storage box is near capacity and additional capacity is required to continue EDW development.

Economic Analysis:
An approved economic analysis is on file.

Program Completion:
The entire combat support enterprise will be completed by the close of FY07.

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: KeystoneHW
Item Description: HQAFMC0001
Capital Category: ADPE & Telecomm

2003 AC			2004 AP			2005 R		
Item Quantity	Item Cost	Total Cost	Item Quantity	Item Cost	Total Cost	Item Quantity	Item Cost	Total Cost
1	0.440	0.440	1	0.200	0.200	1	0.150	0.150

Item Justification/Impact If Not Provided:

Keystone (H303) Decision Support System (DSS)

Description and Purpose:
The Supply Working Capital Fund Decision Support System (DSS),Keystone (H303), evolved from the Unit Cost Analysis and Resource Tracking System (UCARTS) requirement to provide unit cost ratio information for the Air Force Working Capital Fund Materiel Support Division (MSD). UCARTS was terminated in August 1997 because it did not meet program objectives. The Keystone (H303) DSS provides improved functionality previously identified for UCARTS, with additional capabilities for MSD sales and costs down to Product Directorate, weapon system and National Item Identification Number (NIIN) level. Keystone also has ad hoc analysis capability, allowing improved comparisons of estimates and actual costs, facilitating MSD budgeting and execution reporting capabilities.

Current Deficiency and/or Problem:
Increased user demand, stricter security requirements and planned Inclusion of additional Air Force Working Capital Fund data will require expanded data base server capability, increased data storage capacity and continuing security improvements to maintain and improve system performance specifications. Hardware upgrades are anticipated to include processor and memory expansions/upgrades, additional disk drives, replacement of failed hardware components as required, plus planned replacement of the production, test and web servers due to aging and expected system growth.

Impact:
Disapproval of this request will not permit growth of Keystone to include additional Air Force Working Capital Fund financial data, such as Depot Maintenance and General Support Division information, or take advantage of improved technology, eventually limiting user accessibility, degrading system response time and becoming non-compliant with system security requirements.

Economic Analysis:
An economic analysis has been accomplished.

Program Completion:
Anticipated growth in data storage capacity and security requirements is projected through the budget years, as an anticipated move to the Air Force Knowledge Services architecture will not occur prior FY06.

080000

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: ABACUSSW/ERP

Item Description: HQSAF0012

Capital Category: Software Development (Externally developed)

2003 AC			**2004** AP			**2005** R		
Item Quantity	**Item Cost**	**Total Cost**	**Item Quantity**	**Item Cost**	**Total Cost**	**Item Quantity**	**Item Cost**	**Total Cost**
1	1.969	1.969	1	1.360	**1.360**	1	0.417	**0.417**

Item Justification/Impact if Not Provided:

Automated Budget Analysis/Centralized User System (ABACUS)/ERP

Description and Purpose:
This capital purchase request reflects the costs estimated for a software contractor to develop an enhanced budget system. This enhanced system is intended to be more responsive to changing Air Force Working Capital Funds (AFWCF) business practices. The major enhancement that ABACUS will undergo at this time is to rebuild the enhanced ABACUS on an Air Force and DoD compliant system architecture. This new architecture will serve as a solid foundation, flexible for future enhancements to meet changes in the AFWCF budget process. The enhancements will be web-based, data focused with archiving and export features, and auditing capability. This functionality will migrate into Enterprise Resource Planning (ERP) solution. The development of the enhanced ABACUS will occur over several years beginning in FY02.

Current Deficiency and/or Problem:
The current ABACUS is used to create and assemble budgets in a uniform manner for approximately six months out of the year. The remaining time ABACUS is not used. There is no database to store historical data which could be used to analyze trends. Changes that occur at higher levels cannot be distributed property to lower levels. Changes to AFWCF procedures are not easily incorporated due to current system architecture and operating environment. Budget submissions are sent by File Transfer Protocol, which is a tedious process. The proposed changes to ABACUS will fix these shortfalls.

Impact:
An enhanced ABACUS will allow more time for analysis, because historical data will be available within ABACUS. Time will be saved by allowing budgets to be developed in ABACUS. Files can be **transferred easily from lower to higher levels.**

Estimated Completion Date:
FY05

Economic Analysis:
An approved economic analysis is on file.

180000

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: EDW/ERP
Item Description: HQAF00012
Capital Category: Software Development (Externally developed)

2003 AC			2004 AP			2005 R		
tern Quantity	tern Cost	Total Cost	tern Quantity	tern Cost	Total Cost	Item Quantity	tern Cost	Total Cost
1	7.690	7.690	1	3.085	3.085	1	3.170	3.170

Item Justification/Impact if Not Provided:

Enterprise Data Warehouse (EDW) Software/ERP

Description and Purpose:
The Enterprise Data Warehouse (EDW) Program will bring together the full spectrum of Air Force combat support data to include maintenance, supply, transportation, finance, contracting, and planning. Through the use of modern query and data mining tools, the EDW cross-functional data will be transformed into the information required by the war fighters. Gathering and storing enterprise wide data in a secure, reliable and consistent manner, through web accessible portals, the EDW will enable modern decision support tools to quickly provide clear and accurate decision support information. This endeavor will significantly enhance the Air Force's ability to improve weapon system availability, asset visibility, operational readiness, contingency planning, and combat operations. The EDW will continuously gather key data elements from selected Air Force systems, organize them, provide enhanced access and analytical query capabilities, and produce user-tailored reports. The EDW will become an integral part of Enterprise Resource Planning solution (ERP) within the FYDP. Two other key characteristics will be user single point of entry and significantly reduced response times. Starting in the last quarter of FYOO, the initial segment, the Air Force's fleet wide historical maintenance provided by REMIS (Reliability and Maintainability Information System), was entered into the EDW by the end of March 2001. The next segment drew pertinent data from all other aircraft and communication-electronics related maintenance systems by the end of FY01. Supply data from selected Material Support Division (MSD) supply systems like REMIS, SCS (Stock Control System), DO43 (Master Item Identification Control System), D165 (MICAP data), PTAMS (Pipeline Tracking Analysis and Metrics System), and D200 (Requirements Data Bank) is folding into the enterprise warehouse, followed by other logistics and decision support data in FY04/05. The entire combat support enterprise will be covered by the close of FY07. Targeted data is currently planned for the following domains: maintenance, supply, ammunition, medical, transportation, civil engineering, finance, accounting, cost management, logistics plans, contracting, requirements determination, sustaining engineering, decision support, PPBS, communications, services, and security.

Current Deficiency **and/or Problem:**
Currently, the MSD community is using several systems with data mart capabilities throughout AFMC and the AF. However, existing data mart capabilities require the data be transferred multiple times and stored in many places, resulting in outdated and inaccurate data. By building EDW, the MSD community will get a single decision support capability that will provide data from a single reliable and accurate source. This single data source will allow access faster and increase the accuracy of available information.

Impact:
Failure to fund the Enterprise Data Warehouse will continue the practice of relying on closed, rigid, compartmentalized and non-integrated combat support data to underpin key decisions. Timeliness of data will continue to lag the needs of commanders, accuracy will remain suspect and the relationships between such activities as supply, transportation, maintenance, and operations will remain clouded. The Air Force's ability to make combat support decisions will trail best proven business practices, not meet the intent of Joint Vision 2010/2020, and could place people and equipment at unnecessary risk.

Economic Analysis:
An approved economic analysis in on file.

Program Completion:
The entire combat support enterprise will be covered by the close of FY07.

28 0082

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: EXPRESS(DO878X)/ERP

Item Description: OC7LG8

Capital Category: Software Development (Externally developed)

2003 AC			2004 AP			2005 R		
hem Quantity	Item Cost	Total Cost	Item Quantity	tern Cost	Total Cost	Item Quantity	tern Cost	Total Cost
1	1.125	1.125	1	1.125	1.125	1	0.425	0.425

Item Justification/Impact If Not Provided:

Execution and Prioritization of Repairs Support Systems (EXPRESS) DO87X/ERP

Description and Purpose:
An automated tool to support the Depot Repair Enhancement Program (DREP), performs the following functions: a. Prioritization of Aircraft Repairables (PARs) b. EXPRESS Prioritization Processor (EPP) c. Supportability Module. EXPRESS provides a single integrated priority list of all repair requirements at an ALC, detenines the ability of existing resources to support repair actions, and provides the data and the mechanism to move items into repair. The source of repair/supply uses a mathematical model in PARS to prioritize repair and distribution of assets to the users from the source of the consolidated serviceable inventory (CSI). PARs takes into account base flying activity, asset position, and the corporately established aircraft availability goals. EPP sets priorities for the repair of items which are not addressed in PARs and combines all priorities into a single integrated list for each repair shop. Assets which do not have aircraft availability goals are prioritized using a "deepest hole" logic to try to fill the most critical need. EPP also provides the prioritized list to the Distribution Module, which identifies prepositioning actions for serviceable parts as they come out of repair.

The Supportability Module takes the prioritized repair list from the EPP and determines whether the requlred items can be repaired based on four evaluation criteria: a. Carcass availability b. Repair parts availability c. Repair funds availability d. Repair resources availability. Items which meet all of these criteria are entered onto the D035K Express Table for transfer to the Shop. Items which fail one or more of these criteria are identified to SHOP PRO, where workload managers can resolve supportability constraints.

These funds will be used to continue the ongoing modernization efforts towards DII/COE and bring EXPRESS into an open systems environment under the GCSS-AF Integration Framework which ensures compliance with USAF/IL direction. This is a precursor for migration to an Enterprise Resource Planning (ERP) tool set module meeting the functionality EXPRESS provides. Componentization efforts will **also move** EXPRESS **towards integration into a single logistics system, improving data quality and business processes, reducing number of system interfaces, eliminating software redundancy and identifying** reuse opportunities, and reducing system sustainment costs. This on-line, real-time capability will allow Air Force users the ability to share data for analysis; provide enhanced data services in capturing, organizing, and loading logistics planning data; and improve the operators ability to monitor, troubleshoot, update and execute system operation resulting in more timely and accurate information to decision makers.

Current Deficiency and/or Problem:
The current systems performing this process do not meet the DII/COE or GCSS-AF requirements. Without this investment we will not be able to meet USAF/IL direction. Additionally, current systems do not allow for on-time, real time capability.

Impact:
Without these funds this system will not be able to move into a modern DII/COE architecture nor will the system be GCSS-AF compliant. The system must be modernized to provide the best support to the field.

Economic Analysis:
An approved economic analysis has been completed for this project and is on file with HQ AFMC/FMRS.

Program Completion:
Delivery of software using FY04 funds will be completed in FY05. Delivery of software using FY05 funds will be completed in FY06.

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: FIABSSW/ERP
Item Description: HQAFMC00013
Capital Category: Software Development (Externally developed)

2003 AC			2004 AP			2005 R		
tern Quantity	Item Cost	Total Cost	tern Quantity	tern Cost	total Cost	Item Quantity	tern Cost	total Cost
1	0.464	0.464	1	3.196	3.196	1	8.995	8.995

tem Justification/Impact If Not Provided:

Financial Inventory Accounting and Billing System (FIABS)/ERP

Description and Purpose:
FIABS is used by wholesale and retail item managers, loan control officers, Air Logistics Centers, various logistics organizations such as procurement, and accounting and finance. It also provides data interface files to other systems. The capital investment for software addressed in this project entails the update of the existing FIABS.

Current Deficiency and/or Problem:
The current FIABS is inflexible, hosts rigid applications, is expensive and slow to incorporate changes. It has reached the point where poor data quality and the lack of standardization inhibit the ability to share reliable data. The update will comply with DOD and Air Force directives to provlde commanders with near real-time information. The update will be accompanied by better documentation which is important to understanding/validating data. Simplified accounting will clean up the existing process, making data reviews less cumbersome. FIABS currently uses LAC (latest acquisition cost) to value inventory. This is inconsistent with OSD July 2001 mandate making Moving Average Cost (MAC) as the valuation method. The functionality of FIABS will migrate to an Enterprise Resource Planning (ERP) tool set module to be compliant with Federal and DoD architecture framework.

Impact:
The major benefits of this effort are upgrades to the current antiquated legacy system and improved business area management. The updated FIABS will incorporate the valuation of inventory using Moving Average Cost as directed in the Jul 01 OSD policy. The updated system will reduce the number of transactions passed between systems, eliminate data redundancy, streamline accounting procedures and processes, and move edits to upfront shared processes.This will allow errors to be caught as the transactions process through the logistic systems so they are rejected at the source of entry. Management visibility will be increased by the use of statistical modeling and analytical sampling such as metrics. Audit trails will exist that document the entire processing of each transaction. This will include all updates to user maintainable tables as well as including program and process training capabilities to meet CFO requirements. Original transactions will not be altered and the original transaction will be marked as audited and new transactions will take their place. Other benefits include the evolution of the current business system's baseline to an integrated functional and interoperable technical environment maximizing the use of standardized data and data repositories to support all logistics business functions, management and operating levels.

Program Completion:
Phase I completed on 30 September 2003
Phase II projected completion: 30 September 2007

Economic Analysis:
An approved economic analysis is on file.

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: KeystoneSW/ERP
Item Description: HQAFMC0011
Capital Category: Software Development (Externally developed)

2003AC			2004AP			2005 R		
hem Quantlty	**Item Cost**	**Total Cost**	**Item Quantity**	**Item Cost**	**Total Cost**	**Item Quantity**	**Item Cost**	**Total Cost**
1	0.884	0.884	1	1.661	1.661	1	1.134	1.134

Item Justification/Impact If Not Provided:

Keystone (H303) Decision Support System (DSS)/ERP

Description and Purpose:
The Supply Working Capital Fund Decision Support System (DSS),Keystone (H303), evolved from the Unit Cost Analysis and Resource Tracking System (UCARTS) requirement to provide unit cost ratio information for the Air Force Working Capital Fund Materiel Support Division (MSD). UCARTS was terminated in August 1997 because it did not meet program objectives. The Keystone (H303) DSS provides improved functionality previously identified for UCARTS, with additional capabilities for MSD sales **and** costs down to Product Directorate, weapon system and National Item Identification Number (NIIN) level. Keystone also has ad hoc analysis capability, allowing improved comparisons of estimates and actual costs, facilitating MSD budgeting and execution reporting capabilities. These processes are part of the long term Enterprise Resource Planning (ERP) solution.

Current Deficiency and/or Problem:
This request is for system software enhancements required to implement expansion of the Keystone DSS, as identified in the Keystone Strategic Roadmap. Identified expansion of Keystone's capabilities include additional MSD analysis requirements, expected interfaces with the Enterprise Data Warehouse, incorporation of General Support Division and Depot Maintenance Activity Group financial data into the Keystone data base from legacy systems and assuring Keystone compatibility with projected DFAS data systems conversions and mergers.

Impact:
Disapproval of this request will limit Keystone's capability to meet user identified requirements in providing Air Force Working Capital Fund budget analysts, inventory managers and Supply Chain Managers **an effective and efficient means for reviewing and analyzing their mission area's financial and inventory data and allow them to manage their programs in a business-like manner.**

Program Completion:
System capability enhancements, identified as spiral developments are currently programmed through the budget years.
* Spiral 10: MSD enhancements such as MSD Cash Flow Income Statements, Market Basket Analysis and FIABS Asset Balance Analysis, ECD Sep 04.
* Spiral 13: GSD enhancements such as GSD Cash Flow Income Statement and Incorporate M-20 Inventory Report, ECD Aug 04.
. Spiral 14: Virtual Inventory Control Point Execution Tracking System for Buy, Contract and Organic Repair, ECD March 05.

Economic Analysis:
An economic analysis has been accomplished.

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: MP&E/ERP
Item Description: JLSC02C
Capital Category: Software Development (Externally developed)

2003 AC			2004 AP			2005 R		
Item Quantity	**tern Cost**	**Total Cost**	**Item Quantity**	**tern Cost**	**total Cost**	**Item Quantlty**	**tern Cost**	**Total Cost**
1	**0.000**	**0.000**	1	**6.967**	**6.967**	1	**6.251**	**6.251**

Item Justification/Impact If Not Provided:

Maintenance Planning and Execution (MP&E)/ERP

Description and Purpose:
Maintenance Planning and Execution System (MP&E) provides Repair Program Managers with a standard system for performing the actions of planning for the maintenance of reparable items. The application provides a common system for controlling and tracking funds used for maintenance; negotiating maintenance costs and schedules; and providing management of maintenance programs.

The first phase of MP&E was successfully deployed in FYOO. These funds will be used to continue the development and deployment of additional MP&E capabilities. The work will move the system towards a Defense Information Infrastructure/Common Operating Environment (DIVCOE) compliant open systems architecture. Additionally, continued modernization planning towards DII/COE and bringing the system into an open systems environment under the Global Command Support Systems - Air Force (GCSS-AF) Integration Framework ensures compliance with USAF/IL direction. The ultimate solution for MP&E may include implementation of an Enterprise Resource Planning (ERP) tool set module. Componentization efforts will also move MP&E towards integration into a single logistics system, improving data quality and business processes, reducing number of system interfaces, eliminating software redundancy and identifying reuse opportunities, and reducing system sustainment costs.
This on-line, real-time capability will allow Air Force users the ability to share data for analysis as well as provide enhanced reporting/query capabilities, access to current/future maintenance requirements, and repair program historical data resulting in more timely and accurate information to decision makers.

Current Deficiency and/or Problem:
The current systems performing this process have old mainframe platforms, use outdated programming languages, are costly to maintain, do not have the required flexibility to support inter-operability and AEF **requirements, and cannot function within the required GCSS-AF and DII/COE environment.**

Impact:
Without these funds this system will not be able to move into a modern DII/COE architecture nor will the system be GCSS-AF compliant. The system must be modernized to provide the best support to the field.

Economic Analysis:
An economic analysis has been completed for this project and is on file with HQ AFMCIFMRS.

Program Completion:
Delivery of software using FY04 funds will be completed in FY05.
Delivery of software using FY05 funds will be completed in FY06.

980000

Item Name: PRPS (D203)/ERP

Item Description: JLSC02D

Capital Category: Software Development (Externally developed)

2003 AC			2004 AP			2005 R		
Item Quantity	Item Cost	Total Cost	Item Quantity	Item Cost	Total Cost	Item Quantity	Item Cost	Total Cost
1	2.275	2.275	1	2.660	2.680	1	2.663	2.683

Item Justification/Impact If Not Provided:

Purchase Request Process System (PRPS)/ERP

Description and Purpose:
The Purchase Request Process System (PRPS) automates the front end of the acquisition process and is used to bridge the requirement stage to acquisition competition screening, automated purchase request and attachments, delivery order notices and the contracting stage. PRPS provides the ground work for the Enterprise Resource Planning (ERP) solution. PRPS processing begins with the receipt of a validated buy requirement, and includes acquisition competition screening, automated purchase request and attachments, delivery order notices and transmission to the buying activity.

These funds will be used to continue the ongoing modernization efforts of the Purchase Request Process System (D203). The work will move the system into a Defense Information Infrastructure/Common Operating Environment (DIVCOE) compliant open systems architecture. Additionally, the work will prepare the system for and move it into GCSS-AF in compliance with USAF/IL direction. GCSS-AF and DIVCOE will bring all the systems into a common operating environment. This with the combination of on-line, real-time capability, will allow users from the entire Air Force to share data for analysis as well as conduct automated and interactive file maintenance actions, suspense tracking, and determine order status. The number of interfaces will be reduced and the systems will provide more timely and accurate information to decision makers.

Current Deficiency and/or Problem:
The current business process is a combination of manual processes and existing legacy systems. This system will automate the business process, eliminate outdated legacy systems, and allow for real-time capability and paperless contracting. The current systems performing this process have old mainframe platforms, use outdated programming languages, are costly to maintain, do not have the required flexibility to support inter-operability and AEF requirements, and cannot function within the required GCSS-AF and DII/COE environment.

Impact:
Without these funds this system will not be able to move into a modern DIVCOE architecture as directed by higher HQ nor will it provide a paperless acquisition system. The system must be modernized to provide the best support to the field.

Economic Analysis:
An economic analysis has been completed for this project and is on file with HQ AFMCIFMRS.

Program Completion:
Delivery of software using FY04 funds will be completed in FY05.
Delivery of software using FY05 funds will be completed in FY06.

280000

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: RMS/ERP
Item Descrtptlon: JLSC02A
Capltal Category: Software Development (Externally developed)

2003 AC			2004 AP			2005 R		
hem Quantlty	**Item Cost**	**Total Cost**	**Item Quantity**	**tem Cost**	**total Cost**	**Item Quantity**	**tern Cost**	**total Cost**
1	6.398	6.398	1	12.356	12.356	1	9.719	9.719

Item Justification/Impact If Not Provided:

Requirements Management Systems (RMS)/ERP

Description and Purpose:
This system comprises a set of major logistics processes and models integrated by a large relational database. This system automates and integrates the Air Force materiel requirements determination processes which compute procurement, termination and repair requirements for spares, repair parts, and major equipment items, It uses a planning period of 39 quarters and recomputes quarterly. The relational database is the repository of detailed information showing the indentured application of every individual part of each particular aircraft type of end item. Within this structure the system holds the historical and planning data needed to support computation of quantities for buy, termination and repair. The data includes: past and projected weapon system operating programs, future readiness goals, maintenance and modification schedules, item failure rates, and condemnations. Dataquery, modeling, and management report generation are on-line.
These funds will be used to continue the ongoing modernization efforts of the Requirements Management System (RMS). Continued modernization planning towards Defense Information Infrastructure/Common Operating Environment (DIVCOE) and bringing the RMS into an open systems environment under the Global Command Support Systems - Air Force (GCSS-AF) Integration Framework ensures compliance with USAF/IL direction. Ultimately, the solution for RMS functionality will reside in an Enterprise Resource Planning (ERP) tool set. Componentization efforts will also move RMS towards integration into a single logistics system, improving data quality and business processes, reducing number of system interfaces, eliminating software redundancy and identifying reuse opportunities, and reducing system sustainment costs. This on-line, real-time capability will allow Air Force users the ability to share data for analysis: improve computation of universal requirements and simulation capability; provide on-line historical data; and, improve projections of factors, requirements, and status information resulting in more timely and accurate information to decision makers. GCSS-AF and DIVCOE development work will continue in FY04 and beyond in order to accomplish GCSS-AF and DII/COE mandates.

Current Deficiency and/or Problem:
The current systems have old, mainframe platforms with outdated programming languages, are costly to maintain and operate, do not have required flexibility to support inter-operability and AEF requirements, and cannot function within GCSS-AF and DII/COE environment.

Impact:
Without these funds this system will not be able to move into a modern DIVCOE architecture nor will the system be GCSS-AF compliant. The system must be modernized to provide the best support to the field.

Economic Analysis:
An economic analysis has been completed for this project and is on file with HQ AFMC/FMRS.

Program Completion:
Delivery of software using FY04 funds will be completed in FY05.
Delivery of software using FY05 funds will be completed in FY06.

880000

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: RSSP/ERP

Item Description: SM99001

Capital Category: Software Development (Externally developed)

2003 AC			2004 AP			2005 R		
Item Quantity	**Item Cost**	**Total Cost**	**Item Quantity**	**Item Cost**	**Total Cost**	**Item Quantity**	**Item Cost**	**Total Cost**
1	1.880	1.880	1	1.800	1.800	1	3.140	3.140

Item Justification/Impact if Not Provided:

Reformed Supply Support Program (RSSP)/ERP

Description and Purpose:
The Reformed Supply Support Program (RSSP) is the process the Air Force uses to bring initial spares into the inventory and to form a partnership with industry to manage initial spares more efficiently. The RSSP Data Exchange (D375) is the technological solution for weapon system Program Offices to gain visibility of spares and parts usage data during the acquisition cycle and the interim supply support period. This functionality provides the pathway for the Enterprise Resource Planning (ERP) solution. The Data Exchange (D375) will feed spares data from the contractor to the government systems (e.g., computation models, retail tracking systems, wholesale tracking systems and packaging and transportation systems) to enhance asset visibility, provide the data necessary for the government to make informed decisions when laying in initial and follow-on spares and Agile Logistics in an open systems architecture.

Current Deficiency and/or Problem:
The data that the RSSP Data Exchange provides is not collected and tracked in any government systems today. The data is held in a myriad of contractor systems which do not link ot government systems. This situation precludes informed decisions and demand based forecasting of future requirements when laying in initial and follow-on spares. Once deployed, the RSSP DE will have to be upgraded to the latest GCSS-AF version of software requirements, and the DE will have to migrate to the GCSS-AF Infrastructure to meet Level 4 compliance by FY 07. Funds requested in FY04 and FY05 support this migration.

Impact:
HQ AFMC, AF/IL and SAF/AQ have endorsed this process for immediate implementation. Without Capital Development funding, the RSSP Data Exchange will not meet planned FOC by FY05, only limited functionality will be implemented, We will not be able to provide a common point of reference for spare asset visibility and analysis, nor a linking to government systems, the government will lose sight of sparing activities as contractors continue to maintain the Air Force system for an extended period. Also the government will be hampered in procuring the right spares, in the right amount, and at the right time.

Program Completion:
Current effort is planned for completion in three increments: Build 1 IOC, the D035T functionality, was completed in Sep 02; the Spares Acquisition Worksheet (SAW) was added in Mar 03. Build 2 (D200A/N and Aircraft Sustainability Model) capabilities are planned for implementation in Mar 04; an upgrade to the D200.A,N data interface scheme is planned for Mar 04. Remaining upgrades and requirements to migrate to the GCSS-AF Integration Framework are to be addressed in FY04-09. RSSP DE is GCSS-AF v3.2 compliant. GCSS-AF is currently at v5.0 and the D375 will have to upgrade the system to meet the then current version as well as migrate the capability to the GCSS-AF Integration Framework. Increase in FY05-06 to support increased legacy system interface requirements to support implementation of contractor supported weapon systems into the Air Force's support structure, necessary financial, supply and maintenance processes to facilitate depot partnering between industry and AF depot maintenance activities and GCSS-IF integration/migration which requires upgrade to current version and integration to the Integration Framework Platform. As the system continues to be used to support various AF/Contractor sustainment options (e.g. CLS, Partnering, Flexible Sustainment, etc.), and Air Force system initiatives are required to be met (e.g., Portal Linkage, Enterprise Data Warehouse integration, etc.), new requirements will be levied by the users.

Economic Analysis:
An Economic Analysis, along with a Cost Benefit Analysis and Business Case Analysis, was prepared and is on file. The Economic Analysis was updated to reflect changes identified for this 9B input.

Capital Budget Input Report

Air Force Working Capital Fund
Supply Management Activity Group
MSD - AFMC

FUND9B
(Dollars in Millions)

Fiscal Year (FY) 2005 Budget Estimates
February 2004

Item Name: SCS/ERP
Item Description: JLSC02F
Capital Category: Software Development (Externally developed)

2003 AC			2004 AP			2005 R		
Item Quantity	Item Cost	Total Cost	Item Quantity	Item Cost	Total Cost	Item Quantity	Item Cost	Total Cost
1	17.644	17.644	1	17.879	17.879	1	17.318	17.318

Item Justification/Impact If Not Provided:
Stock Control Systems (SCS)/ERP

Description and Purpose:
SCS is the core of Asset Management. SCS is used by both the Air Force and Marine Corps (AF as executive agent) to maintain visibility of wholesale supply assets, (serviceable, unserviceable, reparable carcasses, intransit to repair, in work, intransit from repair); process requisitions and issue materiel; provide customer status, control allocation/release of assets, and provide Joint Total Asset Visibility (JTAV) capability for inter-service lateral redistribution and procurement offset transactions. Air Force uses SCS to maintain visibility of MSD assets from bases/depot supply to fill backorders, to track assets intransit between bases and intransit to Air Logistics centers and to improve customer support thru prepositioning of backorders for Immediate shipment from the receiving line. SCS provides real-time MSD asset balances, requisition status and item management data to customers world-wide via SCS Web capability. As a key financial feeder system, SCS impacts the MSD general ledger accounts and achievement of Air Force Chief Financial Officer (CFO) compliance. SCS maintains aggregation accounts, controls/issues Government Furnished Materiel (GFM) to contractors, and processes shipments to disposal.

These funds will be used to continue the ongoing modernization efforts of the Stock Control System (SCS). The work will improve/re-engineer various business processes such as those impacting issue effectiveness and pipeline time, improve the visibility and management of MSD items, directly contribute to Air Force's achievement of CFO compliance, and move SCS into a DII/COE compliant open systems Architecture /GCSS-AF configuration, thereby allowing more effective sharing of logistics information/and improved functional integration within the AF and DoD . This effort will allow SCS to comply with direction given by HQ USAF/IL. The key tenets of SCS will ultimately reside in an Enterprise Resource Planning (ERP) tool set. GCSS-AF and DII/COE will bring all the systems into a common operating environment. This with the combination of on-line, real-time capability, will allow users from the entire Air Force to share data for analysis as well as conduct automated and interactive file maintenance actions, suspense tracking, and determine order status. The number of interfaces will be reduced and the systems will provide more timely and accurate information to decision makers.

Current Deficiency and/or Problem:
The current systems performing this process have old mainframe platforms, use outdated programming languages, are costly to maintain, do not have the required flexibility to support inter-operability and AEF requirements, and cannot function within the required GCSS-AF and DII/COE environment.

Impact:
Without these funds this system will not be able to become fully CFO compliant, to move into a modern DII/COE architecture, or to be GCSS-AF compliant. The system must be modernized to provide the most effective visibility/management of MSD assets and to provide superior support to the warfighter.

Economic Analysis:
An economic analysis has been completed for this project and is on file with HQ AFMCIFMRS.

Program Completion:
Delivery of software using FY04 funds will be completed in FY05.
Delivery of software using FY05 funds will be completed in FY06.

FY	Approved Proiect	Internal Transfers	Approved Carrvover	Proiect Cost	Current Proiect Cost	Asset/ Deficiency	Explanation
Equipment - Except ADPE and TELECOM							
Equipment - ADPE and TELECOM							
FY03	KEYSTONE	0.400		0.165	0.440	0.125	400K was reprogrammed from Keystone SW to purchase server-final cost lower than expected
	MMS ADPE Equipment			4.650	4.650		
	EDW			3.465	3.465		
	Total	0.400		6.260	6.555	0.125	
FY04	KEYSTONE			0.300	0.200	0.100	Estimate reduced based on lower than predicted costs. Funds used to realign software requirements (See 9c FY04 Software)
	EDW			1.155	1.155		
	Total			1.455	1.355	0.100	
FY05	KEYSTONE			0.150	0.150		
	EDW			1.160	1.160		
	Total			1.330	1.330	0.000	

FY	Approved Proiect	Internal Transfers	Canvover	Approved Proiect Cost	Current Proiect Cost	Asset/ Deficiency	Explanation
Software Development							
FY03	ABACUS/ERP			1.969	1.969		
	KEYSTONUERP	(0.400)	0.491	3.571	0.684		Estimate reduced based on lower than predicted costs. 400K 1.796 transferred to Keystone Hardware
	RSSP/ERP			1.880	1.880		
	FIABS/ERP		0.536	1.000	0.464		
	EDW/ERP			7.690	7.690		
	Inventory Valuation		0.841	1.580	0.739		
	Legacy Systems Modernization		6.995	34.436	27.442	(0.001)	
	SCS/ERP		1.156	18.800	17.644	0.000	
	PRPS/ERP			2.275	2.275		
	EXPRESS/ERP			1.125	1.125		
	MP&E/ERP		4.800	4.800	0.000		
	RMS/ERP		1.039	7.436	6.398	(0.001)	
	Total	(0.400)	8.863	52.126	41.068	1.795	

FY	Approved Proiect	Internal Transfers	Approved Carrvover Proiect Cost	Current Project Cost	Asset/ Deficiency	Explanation
Software Development (Cont'd)						
FY04	ABACUS/ERP		1.360	1.360		
	KEYSTONE/ERP		1.936	1.661	0.275	Estimate reduced based on lower than predicted costs
	RSSP/ERP		1.800	1.600		
	FIABS/ERP		3.196	3.196		
	EDW/ERP		3.085	3.085		
	Legacy Systems Modernization		40.632	41.007	(0.375)	
	SCS/ERP		17.879	17.879		
	PRPS/ERP		2.680	2.680		
	EXPRESS/ERP		1 .000	1.125	(0.125)	Correct FY04 budget ommission
	MP&E/ERP		6.842	6.967	(0.125)	Correct FY04 budget ommission
	RMS/ERP		12.231	12.356	(0.125)	Correct FY04 budget ommission
	Total		52.009	52.109	(0.100)	

FY	Approved Project	Internal Transfers	Carryover	Approved Project Cost	Current Project Cost	Asset/ Deficiency	Explanation
Software Development (Cont'd)							
FY05	ABACUS/ERP			0.417	0.417		
	KEYSTONE/ERP			2.420	1.134	1.286	Estimate reduced based on lower than predicted costs
	RSSP/ERP			1.900	3.140	(1.240)	Scope expanded (per AF/ILGP ltr 30 May 03) directing use of RSSP-DE as the data exchange conduit between contractor ICPs & AF Legacy systems.
	FIABS/ERP			8.995	8.995		
	EDW/ERP			3.170	3.170		
	Legacy Systems Modernization			36.350	36.396	(0.046)	
	SCS/ERP			17.318	17.316		
	PRPS/ERP			2.683	2.683		
	EXPRESS/ERP			0.425	0.425		
	MP&E/ERP			6.251	6.251		
	RMS/ERP			9.673	9.719	(0.046)	Correct FY04 budget ommission
	Total			53.252	53.252	0.000	

Fiscal Year (FY) 2005 Presidentail Budget
Department of the Air Force
Depot Maintenance
February 2004
(Dollars in Millions)

Line Number	Item Description	FY 03		FY 04		FY 05	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
	$1,000,000 and over - Replacement						
E99G02	F- 16 Microwave Test Stand	0.0	0.0	1.0	0.6	0.0	0.0
E99H01	B 1B Support - VXI Rehost	1.0	0.4	1.0	4.5	0.0	0.0
E01G03	BRAT / MADTS Tester Program	1.0	2.8	0.0	0.0	1.0	0.5
E02G01	F-16 Aircraft Avionics Digital T/S	1.0	1.1	1.0	4.1	1.0	3.8
E02G02	Fire Control Radar Antenna	0.0	0.0	2.0	2.3	0.0	0.0
E02H38	CNC Universal Grinder - TCR Shop	0.0	0.0	2.0	1.5	0.0	0.0
E02L06	Electro Optical Work Center	1.0	1.4	0.0	0.0	0.0	0.0
E02L39	Benchtop Reconfigurable Auto Tester	1.0	3.6	0.0	0.0	0.0	0.0
E03G02	IOE Hydraulic/Pneudraulic MILCON	1.0	3.7	0.0	0.0	0.0	0.0
E03G09	Bake, Fill & Evacuate Test Stand	2.0	1.1	0.0	0.0	0.0	0.0
E03G27	Penetrate Line (Pretreat)	1.0	1.5	0.0	0.0	0.0	0.0
E03G57	F- 16 Aux Drive Gearbox	1.0	1.2	0.0	0.0	0.0	0.0
E03H01	IOE Depot Plating Shop MILCON	1.0	6.0	0.0	0.0	0.0	0.0
E03L15	Test Set, Stores Management	1.0	1.3	0.0	0.0	0.0	0.0
E03L34	Automated Plastic Media Blast	1.0	1.3	0.0	0.0	0.0	0.0
E04G02	Cadmium Plating Line	0.0	0.0	1.0	1.0	0.0	0.0
E04G10	Auto inspect Blast Depaint	0.0	0.0	1.0	1.5	0.0	0.0
E04G13	Transforming AF Components Surface Restoration Proce	0.0	0.0	1.0	13.0	0.0	0.0
E04H03	CNC Universal Grinder - Gearbox Shop	0.0	0.0	2.0	1.0	0.0	0.0
E04H04	Case Shop CNC Vertical Turret Lathe	0.0	0.0	2.0	2.2	0.0	0.0

Fiscal Year (FY) 2005 Presidentail Budget
Department of the Air Force
Depot Maintenance
February 2004
(Dollars in Millions)

Line Number	Item Description	FY 03		FY 04		FY 05	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
E04H05	Machine Shop Modernization	0.0	0.0	**2.0**	1.1	0.0	0.0
E04H07	Decimal Test & Repair Systems	0.0	0.0	**1.0**	3.3	0.0	0.0
E04H10	C-5 Bench Top Reconfigurable Test Set	0.0	0.0	**2.0**	1.2	0.0	0.0
E04H17	Bldg. 3001 IOE Transformation	0.0	0.0	**1.0**	8.0	0.0	0.0
E04H18	B-2 Test Program Sets Transformation	0.0	0.0	**1.0**	6.5	0.0	0.0
E04L02	APG-63(V) 1 Radar Lab Upgrade	0.0	0.0	**1.0**	4.2	0.0	0.0
E04L08	Replacement of the A- 10 IATS	0.0	0.0	**2.0**	2.3	0.0	0.0
E04L10	F-15 Analog Avionics Dept T/S	0.0	0.0	**1.0**	1.9	0.0	0.0
E04L15	Modem Aircraft Paint Technologies (IOE)	0.0	0.0	**1.0**	7.0	0.0	0.0
E04L16	Modem Aircraft De-Paint Technologies (IOE)	**1.0**	5.7	**1.0**	8.0	0.0	0.0
E04L17	Transforming Airborne Electronics Phase 1	**0.0**	0.0	**1.0**	5.0	0.0	0.0
E05G23	Hydraulic Test Equip for GTE	**0.0**	0.0	**0.0**	0.0	**5.0**	1.5
E05G25	Electrical Cable Test Set (ECTS)	**0.0**	0.0	**0.0**	0.0	**3.0**	2.2
E05H08	Eddy Current Inspect System (ECIS)	**0.0**	0.0	**0.0**	0.0	**7.0**	1.9
E05H10	Pacer Comet III Test Cell Auto System	**0.0**	0.0	**0.0**	0.0	**6.0**	9.0
E05H11	Compact Radome Range Equipment	**0.0**	0.0	**0.0**	0.0	**1.0**	5.7
E05H16	Heat Treat Addition Cooling Water Sys., B3001	**0.0**	0.0	**0.0**	0.0	**1.0**	1.9
E05L18	Antenna Ranges	**0.0**	0.0	**0.0**	0.0	**6.0**	4.5
	$1,000,000 and over - Replacement Subtotal	**14.0**	31.1	**28.0**	80.1	**31.0**	30.9

96000

Fiscal Year (FY) 2005 Presidentail Budget
Department of the Air Force
Depot Maintenance
February 2004
(Dollars in Millions)

Line Number	Item Description	FY 03 Quantity	FY 03 Total Cost	FY 04 Quantity	FY 04 Total Cost	FY 05 Quantity	FY 05 Total Cost
	$1 ,OOO,OOO and over - Productivity						
E02H58	AFATS Software/Hardware Upgrade	0.0	0.0	0.0	0.0	1.0	2.8
E03H03	MFC Test Stand Upgrade, B3 108	6.0	1.6	0.0	0.0	0.0	0.0
E04L03	Radar Module Test Station	0.0	0.0	1.0	2.8	0.0	0.0
E05L17	HP3075 Series III Digital Test Sta	0.0	0.0	0.0	0.0	1.0	5.5
	$1 ,000,000 and over - Productivity Subtotal	6.0	1.6	1.0	2.8	2.0	8.3
	$1 ,OOO,OOO and over - Environmental						
	No projects	0.0	0.0	0.0	0.0	0.0	0.0
	$1 ,OOO,OOO and over - New Mission						
E05L16	Upgrade Avionics Lab to ADCP	0.0	0.0	0.0	0.0	1.0	3.0
E05L19	Upgrade Avionics Lab to PACS-45	0.0	0.0	0.0	0.0	1.0	3.0
	$1 ,000,000 and over - New Mission $1 M Subtotal	0.0	0.0	0.0	0.0	2.0	6.1
	$1 ,000,000 and over - Total	20.0	32.7	29.0	83.0	35.0	45.3
EF0000	* $500,000 to $999,999.99	6.0	4.0	6.0	3.8	3.0	2.5
E99999	* $100,000 to $499,999.99	16.0	5.1	8.0	2.8	12.0	4.3
	Total Equipment	42.0	41.9	43.0	89.6	50.0	52.0

Fiscal Year (FY) 2005 Presidentail Budget
Department of the Air Force
Depot Maintenance
February 2004
(Dollars in Millions)

Line Number	Item Description	FY 03		FY 04		FY 05	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
	ADPE & Telecommunication Equipment						
A96001	DMAP/Legacy System Moderniation	1.0	11.0	1.0	8.9	1.0	7.5
	ADPE & Telecom Subtotal	1.0	11.0	1.0	8.9	1.0	7.5
	Software Development (Internally)						
S96001	ABACUS ERP	1.0	2.0	1.0	1.4	1.0	0.4
S97001	Legacy System Technical Refresh ERP	1.0	20.1	1.0	54.6	1.0	55.3
S97002	DMAPS Development/Implementation ERP	1.0	28.6	1.0	6.8	1.0	6.8
	Software Development Subtotal	3.0	50.7	3.0	62.8	3.0	62.5
M00000	Minor Construction	8.0	3.1	2.0	0.9	7.0	3.4
	Prior Year Adjustments	7.0	0.6	0.0	0.0	0.0	0.0
	TOTAL	61.0	107.2	49.0	162.2	61.0	125.4

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E02G01** Replacement **F-16 Aircraft Avionics Digital T/S**	Activity Identification 00-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
F- 16 Aircraft Avionics Digital T/S	1	1100	1100	1	4115	4115	1	3773	3773

Narrative Justification:

MALA avionics facility and Support Center Pacific repair shop replacement unit (SRU) circuit cards are utilizing H3500, H2600, TI-960, and PK-1000 automatic test equipment (ATE) and test program sets (TPSs). This multi-year program (FY-02 $6.1M, FY-03 $1. 1M, FY-04 $7.9M, FY-06 $15M, FY-07 $10.3M) provides 21 units at $1.1 million each, and 5 15 TPSs at $30 thousand each, totaling approximately $39,580,000. The F-16 Aircraft Avionics Digital T/S is approaching serviceable life because of obsolescence and parts non-availability. The depot is pursuing a Digital T/S sustainment effort to upgrade previous configurations, preferably one common to year 2020. This effort allows us to retain existing TPSs while improving repair support capability because of improved station reliability/maintainability. In addition to transforming the process it provides expanded testing capability because of inherent technology improvements in instrumentation while retaining existing test adapters maintaining the current level of production with no workarounds or substitute equipment. It will also allow the depot to replace antiquated analog instrumentation with digital. This effort replaces existing F-16, F-15, and B-1B digital ATE and rehosts existing 515 TPSs onto new test stands. It has been noted that the new Digital Test Stands acquired in Phases one and two of this project have been doing an excellent job, enabling the shop to perform workload to meet customer needs on F-15/16 circuit cards. An economic analysis (EA) was prepared and certified to meet the criteria of a certifiable EA as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. The EA is on file in HQ AFMC/LGPE and reflects a savings to investment ratio of 1.48, with a payback of 6.82 years. This project is projected operational 12 months after obligation.

Impact if not provided:

The stations in place are 30 years old and have become increasingly difficult to operate when they are up.
The test stands now experience so much downtime that there is a queue of work for the F-16 and F-15 Aircraft which these test stands support. Without new test stands the queue will continue to longer and due date performance, and the ability to deliver goods and services at the contractually appointed time will not happen. The warfighter will not be able to perform its mission.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E99G02** Replacement **F-16 Microwave Test Stand**	Activity Identification 00-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
F-16 Microwave Test Stand				4	153	612			

Narrative Justification:

The purpose of this project is to complete the sustainment effort already begun in FY99 on the F-16 Microwave Test Stands. (FY-99 $1.6M, FY 00 $3.0M, FY-01 $4.8M, FY-02 $1.2M funded to date). Program will refurbish 10 stations; FY04 - $612,000 will provide the outstanding amount for funding shortfall from previous years, TOTAL of all years $11,301,000. The Microwave Test Stands diagnose and troubleshoot Shop Replacement Units (SRUs), Avionic Intermediate Shop (AIS), and Tray Replacement Units (TRUs). In past years we have not received total funding required to adequately complete this project. For example in FY99, we were to receive $3M, we only received $1,683M. To date we have been able to complete 8 test stands with the accompanying 8 TPSs and documentation. In FY04 we hope to finish the remaining TPSs and documentation left due to funding shortfalls from previous years. The project was planned over a three-year implementation period. Over the life of this project the funding shortfalls occurred every year, in some instances significantly more than what was remaining portion of funding to complete TPS rehost and documentation efforts from that of the original project estimate of $11,301M and that of funding to date $10,991M. An economic analysis (EA) was prepared and certified to meet the criteria of a certifiable EA as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. EA savings to investment ratio is 1.48 and the payback is 6.82 years. This project is projected to be operational Jul 2004

Impact if not provided:

The workloads requirements driven in by the customer for the F-16, and B-1B aircraft will become unsupportable. Without planes the warfighter can not perform its mission.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E02G02** Replacement **Fire Control Radar Antenna**	Activity Identification 00-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Fire Control Radar Antenna				2	1163	2326			

Narrative Justification:

The purpose of this project is to test and calibrate antennas as part of the repair process in the F-16 Avionics Intermediate shop. The replacement effort is required to continue providing a test capability for antennas on the F- 16 Aircraft through projected program life expectancy, FY2020. The repair facility has tried to continue to satisfy demands for antennas through cannibalization of parts, overtime and multiple shifts. But the backlog of antennas requiring test is growing along with the number of mission incapable, awaiting parts (MICAPs) for these end items. Currently, the shop's capacity cannot satisfy peacetime demands; there is no capability for a wartime surge. An economic analysis has been accomplished and certified to meet the criteria of a certifiable EA as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. The EA saving to investment ratio is 1.6, with a payback of 9.8 years. This project is expected to be installed in Mar 2004. This project is projected to be operational Apr 2004.

Impact if not provided:

Antennae backlogs awaiting testing will grow, MICAPs will increase. The F- 16 Aircraft needing repair will become unsupportable and non-mission capable by 2004 when the remaining systems are projected to fail and become non-supportable. These antennae support the F-16 Aircraft, Airborne Electronics at 00-ALC.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E04H10** Replacement **C-5 Bench Top Reconfigurable Test Set**	Activity Identification OC-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
C-5 Bench Top Reconfigurable Test Set (BRAT)				2	600	1200			

Narrative Justification:

OC-ALC Aircraft Management Directorate Production Branch, Tanker Branch, Engine Control Unit has determined the need to replace one Bench Top Reconfigurable Test Sets (BRAT) in support of the C-5 Autopilot workload, and purchase a second test set to support the C-5 Go-Around Attitude Subsystem (GAAS)/Stallimeter workload. The existing test set is becoming non-supportable for repair parts and replacement is needed in order to eliminate equipment downtime and subsequent backorders. Supportability of the antiquated test set necessitates replacement with BRAT configured to run the C-5 Autopilot workload. The current C-5 GAAS/Stallimeter workload consists of 3 1 sub-assemblies. This workload has exceeded the capability of the one dedicated test set. Continual inability to meet existing workload schedules will result in excessive backlog of various C-5 electronic sub-assemblies. An economic analysis (EA) was certified that this EA meets the criteria as outlined in DoDI 7041.3, AFI65-501 and AFMAN 65-506. The EA is on file and reflects a projected saving to investment ratio of 1.84 with a payback period of 4.76 years. The equipment will be production ready in October 2004.

Impact if not provided:

The equipment supports repair of the C-5 weapon system electronic systems. Without new equipment the downtime experienced due to non-availability of parts to support the repair of the C-5 WSES will increase. C-5 scheduled for repair can-not be driven in and will have to be grounded because of non- airworthiness.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E05G23** Replacement **Hydraulic Test Equip for GTE**	Activity Identification 00-ALC

Element of Cost	FY2003			FY2004			FY 2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Hydraulic Test Equip for GTE, Bldg 238							5	300	1500

Narrative Justification:

The purpose of this project is to replace six aging test stands. Four are variants on Hydraulic Component test stands (HCT), one is a Lube Accessory stand and the other is a PTS-1000 test stand. These test stands test a variety of oil pumps; oil accessories and oil coolers under flow and pressure conditions. The stands came from Kelly AFB as part of the Base Realignment and Closure (BRAC). They are all 40 years old, with technology of that time. The workload at Kelly was 11,250 hours per year; our workload is 20,000 per year and projected to go higher. Getting new test equipment will reduce overtime required to produce end items by 1600 hours per year, 2000 hours of repair time will be reduced to 400 hours per year (still will be using this old equipment minimally). Current cost to replace parts is $100K/year and this will drop to $25K/year. Increased efficiency (10-15%) will save the shop 1600 production hours per year. We have clocked 13 days of downtime with the old equipment driven by a drive system going down. An economic analysis (EA) was prepared and certified to meet the criteria outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. The EA is on file and reflects a projected savings to investment ratio of 1.90 and a payback of 8 years for the project. Weapon systems supported by this project are the F-15116 Heat exchangers, Central Gear Box (CGB), Air/Oil Cooler, F220 Air/Oil Cooler, GCGB Oil Pumps, Left/Right hand Aircraft Mounted Auxiliary Drive (AMAD) Oil pumps, all GTE oil pumps, Accessory Gear Drive boxes (AGD), and Jet Fuel Starters (JFS) oil pumps at OC-ALC and 00-ALC. These are all gas turbine engines. This project is expected to be installed and savings to begin in June 2006

Impact if not provided:

Loss of production and readiness to meet goals. Continued time loss due to equipment down and waiting for repairs. A recent repair/replacement of a drive system caused the system to be down for 13 days, and this trend will continue into the foreseeable future unless test stands are replaced. Grounded air craft will be the end result.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E99H01** Replacement **VX1 Rehost**	Activity Identification OC-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
VX1 Rehost, Phase III in FY04, Phase IV in FY06	1	420	420	1	4500	4500			

Narrative Justification:

This project, when complete, will provide for the replacement of all obsolete depot automatic test station for avionics (DATSA) in support of the B-1B to include the re-host of software programs to the more state-of -the-art equipment. The purpose of this project is to re-host digital shop replaceable unit (SRU) test programs sets (TPS) onto previously purchased VXI testers, thereby replacing the obsolete test station used to repair cards from the DATSA. This is a phased project that began in FY 1999 ($4,383K), waiting one final vendor deliverable. The project will continue until complete with phase IV in FY2006. The completion date has been adjusted several times due to funding constraints, and continued delays will lead to grounded air craft. The FY2001 ($4,196K) effort re-hosted digital circuit cards. Phase III ($4,500K) effort continue the re-hosted digital circuit cards. The final phase in FY06, ($4,500K) will be the completion of digital circuit card re-host and re-host of analog/hybrid circuit cards. The software (TPS) development and re-hosting of the TPS is identified as one system. An economic analysis (EA) was certified that this EA meets the criteria as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. The EA is on file and reflects a projected savings to investment ratio of 1.0 for FY 1999, 0.9 for FY 2001, 1.49 for FY 2004 with a payback period of 5.97 years, and 1.54 for FY06 with a payback period of 5.8 years. The FY99 phase 1 was not yet completed, due to one part problem delivery, phase II will be completed in early June 2004, phase III is slated for completion in December 2004, and the final phase will be complete in December 2006. Savings will begin at the completion of each phase in accordance with the original plan

Impact if not provided:

DATSA obsolescence will continue to worsen each year leading to increased breakdown rates, reduction in the availability of spare parts, increase in repair costs and DATSA increased downtime per breakdown. If the obsolete DATSA is not replaced, the eventual result will be the loss of B-1B SRU repair capability. Additionally, OC-ALC would experience degradation of shop efficiency, increasing resource control center (RCC) costs, decreasing repair volume and quality. The timely and accurate repair of these parts is vital to the mission readiness of the B-1B weapon system.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E04L16** Replacement **Modern Aircraft De-Paint Technologies (IOE)**	Activity Identification WR-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Modern Aircraft De-Paint Technologies (IOE)	1	5736	5736	1	8000	8000			

Narrative Justification:

This project provides the initial outfitting equipment (IOE) that transforms out-dated de-paint capability to state-of-the-art technologies for removal of corrosion resistant coatings. The equipment required includes such items as telescoping man-lifts, a media distribution system, a respiratory air system, and a fall protection system. This equipment replaces a current capability that is used in a 35-year-old joint use facility and will be installed into a new dedicated de-paint technology facility to accommodate a C-5, C-17, and smaller airframes overhauled at Robins AFB for paint removal. The equipment supports $2.3M hours of core/core-plus programmed depot maintenance aircraft workloads and will provide the facility with an industry-accepted "dry" de-paint process known as plastic media blast (PMB) – the preferred de-paint process for our large aircraft, eliminate bottlenecks, decrease aircraft depot flow times, add a flexible capability for existing and future aircraft corrosion control requirements, and alleviates need to contract a portion of aircraft de-paint workload. This transformation project is to support the Congressional insert of the Corrosion Control De-paint Facility (MILCON) in FY03 and implements the best practices identified in studies performed with the AF Corrosion Control Office, AFRL, and industry for technology and coatings use on aircraft. An economic analysis for this effort reflects a projected savings to investment ratio for the project is 2.4 and the payback period is 9.9 years. This equipment should be installed and production ready in June 2008.

000105

Impact if not provided:

Lack of the proposed IOE for the de-paint hangar would render an approved MILCON facility ineffective for its intended purpose and benefits of constructing the facility would be lost. This would prevent the timely completion of de-paint workloads on supported aircraft and may force de-paint workloads to be contracted at alternative locations, at higher sales rates and increased throughput times, and risk of a 50/50 limitation violation. Operating commands will continue to experience time delays in return of mission ready aircraft.

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	Line Number: E04L02 Replacement APG-63(V)1 Radar Lab Upgrade									Activity Identification WR-ALC
	FY2003			FY2004			FY2005			
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
APG-63(V) 1 Radar Lab Upgrade				1	4180	4180				

Narrative Justification:

The F-15C/D fleet is being retrofitted with the APG-63(V)1 radar. The depot currently performs updates to the APG-63 and APG-70 Operational Flight Programs (OFP). By upgrading the existing radar lab to incorporate the APG-63(V) 1, the depot can assume this workload from the contractor, Raytheon Systems, Inc. Economies of scale will be realized by having all F-15 radar OFP work performed at one site since manpower can be shared among the various workloads. Raytheon Systems, Inc. currently performs the APG-63(V)1 OFP workload at an annualized cost of approximately $12.32M/year. By sharing resources among three different OFP workloads, WR-ALC/MASF can perform the same workload for approximately $3.45M/year. By moving the APG-63(V)1 OFP workload from the contractor to organic, the 50/50 position will also be improved. An economic analysis (EA) was certified that this EA meets the criteria outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The Economic Analysis is on file and projects a savings to investment ratio of 8.56 with a payback period of 4.0 years. This project is expected to be installed and savings to begin in June 2005. The project will start in FY04 and the remaining portion of the project is on the long term strategy list.

Impact if not provided:

The contractor will continue to perform the workload, resulting in a higher cost to the government. Additionally, economies of scale as well as improving the 50/50 posture will be overlooked.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E01G03** Replacement **BRAT / MADTS Tester Program Ph 3 of 3**	Activity Identification 00-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
BRAT / MADTS Tester Program Ph 3 of 3	1	2834	2834				1	500	500

Narrative Justification:

The purpose of this project is to procure and finish the three phases of the test program set/interface test adapter (TPS/ITA) for the F-15 Aircraft and electronics at. These test program sets test and verify all subassembly circuit functions of all circuit card assemblies installed in the Air Data Computer (ADC), Air Navigational Multi-function Indicator (ANMI), Air Heading Reference System (AHRS), and the Programmable Signal Data Processor (PDSP). These electronic components are critical to the flight components of the F-15 aircraft. This is a multi-year project from FY01/05.to replace the Multifunction (Analog) Avionics Depot Test Station (MADTS) with Benchtop Reconfigurable Automatic Testers (BRAT digital testers). FY01 was funded at $3.5M and FY02 was funded at $1.1M. A Reprogramming action for FY03 was submitted for $2.834M and final completion for $0.5M This project will be accomplished using design and engineering support. The TPS/ITA supports the Shop Repairable Units (SRU) for F-15 Aircraft. The Original Equipment Manufacturer (OEM) no longer supports this project and so the assets will not be repairable. In the likely event that both remaining stations cease to function, dynamic testing of the SRU's electronic circuitry will no longer be an option. Static test and verification methods employed by the CCA OEM would be the sole avenue of repair and the production of any part or the workload could be halted by the OEM at any time. An economic analysis (EA) was prepared and certified to meet the criteria of a certifiable EA as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. The EA is on file and reflects a projected savings to investment ratio of 1.4 for the project, with a payback of 11.2 years. This project is expected to be installed and operational in June 2004.

Impact if not provided:

It is likely that the remaining testing stations will not function properly and the dynamic testing of the SRUs' electronic circuitry will not be done in this shop. Static test and verification methods would be the sole avenue of repair and the OEM production of parts or the workload could be halted at any time. If we cannot repair the circuit cards within this unit in a timely manner, the F-15 mission would be seriously affected to include grounding of aircraft

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E04L03** Productivity **Radar Module Test Station**	Activity Identification WR-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Radar Module Test Station				1	2841	2841			

Narrative Justification:

This project system is for the purchase of additional Radar Module Test Station and associated Test Program Sets to maintain and repair seven Shop Replaceable Units (SRU) with the heaviest workload within APG-63 and APG-70 Radar Systems. These systems are used to support F-15 Aircraft and APQ-180 Radar used on C-130 Gunship. Placing the seven Shop Replaceable Units (SRUs) with the heaviest workload on new Radar Module Test Stations will relieve the current pressure on the existing two Radar Module Test Stations, extend their life, and improve production of SRUs to support the customer. Additionally, this tester supports the core workload for F-15 APG-63 & APG-70 radar systems and the C-130 Gunship APQ-180 radar system. An economic analysis (EA) was certified that it meets the criteria outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and projects a savings to investment ratio of 2.3 1 with a payback period of 4.0 years. This project is expected to be installed and savings to begin in October 2004.

Impact if not provided:

The two existing Radar Module Test Stations are not meeting the customer demands for SRUs within the APG-63 and APG-70 Radar Systems. The SRUs directly support the F-15 Aircraft and APQ-180 Radar System for the support the C-130 Gunship. The Radar Production Section is currently utilizing the two existing Radar Module Test Stations in conjunction with supplemental contracts obtained by the F- 15 System Program Office (WR-ALC/LF) to maintain and repair SRUs to supporting the APG-63, APG-70, and APQ-180 Radar Systems. This is not a viable alternative due to the core workload designation for the electronic systems. This workload must be maintained and supported by in-house Air Force resources. The production shop is working overtime in an attempt to meet the demands for the SRUs. The original equipment manufacture (OEM) has discontinued production of the electronic subassemblies. Replacement parts required to maintain the test stations in a serviceable condition are becoming increasingly difficult and will become more difficult, if not impossible, to obtain from any source of supply. Failure to fund the project will result in increased overtime to meet the customer's demands. The time to purchase an additional Radar Module Test Stations is now. Lack of funding this requirement will negatively impact the USAF aircraft war readiness ability and mission capability rates.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E05L16** New Mission **Upgrade Avionics Lab to Advanced Display Core Processor**	Activity Identification WR-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Upgrade Avionics Lab to Advanced Display Core Processor (ADCP)							1	3045	3045

Narrative Justification:

This project is needed because the F-15E fleet is being retrofitted with the Advanced Display Core Processor (ADCP). The depot currently performs updates to the other avionics subsystems on the F-15E. By upgrading the existing avionics lab to match this retrofitted configuration, the depot will then be able to support this workload organically, as opposed to continuing contractor support. Economies of scale will be realized by having all F-15E Operational Flight System (OFP) work performed at one site. Boeing, Inc. is currently developing the ADCP subsystem for a total cost of $81M. When the F-15E is retrofitted with ADCP, it is anticipated that the OFP will cost $3.0M annually, based on extrapolations from the current cost to perform the F-15E VHSIC Central Computer OFP. By sharing resources among three different OFP workloads, The depot can perform the same workload for approximately $1 .5M/year. The proposed upgrade is for F-15 OFP. An economic analysis (EA) was certified that this EA meets the criteria as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 4.34 with a payback period of 3.0 years. This project is expected to be installed and savings to begin in December 2005.

Impact if not provided:

The work will continue to be contracted out at a rate higher than what Warner- Robins depot can perform the workload.

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Department of the Air Force Depot Maintenance February 2004	Line Number: A96001 DMAP/Legacy System Modernization									Activity Identification AFMC
	FY2003			FY2004			FY2005			
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
DMAP/Legacy System Modernization	1	11000	11000	1	8900	8900	1	7450	7450	

Narrative Justification:

This project is to upgrade the infrastructure necessary to support the Depot Maintenance Accounting and Production System (DMAPS), Maintenance Repair and Overhaul (MRO) and the modernized depot maintenance legacy systems. The funds are linked to all three programs, as they can not be separately identified. All three efforts will share the same infrastructure. All the fiber optics, computers, and equipment will be jointly used, making it impossible to locate the cost separately to each project. This effort is to upgrade the fiber optics, routers, and infrastructure items running to buildings that will implement an XP (operating system) network. Additionally, these funds will be used for personal computer upgrades and operating software. The benefit of this project is that it meets the desired goals of the Department of Defense (DoD) driving specific modernization directed for DoD logistics information. This is according to the logistics strategic plan from the Deputy Under Secretary of Defense (Logistics). To accomplish these goals, further definition has been provided by the defense information infrastructure (DII) master plan, dated 23 April 1997, and the DII shared data environment (SHADE) capstone document. The current infrastructure at the air logistics centers will not support these applications. The infrastructure upgrades are a multi-year project being phased between FY2000 and FY2009. The system so far included, $16.4M in FY97, $3.775M in FY98, $12.5M in FY99. $19.8M in FYOO, $9.5M in FY01, and $12M in FY02. The total amount spent to date on ADPE is $73.95M. Future funding plan includes $6.7 in FY06, $7.5M in FY07, $6.7M in FY08, $7.5M in FY09, to ensure the projected infrastructure upgrades are accomplished to support DMAPS. They are coordinated with release of software for DMAPS and the legacy modernization efforts. An economic analysis is not available for this work. A waiver has been approved since this investment is necessary to support initiatives being directed by higher headquarters.

0011 10

Impact if not provided: The Air Force would be unsuccessful in the implementation of DMAPS and MRO and the modernization of legacy systems that would impact the ability to support DoD logistics strategic plans. Without this improvement much needed infrastructure improvements will not be made. The modernized software must have the upgraded infrastructure in place to operate. This is a key investment to allow our depots to remain competitive.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Department of the Air Force Depot Maintenance February 2004	**Line Number: S96001/ERP** **ABACUS**	Activity Identification AFMC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Automated Budget Analysis/Centralized User System (ABACUS)	1	2000	2000	1	1400	1400	1	400	400

Narrative Justification:

Depot Maintenance Activity Group (DMAG) budget and price development system supports the automated budget analysis/centralized user system (ABACUS) development effort. This capital purchase request reflects the costs estimated for a software contractor to develop an enhanced budget system. This enhanced system is intended to be more responsive to changing Air Force Working Capital Funds (AFWCF) business practices. The development of the original ABACUS included, $1.614M in FY99. $0.8M in FYOO, and $0.7M in FY01. The total amount spent to date on the original ABACUS was $3.1M. The enhancements consisting of rebuilds on an AF& DoD compliant systems architect will be web-based, data focused with archiving and export features, and auditing capability. This new architect will serve as a solid foundation, flexible for future enhancements to meet changes in the AFWCF budget process and provides the functionality for the future enterprise resource planning solution. The development of the enhanced ABACUS will occur over several years beginning in FY02 at $1.8M and continue as shown above, and follow-up Increment 3 in FY 06 at $0.5M. The current ABACUS is used to create and assemble budgets in a uniform manner for approximately six months out of the year. The remaining time ABACUS is not used. There is no database to store historical data which could be used to analyze trends. Changes that occur at higher levels cannot be distributed properly to lower levels. Changes to AFWCF procedures are not easily incorporated due to current system architecture and operating environment. Budget submissions are sent by File Transfer Protocol, which is a tedious process. The proposed changes and enhancements to ABACUS will fix these shortfalls. Increment 2 will establish interfaces between ABACUS and other systems. It will also have import capability. An economic analysis (EA) was prepared and certified to meet the criteria as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. The EA is on file. The FY05 requirement was increased to fund Increment 2. The estimated completion date for Increment 1 is N04, the estimated completion date for Increment 2 is FY05, and the estimated completion date for Increment 3 is FY07.

000111

Impact if not provided: DMAG will be unable to provide timely and accurate processing data. For customers, this will lead to major funding shortfalls and excesses in execution and will undermine the activities to reliably project future requirements. In addition, DMAG's budget submissions will be ineffective in identifying resource requirements, providing the information and tools necessary for management decision making, and providing a valid basis for program execution. The current process without data base storage and trend analysis has become counter productive resulting in ineffective management within a $5.1 billion per year Air Force program.

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Department of the Air Force Depot Maintenance February 2004	Line Number: S97001 Legacy System Technical Refresh/ ERP									Activity Identification AFMC
	FY2003			FY2004			FY2005			
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
Legacy System Technical Refresh	1	20061	20061	1	54600	54600	1	55300	55300	

Narrative Justification:

The Air Force Materiel Command (AFMC) is in the process of modernizing/replacing its current depot maintenance legacy systems. The technical refresh efforts will separate data from the host application, standardize the data and place those data elements into a shared data environment (Data Depot/Warehouse) that is DII/COE compliant. This migration will place the data into one logical data base with unique applications designed to support the depot maintenance business processes accessing it. The system so far included, $18.2M in FY98, $13.1M in FY99. $18.5M in FYOO, $10.5M in FY01, and $24.2M in FY02. The total amount spent to date on Legacy DM systems is $84.4M. The deployments of the modernized systems began in FY2000 with the deployment of H117R. G005M was deployed in FY2002. E046B was deployed in FY2003, subsuming E046A. Future funding plan includes $52.6M in FY06, $50.8M in FY07, $34.5M in FY08, $32.0M in FY09, will be used to ensure the maintenance repair and overhaul MRO program is implemented. The ultimate solution for MRO may be the implementation of an Enterprise resource tool set module meeting the functionality MRO provides. Economic analysis (EA) was prepared and certified to meet the criteria of a certifiable EA as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. The EA is on file and reflects a projected savings to investment ratio of 3.5 and a break-even point of 7.1 years. MRO will be fully implemented by the end of FY2009.

000112

Impact if not provided: If funds are not received, the implementation of Maintenance Repair and Overhaul (MRO) and the legacy systems technical refresh programs will stop. The AF system will remain antiquated while providing incorrect data. Systems will not be CFO compliant as mandated by congress and public law.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Department of the Air Force Depot Maintenance February 2004	**Line Number: S97002/ERP** **DMAPS Development/Implementation**	Activity Identification AFMC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Depot Maintenance Accounting and Production System (DMAPS) Development/Implementation	1	28600	28600	1	6800	6800	1	6800	6800

Narrative Justification:

The Depot Maintenance Accounting and Production System supports the multi-billion dollar organic depot maintenance functional area at the three Air Logistics Centers. Organic depot maintenance repairs systems and spare parts ensure readiness in peacetime and provide sustainment for combat forces in wartime. DMAPS provides better management information, and a standardized material and financial management system. The system so far included, $17.5M in FY98, $20.6M in FY99. $25.9M in FYOO, $41.M in FY01, and $38.9M in FY02. The total amount spent to date on DMAPS is $143.9M. To save development cost and provide for common systems across the Department of Defense, the DMAPS Program uses a suite of existing Government-Off-The-Shelf data systems, (also used by the Navy and Marine Corps) Defense Industrial Financial Management System, Naval Air Systems Command Industrial Material Management System, Automated Bill of Material, and Time and Attendance. To integrate these systems with the Legacy environment and eliminate over 200 interfaces, DMAPS includes the Air Force Materiel Command Integration Engine. Production deployment was completed during FY03 at all depots, where over 22,000 employees use DMAPS to transact daily business. Finance deployment was completed in Oct 2003, when nine Legacy DM systems will be shut down. Material deployment is underway and is planned for completion by Mar 04. With implementation of DMAPS, the Air Force has an integrated suite of systems for functional support to depot maintenance. The continued capital investment program supporting this quantum leap in capability provides for:

- Move closer to full compliance with the emerging, mandated architectural enhancements, such as the Global Combat Support System - Air Force and the Logistics Enterprise Architecture.
- Continue program leadership for program and acquisition management, program control, functional expertise (material, financial, production), configuration management, technical/engineering support, business management, and compliance. The above program profile includes inflation growth for this support.
- Provide implementation support of remaining Phase II activities, the Business Management Modernization Program, architectural improvements, and additional compliance and streamlining initiatives.
- Achieve additional Legacy DM replacements, and reduced operating cost, by absorbing functionality within DMAPS. Sets the stage for migration to an enterprise resource tool set module meeting the functionality DMAPS provides while meeting the functionality DMAPS provides while being fully compliant with federal and DoD architectures.

A waiver to the economic analysis requirement has been approved since this investment is necessary to support direction from higher Headquarters.

Impact if not provided: Deployment of material functionality will be inconsistent across the depots, causing a non-standard configuration. HQ AFMC will not complete the mandated architectural requirements for organic depot maintenance, adding unacceptable risk to program operational capability and increasing sustainment costs for maintaining obsolete architecture. The AF will miss an opportunity to further consolidate systems and reduce operating cost. This will require maintaining Legacy DM systems scheduled for shut down in FY04 with an operational annual cost of $2.3M. Delay in or failure to implement the DoD modernized business processes will cause a significant portion of logistics management to be out-of-sync, reducing the effectiveness of a $100.0M investment. Insufficient program leadership will result in an erosion of the common approach across the depots for production, financial, and material business processes. This diverse operational environment will also complicate implementation of Defense standard architecture and reduce the ability to take advantage of logistics transformation initiatives as well as other improvements, such as Activity Based Costing and Management (ABC/M). DMAG will continue to be non-compliant with CFO legislation and CAS. DMAG management will be adversely affected, (i.e., reduced ability to use actual labor hour accounting for product costing).

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Air Force/Depot Maintenance February 2004	Line Number: MOO000 Minor Construction									Activity Identification AFMC
Element of Cost	FY2003			FY2004			FY2005			
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
Minor Construction	8	Various	305 1	2	Various	900	7	Various	3400	

Narrative Justification:

This category includes an array of minor construction projects that allows flexibility in adapting to new and changing workloads. Projects are small scale (costing between $250,000 and $750,000) and are designed, scheduled, and constructed in accordance with Air Force established priorities. These projects support the depot maintenance mission requirements, correct safety and health problems; improve productivity through quality of life improvement projects and support office and work space reorganizations. These projects also provide construction required to install needed mission essential equipment.

Impact if not provided:

The flexibility to provide minor construction to meet mission objectives would be severely hampered, and would lead to safety issues and production indefficiencies.

000114

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Air Force/Depot Maintenance February 2004	Line Number: EFOOOO Equipment $500K to $999K							Activity Identification AFMC		
Element of Cost	FY2003			FY2004			FY2005			
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
Various Equipment $500K to $999K	6	Various	4041	6	Various	3841	3	Various	2510	

Narrative Justification:

This category includes an array of minor equipment purchases that allows flexibility in adapting to new and changing workloads. Projects are small scale (costing between $500,000 and $999,999) and are designed, scheduled, and installed in accordance with Air Force' established priorities. These projects support the depot maintenance mission requirements.

Impact if not provided:

The flexibility to provide equipment purchases to meet mission objectives will cause inefficiencies in production and increased cost to the customer.

000115

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Air Force/Depot Maintenance February 2004	Line Number: E99999 Replacement Equipment $100K to $499K									Activity Identification AFMC
Element of Cost	FY 2003			FY 2004			FY2005			
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
Various Equipment $100K to $499K	16	Various	5135	8	Various	2800	12	Various	4262	

Narrative Justification:

This category includes an array of minor equipment purchases that allows flexibility in adapting to new and changing workloads. Projects are of smaller scale (costing between $100,000 and $499,999) and are designed, scheduled, and installed in accordance with Air Force established priorities. These projects support the depot maintenance mission requirements. Flexibility of this line is essential as equipment requirements may change as we go through the year because of unexpected equipment failures or price changes, and other problems may require a change to the earlier projected requirements. For example: in FY03 original requirements were for 21 items at approximately $4.7M was changed to 6 items at $5.1M as shown above. Price increases, equipment failures and priority realignments resulted in the FY03 change.

Impact if not provided:

The flexibility to provide minor equipment purchases to meet mission objectives would be severely hampered, reducing depot efficiency and effectiveness.

000116

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	Line Number: E02H38 Replacement CNC Universal Grinder-TCR Shop									Activity Identification OC-ALC
Element of Cost	FY2003			FY2004			FY2005			
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
CNC Universal Grinder-TCR Shop				2	726	1452				

Narrative Justification:

This project involves buying four new CNC Universal Grinders and turning in 2 conventional Universal Grinders used in the Turbine Compressor and Rotor (TCR) Repair Section Shop to support the TF33, F110, F101 and F100 engine workload. The grinder is capable of grinding inside and outside diameters, surfaces and contours on rotating components of the jet engine to its original specification. The new CNC machines will enable us to increase capability and are expected to reduce production time. This will reduce our overtime requirements. The use of these machines will support the repair of jet engine components that are used on F-15, F-16, B-1B, F-16A/B/C/D, F-14D, KC-135, E-6A, and B-2A Aircraft. This shop machines components in the gearbox of the jet engine. Elements considered are reduction in overtime, reliability of grinders and decrease in recycle cost associated to reworks caused by the inability to meet required tolerances. New grinders will not only reduce cost but also reduce the machining time by an estimated 20%. An economic analysis (EA) was certified that this EA meets the criteria as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 1.60 with a payback period of 5.40 years. The equipment will be fully operational September 2006.

Impact if not provided:

Due to the age of existing equipment, it is very difficult to get replacement parts. As such, it is more difficult to get them repaired, which increases downtime and reduces production. The impact is lower quality, higher overtime usage, longer downtimes, potential work stoppages, and an inability to meet required specifications and tolerances. The failure to fund new machine tools in a timely manner will result in the inability to perform these repairs and jeopardize the readiness of the DoD.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E04G02** Replacement **Cadmium Plating Line**	Activity Identification 00-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Cadmium Plating Line				1	1000	1000			

Narrative Justification:

Replace cadmium plating line, Building 505. Project includes replacing tanks, tank ancillary equipment, exhaust hoods, overhead monorails, and modifying crane trolleys. This investment supports a surge rate of 175%, 655K hours of core workload, and various job-routed core plus workload. It also supports the capability to meet future core programs. The existing cadmium plating equipment is nearly 30 years old and has exceeded its useful life. The tanks are deteriorating, creating safety and environmental problems. Tank ventilation flows frequently test below the requirements of the American Conference of Government Industrial Hygienists (ACGIH). Replacing the process line will ensure continued service and minimize the risks to our employees and the environment. The new lines will recycle more rinse water, resulting in less waste going to the Industrial Waste Treatment Plant (IWTP). The calculated cost savings can vary widely depending on which set of assumptions is used. An economic analysis (EA) was certified that this EA meets the criteria as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 0.50 with a payback period of 17.5 years. This is a low ratio, but must be done due to environmental regulation and there is no other source to do the workload. Due to this low ratio, a vital mission memo was submitted by the depot and retained on file with the Air Force. This project is expected to be complete in May 2005.

0001118

Impact if not funded:

The chemical shop has been given an eight year period in which to have all tank lines repaired. If this is not accomplished a Title V condition will be placed against the chemical shop and the state of Utah will close down the chemical shop. The tank lines for the most part have been functioning for thirty years and have leaked to the extent that the flooring must also be replaced for safety of personnel as well as the tanks. If the cadmium line is not replaced, we can expect frequent work stoppages due to equipment breakdowns. We will not be able to realize increased efficiencies by recycling rinse water. Finally, we will continue to put the environment at risk due to failure of a major component. In the event of a major failure, we will be subject to fines, imprisonment, or closure of the plating shop.

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	Line Number: E04G10 Replacement Auto Inspect Blast Depaint									Activity Identification 00-ALC
Element of Cost	FY2003			FY2004			FY2005			
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
Auto Inspect Blast Depaint				1	1450	1450				

Narrative Justification:

This project includes the procurement and installation of an integrated component material handling system, holding fixtures, a dry media blast booth, and an automated nozzle position and control system for implementation of an automated off airframe component Dry Media Blast (DMB) system. This will include a blast booth; all associated DMB process equipment, all required fixtures, material handling systems, and an automated blast nozzle/ surface profile inspection tool manipulator system. This investment supports the wartime tasking rates of 59% (F-16), 72% (A-lo), and 72% (C-130). It also supports over 700K hours of core workload and approximately 1M hours of core plus workload, and supports the capability to meet future core programs. The large number of off airframe components depainted requires 00-ALC to transport and process them at several different manual DMB facilities. Process requirements make the DMB process tedious and difficult for manual operators to accomplish, and is resulting in damage and the associated rework to thin skinned and other sensitive components due to lack of control. An economic analysis (EA) was certified as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 1.2 with a payback period of 9.6 years. This project is expected to be installed and savings to begin in June 2005 if funding is available in FY 2004.

000119

Impact if not funded:

Without this project, the depot will have to continue using the Robotic Paint Stripping Cell (RPSC) and manually blast the off airframe component workload. This will prevent workers from fully utilizing the RPSC for full airframes and will result in damage and the associated rework cost when thin skinned and other sensitive components are damaged due to the variability of the manual process.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E04H03** Replacement **CNC Universal Grinder – Gearbox Shop**	Activity Identification OC-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
CNC Universal Grinder – Gearbox Shop				2	519	1038			

Narrative Justification:

Included in Bldg 3001Transformation IOE requirement and plan to reprogram. The grinders will be used in the Gear Box shop to support the TF33, F100, F110 and F101 gearbox workload. Both internal and external grinding is required in this unit. The grinders are capable of grinding a rebuilt shaft/bearing to its original specification. A CNC grinder can reduce current recycle cost and increase production by reduction grinding time. These grinders are capable of achieving the tolerances and finishes that the part specifications require. These machines will replace conventional grinders with virtually the same work capacity, but cannot perform the required task. These machines will support the repair of jet engines components that are used on F-15, F-16, B-1B, F-16A/B/C/D, F-14D, KC-135, E-6A, and B-2A Aircraft. This shop machines components in the gearbox of the jet engine. Elements considered are reduction in overtime, reliability of machine tools and decrease in recycle cost associated to reworks caused by the inability to meet required tolerances. New grinders will not only reduce cost but also reduce the grinding time; therefore, we are able to reduce our need to carry 3 machines in inventory to two machines. An economic analysis (EA) was prepared and certified as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 2.75 and payback period of 3.17 years. This project is expected to be installed and savings to begin in September 2005 and October 2006 for the second purchase.

0021006

Impact if not provided:

There will be a continued decline in supportability and production effectiveness, an increase in recycle cost and an increase in production cost due to the current machines inability to meet required tolerances. By turning in 3 low production machines and replacing them with 2 new CNC machines, workers should not only be able to grind to specified tolerances but reduce the grind time. Failure to fund new grinders in a timely manner will result in the inability to perform these repairs and jeopardize the readiness of the DoD.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E04H04** Replacement **Case Shop CNC Vertical Turret Lathe (VTL)**	Activity Identification OC-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Case Shop CNC Vertical Turret Lathe (VTL)				2	1116	**2232**			

Narrative Justification:

The VTLs will be used in the Case Repair Section to support the TF33, F110, F101 and F100 engine cases shrouds and supports workload. A CNC VTL can reduce current recycle cost and increase production by reduction machining time and also achieve better tolerances and finishes than the part specifications require. These machines will replace conventional VTLs machining features as inside and outside diameters, surfaces but perform additional contours to original specification and meet the required task that old machine cannot perform. These machines will support the repair of Jet Engine components that are used on F-15, F-16, B-1B, F-16A/B/C/D, F-14D, KC-135, E-6A, and B-2A Aircraft. Elements considered are reduction in overtime, reliability of machine tools, and a decrease in recycle costs associated to reworks caused by the inability to meet required tolerances. New VTLs will not only reduce cost but also reduce the machining time by an estimated 20%. An economic analysis (EA) was and certified as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 1.68 with a payback period of 5.05 years. This project is expected to be installed and savings to begin in September 2005.

0001121

Impact if not provided:

There will be a continued decline in supportability and production effectiveness, also an increase in recycle cost and production cost due to the current machines' inability to meet required tolerances. Due to the age of these VTLs, parts and serviceability are becoming hard to achieve and will result in a line stoppage issue, which would result in MICAP condition. Failure to fund new VTLs will result in the inability to perform these repairs and jeopardize the readiness of the DoD.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E04H05** Replacement **Machine Shop Modernization**	Activity Identification OC-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Machine Shop Modernization				2	532	1064			

Narrative Justification:

This will allow replacement of critical, obsolete machining and grinding equipment with new, state-of-the-art computerized numeric controlled (CNC) machine tools. These machine tools support the TF33, F110, F101 and F100 engine workload. The machine shop workload is currently being performed by outdated, conventional equipment that makes it extremely difficult to meet required specifications and tolerances. The equipment projected for purchase is capable of machining jet engine components to their original specification, thus achieving the tolerances and finishes that the part specifications require. This machine will support the repair of jet engine components that are used on F-15, F-16, B-1B, F-16A/B/C/D, F-14D, KC-135, E-6A, and B-2A aircraft. The components are engine cases, compressors and turbines. Elements considered are reduction in overtime, reliability of machine tools and a decrease in recycle costs associated to reworks caused by the machine inability to meet required tolerances. New machine tools will not only reduce this cost but also reduce the machining time by an estimated 25%. An economic analysis (EA) was certified as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 2.70 and payback period of 2.94 years. This project is expected to be installed and savings to begin in September 2005.

Impact if not provided:

There will be a continued decline in supportability and production effectiveness and an increase in recycle costs and production costs due to the current machines' inability to meet required tolerances. Due to the age of this equipment, parts supportability and serviceability is becoming hard to achieve. There is the possibility line-stoppages will occur, which would result in a MICAP condition. The machining workload for engine repair is estimated at 850,000 hours annually. Failure to fund new machine tools in a timely manner will result in the inability to perform these repairs and jeopardize the readiness of the DoD.

Activity Group Capital Investment Justification											Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E04L08** Replacement **Replacement of A-10 IATS**										Activity Identification WR-ALC
Element of Cost	FY2003			FY2004			FY2005				
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost		
Replacement of A- 10 IATS				2	1147	2294					

Narrative Justification:

The project objective is to maintain the capability to repair the A-10 and KC-135 avionics components by replacing the existing capability of the A-10 Intermediate Automated Test Station (IATS), Enhanced Improved Augmented Bit Tester and Northrop Automated Intermediate Test Stations currently in use by the avionics shop. These test stations, which support the A-10 and KC-135 programs, are fast becoming obsolete and unsupportable. The A-10 and KC-135 aircraft are expected to remain in service beyond the year 2020. The A-10 IATS, ENH Improved Aug Bit and the Northrop AIS Test Stations are used to support the A-10 and KC-135 programs, which are scheduled to last another 20 years. An economic analysis (EA) was certified as outlined in DoDI 7041.3, AFI 65-501, and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 4.90 with a payback period of 5.0 years for the purchase of two WesTest 2000 Test Stations and the rehost of 8 TPSs. This project is expected to be installed and savings to begin in October 2005.

Impact if not provided:

If this capability is not replaced, the production shop will be unable to support the A-10 and KC-135 programs, which will lead to grounding of the aircraft. Without KC-135's other air craft are grounded as well. Given the current condition of the A-10 IATS, they will become unsupportable and inoperable by FY 2006

Activity Group Capital Investment Justification		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number:E04L10** Replacement **F-15 Analog Avionics Dept T/S**	Activity Identification WR-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
F- 15 Analog Avionics Dept T/S				1	1910	1910			

Narrative Justification:

This project is to obtain a contract with Honeywell to upgrade one F-15 Analog ADTS and purchase a F-15 Software Development Station. The upgrade will migrate an aging and obsolete operating system to a PC based system. The upgraded F-15 Analog ADTS will be used by the F- 15 Radar Production Section to maintain/repair Shop Replaceable Units (SRUs) for the APG-63 and APG-70 Radar Systems in support of the F-15 Aircraft. The new F-15 Software Development Station will be used by LYPFD and Software Engineering (LYST) to maintain/support the Test Program Sets for the F-15 Analog ADTS. The existing F-15 Analog ADTS is being used 24 hours per day, 7 days per week to support the current workload. There is no time on the existing test station to support increased workload requirements due to current continuous operation. The existing F-15 Analog ADTS is over 30 years old and the electronic units contained within the test station are continuing to deteriorate making it extremely difficult to repair and maintain it in a serviceable condition. The original equipment manufacturers (OEMs) have discontinued production of the test station and its associated electronic subassemblies several years ago. The non-availability of the replacement parts to maintain the test station will result in increased production downtime. The upgrade of the obsolete subassemblies within the F-15 Analog ADTS will extend its life for at least 10 more years and insure support for the SRUs within the APQ-63 and APQ-70 Radar Systems to support the F-15 aircraft. An economic analysis (EA) was certified that this EA meets the criteria outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 3.45 with a payback period of 3.0 years. This project is expected to be installed and savings to begin in September 2005.

000124

Impact If Not Funded:

Failure to fund the upgrade of the F-15 Analog ADTS will result in increased maintenance on the test station and decrease the available production time to meet production schedules in the maintenance/repair of the SRU. The production shop is already working three shifts per day, seven days per week; therefore overtime cannot be increased to gain additional production time. The lack of funding will negatively impact the DoD aircraft war readiness ability and impact the mission capability rates.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E05G25** Replacement **Electrical Cable Test Set (ECTS)**	Activity Identification 00-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Electrical Cable Test Set (ECTS) Ph 1 of 2							3	733	2200

Narrative Justification:

The purpose of this project is to replace the electrical cable test set (ECTS) with reliable, maintainable hardware, utilizing current technology. Phase 2 is budgeted at $2.2M in FY06 below the funding level. The ECTS supports depot level acceptance and functional testing of the first, second, and third stage flight hardware of the Minute Man II and III missile. The current ECTSs were built in 1985, and due to aging, constant usage, and diminishing sources of repair parts, supportability is becoming questionable and reliability is degrading. This is resulting in increased downtime and is affecting supportability of the intercontinental ballistic missile (ICBM) weapon system. We are currently ramping up to support full rate production of the Propulsion Replacement Program (PRP) a major modification to extend the life of the Minutemen Weapon System through 2020. Reliable and maintainable support equipment is required to ensure the Depot can support this program requirement. An economic analysis (EA) was prepared and certified to meet the criteria as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. The EA is on file with the Air Force. Due to a low savings to investment ratio a vital mission statement is on tile in HQ AFMC/LGPE. This project is expected to be installed and operational in June 2006

Impact if not provided:

This program is for replacement of essential test equipment that is necessary and critical to the mission accomplishment of the Minuteman III, LGM-30 Intercontinental Ballistic Missile Weapon System. The new ECTS will replace existing test equipment that is increasingly becoming unreliable and unsupportable.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E04G13** Replacement **Transforming AF Components Surface**	Activity Identification 00-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Transforming AF Components Surface Restoration				1	13000	13000			

Narrative Justification:

This project will transform antiquated hydraulics, landing gear, auxiliary GTE (gas turbine engine), aircraft secondary power group repair capabilities into a world class Air Force Component Surfaces Restoration Process. This project is a phased implementation to replace archaic equipment to meet and exceed industrial benchmark standards based on industry counterparts, e.g., BF Goodrich and Heroux, and introduces state-of-the-art repair processes. The investment is anticipated to return to the AF a 30% improvement in uptime through faster throughput, 25% better quality in overall components surfaces, 20% improvement in shortened response time to mission requirements, 15% lower condemnation rates, 60% reduced rework to surfaces, and 30% reduced flow days and overall capacity. Some results will be realized within eighteen months as new equipment and protocols are initiated. An economic analysis for this effort reflects a projected savings to investment ratio of 4.4 for the overall project. This equipment should be installed and production ready in FY2006.

Impact if not funded:

Items will continue to be repaired using obsolete equipment and outdated processes that consume more energy and produces more scrap due to inability to maintain process tolerances. Backlogs will grow, cost of doing business will increase, and capabilities will diminish. Older equipment does not have the latest safety features and places workers at greater risk of injury.

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	Line Number: E04H07 Replacement Decimal Test & Repair Systems									Activity Identification OC-ALC
Element of Cost	FY2003			FY2004			FY2005			
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
Depot DEC Test/Repair System (DDTRS) Test Stands				1	3250	3250				

Narrative Justification:

This project calls for the upgrade of the Depot DEC (Digital Engine Controls) test and repair systems (DDTRS) test stand. This purchase will increase system throughput and eliminate engine control MICAPS (Mission Incapable Awaiting Parts) by decreasing existing Test Program Sets (TPS) run times and by increasing system reliability. These three DDTRS's will be used in the Electronics Production Section to support the F-16 weapon system engine controls workload. These test stands will support the repair of jet engine controls that are used on F-16 Aircraft. Elements considered are reduction in overtime and reliability of equipment. Upgrading the DDTRS will also provide automated calibration capability thereby also decreasing production time and increasing available capacity. An economic analysis (EA) was certified that this EA meets the criteria as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 3.02 with a payback period of 2.9 years. This project is expected to be installed and savings to begin in May 2005.

Impact if not provided:

There will be a continued increase in MICAPS and a decrease in production effectiveness. There will also be an increase in backorders. Failure to fund the upgrade to two DDTRS Test Stands and one new DDTRS will result in the inability to perform these tests and jeopardize the readiness of the DoD.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E04H17** Replacement **Bldg. 3001 IOE Transformation**	Activity Identification OC-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Bldg. 3001 IOE Transformation				13	613	8000			

Narrative Justification:

This project is for the purchase of Initial Outfitting Equipment (IOE) in support of the FY04 Bldg. 3001 Lean Modernization, Phase 1 MILCON project. This project will purchase thirteen new pieces of industrial support equipment that supports the nucleus of the Propulsion Division's lean transformation into a world class Engine Depot, utilizing a cellular design approach. The project replaces antiquated, worn-out equipment with new state-of-the-art Computerized Numerically Controlled equipment. The proposed equipment includes 4 Vertical Turret Lathes, 6 Grinders, 1 Horizontal Boring Machine, 1 High Pressure Water Jet, and 3 Coordinate Measuring Machines. All of the equipment is used for precision metal turbine engine components. The equipment will be arranged into a Lean configuration on the shop floor. By placing the equipment into a Lean configuration, the wasted time and effort that is currently being expended in the traditional batch and queue production methods are eliminated. The project is expected to decrease machining times by an estimated 40% and decrease recycle rates by an estimated 25%. An economic analysis (EA) was certified that this EA meets the criteria as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. The EA is on file and reflects a projected savings to investment ratio of 1.48 with a payback period of 9.17 years. The equipment should be installed and operational by 30 Oct 04.

000128

Impact if not provided:

There will be a continued decline in supportability and production effectiveness and an increase in recycle costs and production costs due to the current machines inability to meet required tolerances. Parts and serviceability are becoming hard to achieve due to the age of this equipment. There is the possibility line-stoppages will occur, which would result in a MICAP (mission capability condition). The weapon systems supported are the F-15, B-1B, F-16A/B/C/D, F-14D, KC-135, E-6A, and B-2A.

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	Line Number: E04H18 Replacement B-2 Avionics Test Program Set Upgrade									Activity Identification OC-ALC
Element of Cost	FY2003			FY2004			FY2005			
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
B-2 Avionics Test Program Set Upgrade				1	6500	6500				

Narrative Justification:

This project is for the upgrade of the Depot Level test and repair capability of the B-2 Shop Repairable Units Equipment (SRUs) and Line Replaceable Units (LRUs) by providing Test Program Sets (TPSs) that execute on Existing B-2 Automatic Test Equipment (ATE). This supports the B-2 Avionics repair which is a core capability. Currently there are numerous TPSs that test B-2 SRUs and LRUs on the B-2 ATE. There are still a large number that do not have this test capability. This leaves holes within a black box with either no test and repair capability or a procedure that depends on limited manual test procedures that are both time consuming and limited in fault isolation. This problem has limited the ability to provide a depot repair capability for a complete black box. The transformation will entail upgrading test capabilities by providing TPSs that execute on B-2 ATE allowing total repair of all SRUs/LRUs within a black box. This allows the black box to have the full organic repair capability. An economic analysis (EA) was certified as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-506. The EA is on file and reflects a projected savings to investment ratio of 1.20 with a payback of 7 years. The project should be complete and TPSs functional by November 2006.

000129

Impact if not provided:

This upgrade will reduce Mission Capable (MICAP) shortages and turn-around time for repairs. Lack of funding will create a loss of depot level organic repair capability of numerous B-2 weapon systems Avionic end-items. Interim contractor support will be required to support the DoD workload. If provided the reduction of MICAP and repair times will have a positive impact to the support of the Air Force War-fighter mission.

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E05H08** Replacement **Eddy Current Inspection System (ECIS)**									Activity Identification OC-ALC
Element of Cost	FY2003			FY2004			FY2005			
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
Eddy Current Inspection System (ECIS)							7	270	1900	

Narrative Justification:

This equipment will be purchased to inspect the main rotating parts in each engine to detect extremely small flaws. The most recent requirements for high-performance jet engines cannot be met using existing equipment. The eddy current inspection system will be used to support the TF33, F100, F100, F1 10 and F118 engine repair workload. This equipment will also support the Air Force Research Laboratories Engine Rotor Life Extension Program, improving the electronics within the inspection system to find even smaller flaws. This allows jet engine parts to remain in service longer. This equipment will replace 3 existing controller bays with a single unit, which does virtually the same work capacity, but cannot perform the required task. This equipment will support the repair of jet engines components that are used on F-15, F-16, B-1B, F-16A/B/C/D, F-14D, KC-135, E-6A, and B-2A Aircraft. Elements considered are less floor space required, less noise generation, and a more reliable system. An economic analysis (EA) was certified that this EA meets the criteria as outlined in DoDI 704 1.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 8.12 and payback period of 1.08 years. This project is expected to be installed and savings to begin in August 2005.

000130

Impact if not provided:

The Engine Rotor Life Extension Program expects to reduce the procurement of new engine parts by $300 million over the next 20 years. This savings will not take place unless the existing equipment is improved with the new technology. There will be an increasing backlog of engine parts to be inspected without this system. This will result in a delay in part production causing a delay in engine repair. Failure to a fund this requirement in a timely manner will result in the inability to perform these repairs and jeopardize the readiness of the DoD.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E05H10** Replacement **Pacer Comet III Test Cell Auto System**	Activity Identification OC-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Pacer Comet III Test Cell Auto System							6	1500	9000

Narrative Justification:

This is a phased project with six units being replaced in FY05, two units in FY06, three units in FY08, and three units in FY 10. This project will replace an existing system that has far exceeded its originally project lifespan of ten years. The existing system runs all engines currently maintained. It also collects the engine data associated with the testing. The new system will replace the obsolete and unsupportable data collection reduction system. The new system will use commercial-off-the-shelf (COTS) equipment and will utilize the latest generation technology in hardware and software. It will provide the system and software to run all engines currently maintained in a fully automated mode. The weapons systems supported by this equipment are the F-14, F-16, B-52, B-1B, B-2, C-141, E-3, E-6, E-8, and EF-111. An economic analysis (EA) was certified as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file. Due to this low ratio, a vital mission memo was submitted by OC-ALC and is on file with HQ AFMC/LGPE. This project is expected to be installed and savings to begin in September 2006.

0001131

Impact if not provided:

Supporting the DoD mission will become increasingly more difficult and expensive as downtime continues to increase. The progressive failures of the equipment used to test the TF30, TF33, F100, F101, F108, F110, and F118 engines will render the engine test capability inoperable.

Activity Group Capital Investment Justification ($ In Thousands)							Fiscal Year (FY) 2005 Presidential Budget		
Air Force / Depot Maintenance February 2004	Line Number: E05H11 Replacement Compact Radome Range Equipment						Activity Identification OC-ALC		
Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Compact Radome Range (CRR) Equipment							1	5700	5700

Narrative Justification:

The purpose of this project is to replace and existing Far Field Range (FFR) testing system. This project requires an associated CPP minor construction purchase of $550,000, CSN H23DN1. The current FFR was built in 1957 and has equipment that was incorporated into it between 1969 and 1982. The technology in the existing FFR is outdated and is becoming increasingly difficult to maintain. Over the past five years the FFR has averaged over thirty repair work orders per year. This existing equipment also uses 150,000 square feet of industrial zoned land compared to only 2500 square feet being required for the CRR. The new equipment includes a new test stand, test chamber, air-conditioning equipment, and range instrumentation. This equipment will be placed into a new facility used to accomplish the CRR testing. The CRR has several advantages over the existing FFR. It is an all weather facility, it shields classified frequencies, and it eliminates equipment exposure. An economic analysis (EA) was certified as outlined in DoDI 7041.3, AFI65-501 and AFMAN 65-506. The EA is on file. Due to a low ratio, a vital mission memo was submitted by the depot and is on file with the Air Force. The project will be complete and fully operational by July **2007.**

Impact if not provided:

If new compact radome range equipment is not purchased and the CRR housing is not built, the existing Far Field Range (FFR), with the outdated technology, will eventually experience a failure that cannot be repaired. This could cause radome testing to cease and eventually degrade B-52 aircraft availability across the Air Force that would impact the DoD warfighter mission,

Activity Group Capital Investment Justification ($ In Thousands)										Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	Line Number: E04L15 Replacement Modern Aircraft Paint Technologies (IOE)									Activity Identification WR-ALC
Element of Cost	FY2003			FY2004			FY2005			
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
Modem Aircraft Paint Technologies (IOE)				1	7000	7000				

Narrative Justification:

This project provides the initial outfitting equipment (IOE) required to transform out-dated paint capability to state-of-the-art technology for application of corrosion resistant coatings. The equipment required include such items as telescoping man-lifts, a chemical distribution system, a respiratory air system, a paint gun cleaning system and a fall protection system. This equipment replaces a current capability that is used in a 35-year-old joint use facility and will be installed into a new dedicated paint technology facility to accommodate a C-5, C-17, and smaller airframes overhauled at Robins AFB for top quality paint application. The equipment supports 2.3M hours of core/core-plus programmed depot maintenance aircraft workloads and will provide for improve quality, allow application of high gloss coatings, eliminate bottlenecks, decrease aircraft depot flow times, add a flexible capability for existing and future aircraft corrosion control requirements, and alleviates need to contract a portion of aircraft paint workload. This transformation project implements the best practices identified and studies performed with the AF Corrosion Control office, AFRL, and industry to identify the best process technology and coatings for use on aircraft. An economic analysis for this effort reflects a projected savings to investment ratio for the project is 2.8 and payback period is 9 years. This equipment should be installed and production ready in June 2005.

000133

Impact if not funded:

Lack of the proposed IOE for the paint hangar would render an approved MILCON facility ineffective for its intended purpose and benefits of constructing the facility would be lost. This would prevent the timely completion of paint workloads on supported aircraft and may force paint workloads to be contracted at alternative locations, at higher sales rates and increased throughput times. Operating commands will continue to experience time delays in return of mission ready aircraft.

Activity Group Capital Investment Justification ($ In Thousands)							Fiscal Year (FY) 2005 Presidential Budget		
Air Force / Depot Maintenance February 2004	Line Number: E04L17 Replacement Transforming Airborne Electronics Phase I						Activity Identification WR-ALC		
	FY2003			FY2004			FY2005		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Transforming Airborne Electronics Phase I				1	5000	5000			

Narrative Justification:

This investment provides state-of-the-art technology to modernize and improve aircraft avionics repair capability required to support F-15 and B 1-B core requirement by transforming our testers from outdated technology to new generation technology. It provides a technology upgrade to the existing systems to provide automated testing capability across multiple components and a process to reduce development costs associated with operational flight program (OFP) and manufacture of circuit assemblies. The modernization is required to replace outdated 1970s/1980s technology that is fast becoming obsolete and unsupportable with new computer-controlled microwave test generators, laser test station capability, and other test station enhancements in avionics repair of components and OFP development. The expected benefits include a reduction in flow days/processing time resulting from time savings generated by highly repeatable test conditions and minimal setups. Contract workload can be returned to organic depot to offset the core deficit. An economic analysis for this effort reflects an individual equipment items yield paybacks from 5 to 9 years. This equipment should be installed and production ready in June 2005.

00134a

Impact if not funded:

As the equipment and workload continues to age and the equipment becomes non-supportable, the ability to test for possible failures that can cause avionics and software components to fail becomes difficult to impossible. Failure to test for these variables correctly may result in an inability to accomplish workloads and result in fewer serviceable components available to support mission requirements.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E05H16** Replacement **Heat Treat Addition Cooling Water Sys., B3001**	Activity Identification OC-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Heat Treat Addition Cooling Water System, Bldg3001							1	1850	1850

Narrative Justification:

This project replaces an older heat treat addition cooling water system in building 3001. This cooling system cools twelve vacuum furnaces. The present system has deteriorated significantly requiring new fluid coolers, piping and controls. Since the installation of the existing system, new equipment has been installed requiring additional cooling capacity. The deterioration of the existing system has reduced its cooling capability. As cooling requirements have gone up, cooling capacity has decreased. This has reached a point where the existing equipment is not capable of cooling the furnaces. Furnaces are shutting down or overheating due to the lack of cooling. Overheating causes furnace malfunctions and requires repairs. Significant delays have resulted due to furnace shutdowns. An economic analysis (EA) was certified as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605, and is on file. Due to a low ratio, a vital mission memo was submitted by the depot and is on file with the Air Force. This project is expected to be installed and operational in March 2005.

000135

Impact if not provided:

Failure to fund the replacement of this cooling water system will result in significant delays or the inability to repair jet engine components on the F100, F101, F110, TF33 and TF30 engines. The impact is lower production, higher overtime usage, longer downtimes, and potential work stoppages that will lead to the grounding of aircraft.

Activity Group Capital Investment Justification										Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E05L18** Replacement **Antenna Ranges**									Activity Identification WR-ALC
Element of Cost	FY2003			FY2004			FY2005			
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
Antenna Ranges							6	750	4500	

Narrative Justification:

Six antenna ranges (indoor and outdoor) were selected by MAIPB (Process Engineering Support for MAIB) that warranted immediate repair enabling the continued repair and testing of radomes and antennas for the following systems: Strat Radar (APQ-166), LANTIRN (AAQ-13), APG-63, APQ-122, APQ- 170, APN-218, ALQ- 172, and APQ-175. The above production work is considered "core work-load'. Most of these ranges are configured in a large anechoic chamber with a surrounding parent enclosure, compact reflector, transmitter, source feeds, positioning system, receiver system, instrument control system, range boresight/alignment fixtures, software, and ancillary equipment. With this technological integration of electrical and mechanical components, the occurrence of failures, additional maintenance, unpredicted downtime, and overhead engineering troubleshooting have dramatically increased. The ranges in question are approaching obsolescence (currently 20-25 years of age for some of the ranges) and the equipment & software are becoming harder to support and replace when failure occurs. It is believed that some of the obsolete components cannot be repaired again. Many of the mechanical features such as worn gears, faulty cables, and over used motors may begin degrading many of the precise measurements needed for daily operation. This will lead to longer repair times and a lesser quality repair. The maintenance/service contracts (which only include some of the instrumentation portion of the ranges) by the only known repair contractor is expected to drop their support or either renegotiate (the price might triple) sometime in the near future. Downtime has increased (adding excessive cost to the process. We propose to refurbish the existing ranges (only retrofitting the important critical components) to extend the life expectancy for an additional 20 years. More importantly MA1 would like to retrofit the above ranges while there is still time before an evident range failure occurs. Currently, the failures are consuming production and overhead time, but after the proposed refurbishment, the majority of the problems are expected to end. An economic analysis (EA) waiver has been requested and recommended for HQ SAF approval by HQ AFMC. This project is expected to be installed and operational in Dec 2006.

Impact if not provided:

Without support to this effort, the antenna/radome repair & testing would eventually cease and likely lead to grounding the DoD fleet. The following aircraft are supported: F15, C130, KC135, C141, and B52.

0001136

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E02H58** Productivity **AFATS Software/Hardware Upgrade**	Activity Identification OC-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Advanced Fuel Accessory Test System (AFATS) (Including Hardware and Software Upgrades)							1	2800	2800

Narrative Justification:

This project will employ commercial-off-the-shelf (COTS) components to upgrade obsolete software and hardware, specifically the Virtual Address extension (VAX) computer system, its associated modules and proprietary ADA/Bendix software. This equipment is used to test the fuel accessories that are components of the fuel regulation systems of airframe engines. This existing equipment experiences malfunctions and breakdowns and new replacement components are no longer available. These computers have reached the end of their useful life and can only be supported via purchase of used components. Installing and using COTS software and hardware will increase support with a much larger supply base for parts. This is a multi-year project, FY02 there was $2.1M obligated for Building 3 108 scheduled for completion in December 2003. FY05 there is expected $2.8M need for Building 3902 scheduled for completion in February 2007. The estimated cost of the entire project is $4.9M. The equipment is used to support the weapon system fuel regulation system components used on the F-14, F-15, F-16, B-1B, KC- 135, and C- 130 weapon systems. An economic analysis (EA) was certified as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 1.32 with a payback period of 7.2 years. This equipment will be fully operational by February 2007.

0001371

Impact if not provided:

A high risk exists to the flying status of numerous weapons systems if the current testing system continues to break down. Since this equipment is no longer supplier supported, a non-repairable, catastrophic failure can occur at any time. A catastrophic failure of the testing equipment could result in the grounding of the weapon systems tested having an adverse effect on the readiness of the DoD.

Activity Group Capital Investment Justification ($ In Thousands)							Fiscal Year (FY) 2005 Presidential Budget		
Air Force / Depot Maintenance February 2004	Line Number: E05L17 Productivity HP3075 Series III Digital Test Station						Activity Identification WR-ALC		
	FY2003			FY2004			FY2005		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
HP3075 Series III Digital Test Station							1	5464	5464

Narrative Justification:

This project is to buy out the pay per-use agreement for the HP3075 Series III Digital Test Station from Agilent Technologies Inc. to supplement the three aging AN/ALM-206A/B Digital Module Test Stations and the one DTS-70 Digital Test Station in the repair of Shop Replaceable Units (SRUs) to support the Electronic Warfare Radar Warning Systems and Countermeasures Systems on the F-15 Aircraft. The purchase of the HP3075 Series III Digital Test Station will reduce the required workload capacity for the AN/ALM-206A/B and DTS-70 Test Stations. The HP3075 Series III will also reduce the daily stress and prolong the life of the existing test stations. Failure to fund the project will result in increased overtime to maintain the testers and make it difficult, if not impossible, to meet production schedules. The lack of funding will negatively impact the USAF aircraft war readiness ability and impact the mission capability rates. Weapon Systems and Subsystems Supported and Technical Repair Center (TRC) are as follows: F-15A, F-15B, F-15C, F-15D, and F-15E Aircraft. AN/ALE-45, AN/ALE-47, AN/ALQ-128, AN/ALQ-135A, AN/ALQ-135C, AN/ALR-56A, and AN/ALR-56C Radar Warning and Countermeasure Systems.

0001138

An economic analysis (EA) was certified that this EA meets the criteria outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 1.26 and discounted payback in 8 years. This project is expected to be completed and fully operational in March 2007.

Impact if not provided:

The existing three AN/ALM-206A/B Digital Module Test Stations and the one DTS-70 Digital Test Station are not meeting the field's needs for SRUs. The original equipment manufacturers (OEMs) have discontinued production of the test stations and electronic subassemblies. Replacement parts required to maintain the test stations in a serviceable condition are becoming more difficult to obtain from the Air Force inventory or the private sector. As the test stations continue to age, an increase in the number of failures and downtime will continue to rise. The demand for replacement parts will become greater and much more difficult to maintain the test stations resulting in more production downtime which will lead to the grounding of DoD aircraft.

Activity Group Capital Investment Justification ($ In Thousands)		Fiscal Year (FY) 2005 Presidential Budget
Air Force / Depot Maintenance February 2004	**Line Number: E05L19** New Mission **Upgrade Avionics Lab to PACS-45**	Activity Identification WR-ALC

Element of Cost	FY2003			FY2004			FY2005		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Upgrade Avionics Lab to PACS-45							1	**3045**	**3045**

Narrative Justification:

This project is needed because the F-15E fleet is being retrofitted. WR-ALC/MASF currently performs updates to the other avionics subsystems on the F-15E. By upgrading the existing avionics lab to match this retrofitted configuration, MASF will then be able to support this workload organically, as opposed to continuing contractor support. Economies of scale will be realized by having all F-15E Operational Flight System (OFP) work performed at one site. Boeing, Inc. is currently developing the ADCP subsystem for a total cost of $81M. When the F-15E is retrofitted with ADCP, it is anticipated that the OFP will cost $3,000,000 annually, based on extrapolations from the current cost to perform the F-15E VHSIC Central Computer OFP. By sharing resources among three different OFP workloads, WR-ALC/LYSF can perform the same workload for approximately $1 .5M/year. The proposed upgrade is for F-15 OFP. An economic analysis (EA) was certified that this EA meets the criteria as outlined in DoDI 7041.3, AFI 65-501 and AFMAN 65-605. The EA is on file and reflects a projected savings to investment ratio of 4.34 with a payback period of 3.0 years. This project is expected to be installed and savings to begin in December 2005.

Impact if not provided:

The work will continue to be contracted out at a rate higher than what Warner-Robins can perform the workload for.

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FY	Approved Project	PB	PB Line #	Approved Reprogramming	Internal Transfers	Carryover	Approved Protect Cost	Current Project Cost	Asset / Deficient	Explanation
03	F-16 Aircraft Avionics Digital T/S		1.1 E02G01	0.0	0.0	0.0	1.1	1.1	0.0	
03	Electro Optical Work Center		1.5 E02L06	-0.1	0.0	0.0	1.4	1.4	0.0	Approved reprogramming action
03	Benchtop Reconfigurable Auto Tester		3.5 E02L39	0.1	0.0	0.0	3.6	3.6	0.0	Approved reprogramming action
03	IOE Hydraulic/Pneudraulic MILCON		3.6 E03G02	0.2	0.0	0.0	3.7	3.7	0.0	Due to increase funding of Pad & Elec Control Box & Installation
03	FACT Electrical Interconnecting		2.1 E03G06	-2.1	0.0	0.0	0.0	0.0	0.0	Approved reprogramming action.
03	High Prec Machine Center Jig Borer		2.0 E03G10	-2.0	0.0	0.0	0.0	0.0	0.0	Slipped to out year program to support the Wire EDM, MADTS & other projects. Pending Reprogramming Approval
03	BRAT Taster replace Gen Rad		1.5 E03G13	-1.5	0.0	0.0	0.0	0.0	0.0	Slipped to out year program to support the MADTS for F-15. Pending Reprogramming Approval
03	Penetrate Line (Pretreat)		1.5 E03G27	0.0	0.0	0.0	1.5	1.5	0.0	
03	Bake, Fill & Evacuate Test Stand		1.0 E03G09	0.0	0.0	0.0	1.1	1.1	0.0	Approved reprogramming action
03	F-16 Aux Drive Gearbox		0.0 E03G57	1.2	0.0	0.0	1.2	1.2	0.0	Approved reprogramming action
03	IOE Depot Plating Shop MILCON		7.7 E03H01	-1.7	0.0	0.0	6.0	6.0	0.0	Reprogrammed-$1.714434.
03	BRAT/MADTS Test Program		0.0 E01G03	2.6	0.0	0.0	2.6	2.6	0.0	Approved reprogramming action.
03	MFC Test Stand Upgrade, B3108		1.6 E03H03	0.0	0.0	0.0	1.6	1.6	0.0	
03	Test Set, Stores Management		1.3 E03L15	0.0	0.0	1.3	1.3	0.0	1.3	Approved carryover.
03	Building 49 Paint Booth Insert		5.7 E03L16	-5.7	0.0	0.0	0.0	0.0	0.0	Project dropped : Funds applied to Modem Aircraft De-Paint Technologies (IOE).
03	Modem Aircraft De-Paint Technologies (IOE)		0.0 E04L16	5.7	0.0	0.0	5.7	5.7	0.0	Approved reprogramming action.
03	Automated Plastic Media Blast		1.3 E03L34	0.0	0.0	0.0	1.3	1.3	0.0	
03	B-1B support VXI re-host (Mult-Year		0.0 E99H01	0.4	0.0	0.4	0.4	0.0	0.4	Approved reprogramming action. Carry over approved
03	* $500,000 to $999,999.99		3.1 EF0000	1.0	0.0	0.0	4.0	4.0	0.0	Approved reprogramming action. Note: project A/C Reclamation & PPF IOE estimated $515,000 while actual cost was $496,427 therefore this project moved to the 'under $500K" category
03	* $100,000 to $499,999.99		4.7 E99999	0.3	0.1	0.5	5.1	4.7	0.5	Approved reprogramming actions. Note: carry over approved
03	DMAP/Legacy System Modernization		11.0 A96001	0.0	0.0	0.0	11.0	11.0	0.0	
03	ABACUS		2.0 S96001	0.0	0.0	0.0	2.0	2.0	0.0	
03	Legacy System Modernization		19.3 597001	0.0	0.6	0.0	20.1	20.1	0.0	Reprogramming action for CFO.
03	DMAPS Development/Implementation		26.6 597002	0.0	0.0	0.0	26.6	26.6	0.0	
03	Minor Construction		3.2 MOO000	0.2	-0.3	0.0	3.1	3.0	0.0	Approved reprogramming action.
03	Additional past cost Increases		0.0 P00001	0.6	0.0	0.0	0.6	0.5	0.0	Approved reprogramming action.
03	TOTAL	107.2		-0.5	0.6	2.2	107.2	104.9	2.3	* rounding
04	F-16 Microwave Test Stands Upgrade		0.6 E99G02	0.0	0.0	0.0	0.6	0.6	0.0	
04	B1B Support - VXI Rehost		4.5 E99H01	0.0	0.0	0.0	4.5	4.5	0.0	Due to FY03 reprogramming, was able to reduce FY04 funding requirement. Plan to reprogram FY04 requirement from $4.5M to $3.99M and move funds to 220/229 Test Stand Upgrade (new add).
04	F-16 Aircraft Avionic-s Digital T/S		4.1 E02G01	0.0	0.0	0.0	4.1	4.1	0.0	Phase project #3 of 5, Plan on reprogramming additional $2.145M onto this requirement from Auto Inspect Blast Depaint and Cadmium Plating Line
04	Fire Control Radar Antenna		2.3 E02G02	0.0	0.0	0.0	2.3	2.3	0.0	
04	CNC Universal Grinder - TCR Shop		1.5 E02H38	0.0	0.0	0.0	1.5	1.5	0.0	Included in Bld 3001 Transformation IOE requirement...Plan on reprogramming lundinq to 220/229 Test Stand Upgrade. (New Add
04	Cadmium Plating Line		1.0 E04G02	0.0	0.0	0.0	1.0	1.0	0.0	Combined In Components Surface Restoration Process. Plan on reprogramming lundinq to F-16 Aircraft Avionics DTS Ph-3
04	Auto Inspect Blast Depaint		1.5 E04G10	0.0	0.0	0.0	1.5	1.5	0.0	Due to higher priority projects in the aircraft division moved to out year. Plan on reprogramming funding to F-16 Aircraft Avionics Digital T/S
04	Transforming AF Components Surface Restoration Process		13.0 E04G13	0.0	0.0	0.0	13.0	13.0	0.0	Transformational Project.
04	CNC Universal Grinder Gearbox Shop		1.0 E04H03	0.0	0.0	0.0	1.0	1.0	0.0	Included In Bld 3001 Transformation IOE requirement, Plan on reprogramming funding to TF-33-103 Engine Test Frame Adapter (new add)
04	Case Shop CNC Vertical Turret Lathe		2.2 E04H04	0.0	0.0	0.0	2.2	2.2	0.0	Included In Bldg 3001 Transformation IOE requirement Plan on reprogramming funding to 5- axis CNC Universal Machine (new add

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04 Machine Shop Modernization	1.1	E04H05	0.0	0.0	0.0	1.1	1.1	0.0	Included in FY05 Transformation project list. Plan on reprogramming funding lo Heat Treat Addition Cooling Svstem (new add
04 Decimal Test & Repair Systems	3.3	E04H07	0.0	0.0	0.0	3.3	3.3	0.0	Decrease in requirement. Plan on reprogramming funding to Thermal Coaling - Bond Integrity Sys (new add) and Auto Shot Peening Sys (new add).
04 C-5 BRAT Sets	1.2	E04H10	0.0	0.0	0.0	1.2	1.2	0.0	Decrease in requirement will move lo under 1.0M category. Plan lo reprogram by moving $0.3M to 2201229 Test Stands Upgrade (new add)
04 Bldg. 3001 IOE Transformatior	6.0	E04H17	0.0	0.0	0.0	6.0	6.0	0.0	TransformationalProject.
04 B-2 Test Program Sets Transformatior	6.5	E04H18	0.0	0.0	0.0	6.5	6.5	0.0	TransformationalProject.
04 APG-63(V)1 Radar Lab Upgrade	4.2	E04L02	0.0	0.0	0.0	4.2	4.2	0.0	
04 Radar Module Test Station	2.6	E04L03	0.0	0.0	0.0	2.6	2.6	0.0	RMTS/IFVM/AADTS Projects Consolidated. Plan on reprogramming FY04 funding Increase from $2.841M to $4.404M. Plan lo move funds from EF4L06, 07 and 09.
04 Replacement of the A-IO IATS	2.3	E04L08	0.0	0.0	0.0	2.3	2.3	0.0	Requirement reprioritized to out year. Plan on reprogramming funs to Benchtop Reconfigurable Auto Tester
04 F-15 Analog Avionics Dept T/S	1.9	E04L10	0.0	0.0	0.0	1.9	1.9	0.0	Requirement reprioritized to out year. Plan on reprogramming funds to Benchtop Reconfigurable Auto Tester (new add
04 Modem Aircraft Paint Technologies (IOE)	7.0	E04L15	0.0	0.0	0.0	7.0	7.0	0.0	Transformational Project.
04 Modem Aircraft De-Paint Technologies (IOE)	6.0	E04L16	0.0	0.0	0.0	6.0	6.0	0.0	TransformationalProject.
04 Transforming Airborne Electronics Phase 1	5.0	E04L17	0.0	0.0	0.0	5.0	5.0	0.0	Transformational Project.
04 * $500.000 to $999.999.99	3.6	EF0000	0.0	0.0	0.0	3.6	3.6	0.0	Plan on reprogramming a decrease from $3.841M to $1.975M
04 * $100,000 to $499,999.99	2.6	E99999	0.0	0.0	0.0	2.8	2.6	0.0	
04 DMAP/Legacy System Modernizatior	6.9	A96001	0.0	0.0	0.0	6.9	6.9	0.0	
04 ABACUS	1.4	S96001	0.0	0.0	0.0	1.4	1.4	0.0	
04 Legacy System Modernizatior	54.6	597001	0.0	0.0	0.0	54.6	54.6	0.0	
04 DMAPS Development/Implementation	6.6	S97002	0.0	0.0	0.0	6.6	6.6	0.0	
04 Minor Construction	0.9	MOO000	0.0	0.0	0.0	0.9	0.9	0.0	Plan on reprogramming from $0.900 to $2.654
04 TOTAL	162.2		0.0	0.0	0.0	162.2	162.2	0.0	
05 F-16 Aircraft Avionics Digital T/S	3.8	E02G01	0.0	0.0	0.0	3.8	3.8	0.0	
05 Hydraulic Test Equip for GTE	1.5	E05G23	0.0	0.0	0.0	1.5	1.5	0.0	
05 Electrical Cable Test Set (ECTS)	2.2	E05G25	0.0	0.0	0.0	2.2	2.2	0.0	
05 BRAT / MADTS Tester Program Ph 3 of 3	0.5	E01G03	0.0	0.0	0.0	0.5	0.5	0.0	
05 Eddy Current Inspect System (ECIS)	1.9	E05H08	0.0	0.0	0.0	1.9	1.9	0.0	
05 AFATS Software/Hardware Upgrade	2.6	E02H58	0.0	0.0	0.0	2.6	2.8	0.0	
05 Compact Radome Range Equipment	5.7	E05H11	0.0	0.0	0.0	5.7	5.7	0.0	
05 Pacer Comet III Test Cell Auto System	9.0	E05H10	0.0	0.0	0.0	9.0	9.0	0.0	
05 Heat Treat Addition Cooling Water Sys., 83001	1.9	E05H16	0.0	0.0	0.0	1.9	1.9	0.0	
05 Upgrade Avionics Lab to ADCP	3.0	E05L16	0.0	0.0	0.0	3.0	3.0	0.0	Plan reprogramming
05 Upgrade Avionics Lab to PACS-45	3.0	E05L19	0.0	0.0	0.0	3.0	3.0	0.0	
05 HP3075 Series III Digital Test Sta	5.5	E05L17	0.0	0.0	0.0	5.5	5.5	0.0	
05 Antenna Ranges	4.5	E05L18	0.0	0.0	0.0	4.5	4.5	0.0	
05 * $560,000 to $999,999.99	2.5	EF0000	0.0	0.0	0.0	2.5	2.5	0.0	
05 * $100,000 to $499,999.99	4.3	E99999	0.0	0.0	0.0	4.3	4.3	0.0	
05 DMAP/Legacy System Modernizatior	7.5	A96001	0.0	0.0	0.0	7.5	7.5	0.0	
05 ABACUS	0.4	S96001	0.0	0.0	0.0	0.4	0.4	0.0	
05 Legacy System Modernizatior	55.3	S97001	0.0	0.0	0.0	55.3	55.3	0.0	Plan reprogramming.
05 DMAPS Development/Implementation	6.6	597002	0.0	0.0	0.0	6.6	6.6	0.0	
05 Minor Construction	3.4	MOOOOO	0.0	0.0	0.0	3.4	3.4	0.0	
05 TOTAL	125.4		0.0	0.0	0.0	125.4	125.4	0.0	

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