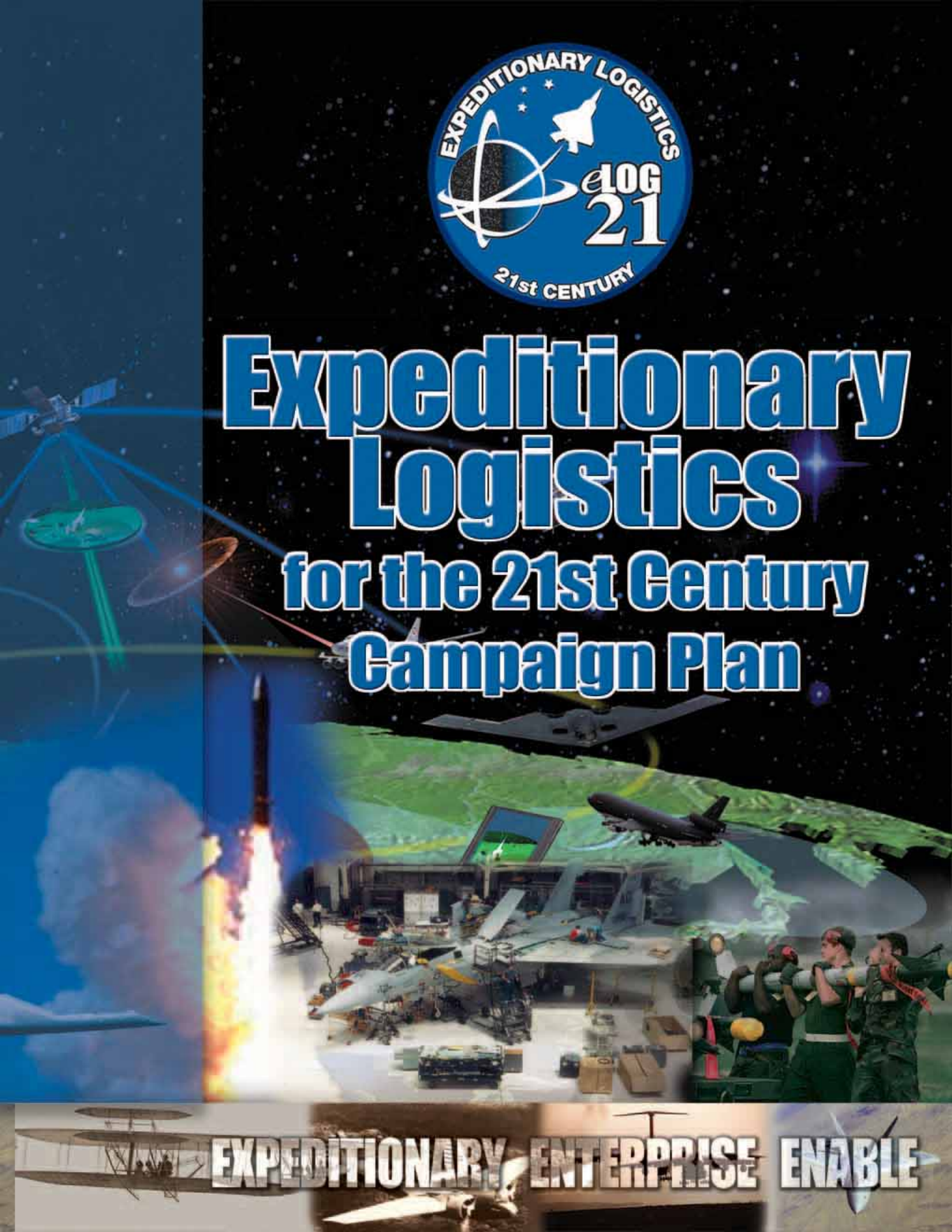
EXPEDITIONARY LOGISTICS
eLOG 21
21st CENTURY
Expeditionary Logistics
for the 21st Century
Campaign Plan
EXPEDITIONARY
ENTERPRISE
ENABLE


Right Support,
Right Place,
Right Time –
Every Time ...

Imperative to Transform

Remarks by the Honorable Donald Rumsfeld,
Secretary of Defense

10 September 2001

Just as we must transform America's military capability to meet changing threats, we must transform the way the Department works and what it works on. We must build a Department where each of the dedicated people here can apply their immense talents to defend America, where they have the resources, information, and freedom to perform.

Our challenge is to transform not just the way we deter and defend, but also the way we conduct our daily business. Let's make no mistake: The modernization of the Department of Defense is a matter of some urgency. In fact, it could be said that it's a matter of life and death, ultimately, every American's.

Those who fear danger do not volunteer to storm beaches and take hills, sail the seas, and conquer the skies. Now we must free you to take some of the same thoughtful, reasoned risks in the bureaucracy that the men and women in uniform do in battle.

To succeed, this effort demands personal and sustained attention at the highest levels of the Department. Therefore, it will be guided by the Senior Executive Council including Under Secretary Pete Aldridge, Army Secretary Thomas White, Navy Secretary Gordon England, and Air Force Secretary Jim Roche. These leaders are experienced, talented, and determined. I am delighted they are on our team. I would not want to try to stop them from what they came into this Department to do. I expect them to be enormously successful, as they have in their other endeavors throughout their lives.

Finally, this effort will succeed because it must. We really have no choice. It is not, in the end, about business practices, nor is the goal to improve figures on the bottom line. It's really about the security of the United States of America. And let there be no mistake, it is a matter of life and death. Our job is defending America, and if we cannot change the way we do business, then we cannot do our job well, and we must. So today we declare war on bureaucracy, not people, but processes, a campaign to shift Pentagon resources from the tail to the tooth. All hands will be required, and it will take the best of all of us.

Foreword

In order to prepare our Airmen to operate efficiently and effectively in expeditionary theaters, we must transform our thinking, culture, and business processes, to aggressively move into the information age. Expeditionary Logistics for the 21st Century (**eLog21**) fundamentally revolutionizes the way the logistics community conducts its day-to-day and strategic business. Its mission is to chart the course of transformation, leading Air Force logistics to streamline and modernize fundamental business practices.

To effectively support the Expeditionary Air Force, an integrated logistics chain must establish better ways to respond to two critical warfighter questions – "Where is our part?" and "When will we get it?" This is no small task – and the logistics community has always met the challenge with unyielding success, innovative thinking, and unfailing reliability. However, the end of the Cold War and the shift to an expeditionary fighting mode requires that we fundamentally change the way logistics conducts business. To support expeditionary operations we must dramatically improve the efficiency of our operations. To support our engagements worldwide we must reduce our reliance on costly infrastructure and inventories by becoming more agile and responsive to our logistics chain requirements. We must replace warehoused inventories with the transportation and knowledge infrastructure to truly ensure that our warfighters have what they need, where and when they need it. Additionally, we must continue to improve our maintenance activities through infrastructure and equipment modernization and application of lean process principles designed to reduce waste. In everything we do, we must seek to exploit new technologies and best-of-breed commercial supply chain practices that increase the reach and effectiveness of our operations. Most importantly, we must continue to recruit and retain the best people, and focus on providing them the 21st-century support systems, tools, and training that empower them to excel at their duty.

This campaign plan outlines the goals and tasks aimed at accomplishing both strategic and operational logistics transformation. It outlines the way ahead to build an expeditionary logistics organization to deliver the support required to meet the way we fight today, and in the decades to come. Although this is no small task, we will succeed…it is the only option.

JAMES G. ROCHE
Secretary of the Air Force

JOHN P. JUMPER, General, USAF
Chief of Staff

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AIR MOBILITY COMMAND

Message to the Warfighter

The logistics mission is straightforward:

- Get the force to the fight
- Keep the force in the fight
- Prepare the force for the next fight

Air Force logisticians have met this challenge throughout the history of the Air Force, and continue to do so today. However, meeting the ever-changing needs of the warfighter in today's joint expeditionary environment demands more. It demands a supply chain that not only meets the mission, but also does it economically. The solutions of the past will not work for the future. We can no longer rely on increased personnel and financial resources to overcome challenges. The garrison based processes born out of the Cold War posture must be fundamentally rethought. The change in operational doctrine requires a new logistics paradigm. Air Force logistics must also become more expeditionary. Expeditionary logistics will satisfy operational requirements, be rapid in its response, flexible in its structure, consistent in its delivery, reliable and economical in its actions.

To this end, Air Force Installations and Logistics (AF/IL) has rolled out a transformation vision: Expeditionary Logistics for the 21st Century (**eLog21**).

eLog21 is the Air Force transformation campaign plan to improve logistics to meet both the current and future threat environment. It is a strategy that guides key logistics transformation initiatives to realize expeditionary logistics. **eLog21** is action focused. These are operational initiatives being implemented at Air Force Materiel Command, Air Combat Command, Air Mobility Command, Pacific Air Forces, United States Air Forces in Europe, Air Education and Training Command, Air Force Special Opertions Command, Air Force Space Command, Air National Guard, and Air Force Reserve Command bases and making impacts across the Air Force today.

These goals strive to improve operational capability while minimizing the cost to deliver that capability. Specifically, the following two goals are being used to drive and measure logistics transformation:

- 20% increase in equipment availibity
- Reduce Annual O&S Cost by 10% ($2.75B) NLT FY 11

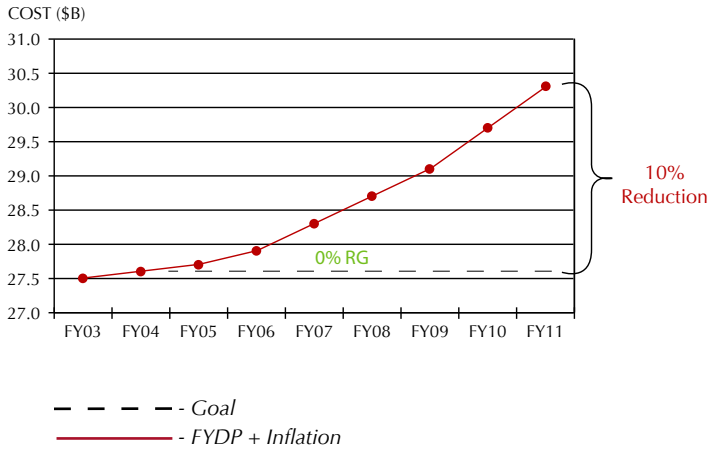
All other logistics goals will tie directly to these two primary goals, ensuring that the enterprise goals drive logistics performance at all levels. To support achieving these goals, everyone in the Air Force logistics community is held accountable for meeting their element of the goals. Rewards will be tied to goal achievement. Keeping the goals simple and direct supports this principle. The current effectiveness and affordability metrics that depict the goals for Air Force logistics are detailed in Figure 1.

The **eLog21** initiative takes advantage of Industry and Air Force best practices to radically change Air Force logistics operations. **eLog21** leverages the latest technologies and systems to enable the Department of Defense (DoD) and Air Force logistics visions, while driving cost down through efficiencies gained by process improvements.

The **eLog21** transformational campaign has a broad scope and touches all logistics functions, including projects in Transportation, Maintenance, Procurement, Inventory

FY03 Aircraft O&S Costs

	$ Millions
Depot Purchased Equipment Maintenance	$2.8
Spare Parts	$4.8
Fuel	$2.2
Supplies	$ .9
Sustainment Engineering	$ .2
Contract Logistics Support	$2.4
Other	$5
Military Personnel	$9.1
Total	$27.4



(Source: AFTOC–AFCAA)

Figure 1

Management, and Product Lifecycle Management across all commodity lines (fuels, munitions, aircraft, vehicles, other major end items, etc.), and organizational boundaries.

The effects produced by the transfomational campaign are fourfold. To be expeditionary, logistics must operate with an **Enterprise View,** across **Integrated Processes**, with **Optimized Resources**, while leveraging **Integrated Technology**. Combined, these four effects drive the future state of Air Force logistics.

eLog21 Effects

eLog21 will drive an expeditionary logistics force by enabling four key effects: Enterprise View, Integrated Processes, Optimized Resources, and Integrated Technology. These effects are interrelated and all are required to deliver eLog21. Establishing the Enterprise View requires success in the other effects. These four effects, when combined, provide the foundations to produce an Enterprise View and to empower decisions made using the Enterprise View. Improved Integrated Processes tie organizations and functions together to deliver end-to-end processes across the Air Force. Optimized resources align our personnel and infrastructure assets with these Integrated Processes. Resource Optimization also includes realigning financial resources to support an Integrated Process enterprise. Lastly, all of the effects are enabled by Integrated Technology, which provides a common toolset across the Air Force.

Effect One: Enterprise View

Establishing an Enterprise View ensures that logistics decisions are made and actions are taken with an understanding of their impact across the entire Air Force. It requires end-to-end business processes enabled by Integrated Technology, and supported by well-trained professionals that execute to a common Air Force objective across the enterprise. The goal is to establish processes, systems, and organizational changes that are able to support decisions to best meet the overall needs of the warfighting community. While today, different Squadrons, Wings, Centers, and Major Commands (MAJCOMs), operate with a wide range of autonomy, tomorrow they will share a common, Air Force enterprise perspective that will enable responsive command and control.

Effect Two: Integrated Processes

Integrated Processes drive total effectiveness and efficiency in the expeditionary logistics enterprise. With integrated end-to-end business processes, orders can move from the flight line to the source of supply, even to the manufacturer, in minutes rather than days; parts can be directed and redirected to the most urgent need with near real-time visibility; technical change orders move between engineering and repair seamlessly, and planning is integrated with execution which will help close the feedback loop. The goal of Integrated Processes is to create unified, enterprise-wide processes that cut across organizations and geographies to deliver the right support, to the right place, at the right time, every time. This provides a common operating picture whether at home station or deployed. **eLog21** seeks to improve the performance of processes wherever possible, by adopting, enabling and institutionalizing best practices from Industry and within the Air Force.

Effect Three: Optimized Resources

In support of Integrated Processes, resources – human, financial, acquisition, and infrastructure (facilities, capital plant and equipment) – are optimized across the enterprise to meet the demands of reengineered logistics processes. The extensive skills and unmatched professionalism of our people at all levels is augmented through training and support in the use of new enterprise-wide business practices and information systems. Infrastructure resources are managed as enterprise assets and information systems are aligned to support enterprise logistics processes. We institutionalize operating principles and lean thinking to continuously improve our business practices and eliminate waste. Financial resources are structured to support the reengineered logistics processes and may include centralization of funds and changes in pricing and funding structure and all facets of general ledger accounting.

Effect Four: Integrated Technology

To enable Integrated Processes, Integrated Technology tools must be employed. The goal of Integrated Technology is to enable and enhance Integrated Processes in the following ways:

- Automating business processes, and incorperating best practices can be leveraged to make people's jobs more effective.
- Providing process visibility across the Air Force, so that an order can be tracked from entry to receipt at any time.
- Establishing total transparency across all systems, to ensure total asset visibility can be achieved and real-time digital dashboards are enabled.

The integration of systems and technology also enables the reengineering of the business processes by leveraging technological capabilities that were previously unavailable. For example, using commercial-off-the-shelf (COTS) catalog ordering tools enables users to order Air Force inventory, receive a delivery date, and track the order through receipt digitally through one system, all governed by automated business rules and approval processes. These capabilities can be leveraged to improve business processes. Further, the new information technology is a key to establishing an integrated, network-centric infrastructure. This is the design model for future Integrated Technology in the Air Force.

Combined, these four effects drive toward the very nature of the future state of Air Force expeditionary logistics:

- "Sense and respond" logistics where warfighters and logisticians proactively manage based on the most current need, and optimize performance across the Air Force to drive efficiency while ensuring effectiveness using a common operating picture.
- Assets are tracked from cradle to grave giving supply chain managers visibility of all resources available across the Air Force. It also allows planners and buyers to control the supply process with vendors and customers more efficiently. On the ground, maintainers instantly know the location, projected delivery time, and quantity of their required assets or materials.
- One standardized system portfolio across the Air Force, with common access, and common processes – for both deployed and home station activity.
- Well-trained resources that are enabled with the tools and skills to do their jobs in the most effective way possible.
- Planners and product lifecycle managers can truly assess total cost of each weapon system.

Each of these outcomes is enabled by the combination of the four effects. Once established, Air Force logistics will not only support expeditionary operations, but will become expeditionary itself.

Effect One: Enterprise View

Establishing an Enterprise View focuses on ensuring that decisions are made and actions are taken with an understanding of their impact across the entire Air Force. The goal is to change our culture to establish a common focus: respond to the ever-changing needs of the warfighting community through optimized use of Air Force-wide assets and resources based on the needs of the enterprise as a whole.

For example, a mission commander shifts from a combat mission to a humanitarian mission. The logistics implications for this change in operational requirements are significant. The primary weapons system platforms will change, as will weaponry. As such, parts, munitions, support equipment, and personnel will all need to change, as well. With an Enterprise View, planners can instantly respond to these changes and optimize use of Air Force resources to deliver what is most urgently needed today, for today's mission. Further, by working collaboratively with the warfighter and others continuously, logistics planners will be able to project the transition on the battlefield far more rapidly than is possible today. A common term that is used to describe this effect is "sense and respond" logistics.

With an Enterprise View:

- Logistics planners collaboratively develop logistics support plans with warfighters based on up-to-the minute logistics and mission data and refine those plans dynamically as operational goals change.
- Logistics goals cascade from the Logistics Plans to daily work activity. Therefore, changes in operations shifting from tactical to lift have a cascading effect on transportation and delivery goals, fulfillment and inventory goals, repair goals, procurement goals, and importantly - weapon system availability (WSA) goals (e.g., Bomber WSA drops, C–5 WSA increases).
- Centralized Inventory Planners manage assets across the entire Air Force inventory. Inventory is distributed to the most urgent need, based on today's operational goals. Further, Inventory Planners use advanced planning tools to optimize inventory across the Air Force to reduce fulfillment and inventory costs.
- Centralized Repair Planners schedule repairs across all sources of repair (back shops, Centralized Intermediate Repair Facilities (CIRF), Air Logistic Centers (ALC), contractor, etc.) to most effectively meet operational requirements, while optimizing efficiency across those sources of repair.
- Product Lifecycle Managers monitor asset performance throughout the lifecycle and across the globe to better improve lifecycle performance and cost.
- Centralized Procurement Agents use cross-enterprise information to leverage Air Force or DoD procurement power with commercial vendors, improving vendor support and price.
- Centralized Supply Chain Planners continuously seek out opportunities to optimize the physical supply chain infrastructure (distribution points, inventory storage, repair locations, etc).
- Enterprise financial resources are optimized across the Air Force to meet logistics goals at the enterprise level. Managing funding centrally eliminates the selling of assets inside the Air Force.

To establish an enterprise view requires several key activities. The first activity is to establish goals and objectives that are linked directly to the warfighter in every logistics activity. These goals and objectives must cascade from level to level, but always tie directly back to the primary goals and objectives.

These goals must in turn translate to weapon system inventory by location, which must relate to transportation and delivery priorities, and repair goals. Transportation and repair metrics must tie to repair priority and schedules, which

themselves link with procurement priority, which must relate with financial management priority. The cascade effect and the intricatenature of metrics from the top-down and the bottom-up is critical. To achieve this capability, **eLog21** has embarked upon a Balanced Scorecard initiative. This initiative provides a basis to build the capability described above. More information on the numerous **eLog21** initiatives and timing is available in Appendices A & B. The second activity to create an enterprise view is to create a dynamic planning/execution structure that can respond to the changes in goals (e.g., WSA). This structure expects frequent shifts and responds using a robust planning/ replanning model. This planning model will optimize the entire Air Force enterprise.

Key Objectives:

- Establish a common set of long-and short-term enterprise logistics goals responsive to Air Force mission evolutions and changes.
- Provide a true enterprise view of logistics operations for decision making capability.
- Provide a Balanced Scorecard set of meaningful metrics at every level of the organization to measure effectiveness and success based on enterprise operational goals.
- Drive cultural change throughout the Air Force enterprise to ensure that new organizational and planning paradigms are institutionalized across the Air Force.



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Effect Two: Integrated Processes

Integrated Processes allow eLog21 to improve the performance of processes wherever possible, by adopting and institutionalizing best practices from Industry and within the Air Force.

Integrated Processes are the foundation that supports the eLog21 Vision. It is through Integrated Processes that logistics will be able to dynamically respond to the decisions made at the enterprise level. The goal of integrating processes is to create unified, enterprise-wide processes that cut across organizations and geography. For example, with Integrated Processes, an order from the flight line can be traced from its order point, to the fulfillment location, to repair location, to supplier and back to the flight line in near real-time.

Integrated Processes are driven by the goals and metrics established at the enterprise level. This allows each process to dynamically respond to changing Air Force priorities. For example, when changing from a combat mission to a humanitarian mission, the business process of placing an order is automatically updated to change order priorities, approval processes, and process goals (e.g., WSA). Integrating Processes focuses on creating a single Air Force logistics enterprise from the stovepiped activities of today.

Integrating Processes will:

- Create a single, executable and sustainable plan that cuts across inventory planning, repair and maintenance planning, and distribution and transformation planning.
- Create a continuous feedback loop at all levels.
- Create a centralized maintenance structure that encompasses field, contractor and depot.
- Integrate Engineering and Configuration Control with Maintenance to ensure complete and accurate Bill of Material (BOM) data for forecasting/planning of repair, buy, and component requirements across enterprise.
- Integrate Repair operations with Product Lifecycle Management (PLM) to improve reliability centered maintenance capabilities.
- Establish Lean processes to increase efficiency and decrease costs.
- Integrate the ordering process with repair, distribution, and transportation processes to ensure Total Asset Visibility (TAV) through the entire supply chain.

With Integrated Processes, an Enterprise View is supported (still requires the Integrated Technology) and end-to-end business processes are established. To institute Integrated Processes requires several key activities.

The first activity is to reengineer business processes. Reengineering business processes involves assessing current Air Force practices, comparing those processes with best practices and system capabilities in order to define a new process that best supports the end-state vision.

The second activity is to establish the organizational support structure. New roles are created and old roles are transformed. To ensure successful Business Process Reengineering (BPR), the organization must be designed to support the process structure. The organizational stovepipes of today will not enable the process of the future to work. The Purchasing and Supply Chain Management (PSCM) team has made strides in this area to ensure that organizations and roles are structured to support reengineered processes. More on PSCM can be found in Appendix B.

The third activity is to enable processes with optimized resources and Integrated Technology. This is a key step. Technology provides a mechanism to ensure that the business process is automated, repeatable, and documented. Further, by exploiting technology capabilities, resources can be optimized beyond reengineering improvements alone. Once the processes are defined, Integrated Technology is configured to enable these processes.

Key Objectives:

- Establish end-to-end business processes that cut across the Air Force, integrating business functions in support of enterprise goals.
- Integrate tactical processes with strategic planning processes to establish a closed-loop planning and execution system that can dynamically respond to changes in the logistics chain.

Effect Three: Optimized Resources

Optimized Resources leverage infrastructure, human and financial resources across the logistics enterprise to achieve maximum effectiveness while ensuring efficiency across logistics processes. Infrastructure Resource Optimization aligns Air Force assets such as parts, equipment, warehouses, and tools to support enterprise logistics processes. Re-alignment of these resources at the enterprise level ensures they are utilized to meet enterprise needs. Human Resource Optimization empowers resources with the right skill sets, and tools to enable them to do their job. Transformation of the Air Force logistics business processes is also a transformation in the current Human Resource skill sets. The extensive skills and professionalism of our people is augmented through training and support in the use of new enterprise-wide business practices, lean operating principles, and information systems. Legacy processes, metrics, and culture represent years of knowledge and experience that must be both leveraged and changed as part of the transformation. Training and change management are also significant parts of the transformation effort. The cultural change necessary to transition to the future state is the single largest challenge that the Air Force faces.

With Human Resource Optimization:

- Roles and responsibilities are transformed to support new business practices and new enterprise information systems.
- Management goals and metrics are transformed to support an enterprise view.
- Training programs are geared towards best practice techniques and enhancing skills via classroom and online instruction, new certifications, and leadership guidance. A learning culture creates an atmosphere of continuous improvement. Education and training focus on new business processes and the Information Technology systems such as value stream mapping, lean principles, supply chain management and enterprise resource planning.
- Our people can divest themselves of non-value-added tasks, freeing them to focus more clearly on their role in warfighter support. By applying lean process improvement principles, we can reduce the waste inherent in current practices.
- New positions and units are created to support the new logistics enterprise such as: Product Lifecycle Managers, Weapon System Supply Chain Managers, Demand Planners, Customer Relations Assistants, and Supply Planners.

Financial Resource Optimization structures funding to support an enterprise view, ultimately enabling decision makers to apply limited funds to the highest priorities across the Air Force. Financial management will restructure to support the future state. Legacy finance processes, such as depot level pricing structures for supply and repair, promote non-enterprise behavior and must be overhauled. Financial transactions must support the logistics business processes, not encumber them.

Financial Resource Optimization seeks to streamline financial processes necessary to support transformed logistics enterprise and optimize the use of financial resources to increase logistics capabilities.

With Financial Resource Optimization we will:

- Ensure CFO compliance.
- Reduce seven current profit centers to four cost centers.
- Simplify the reimbursement process and minimize transactions.
- Eliminate selling assets inside the Air Force.
- Centralize funds management by merging Material Support Division (MSD) with Depot Maintenance Activity Group (DMAG) funds. Realigning Depot Level Reparable (DLR) with Depot Purchased Equipment Maintenance (DPEM) funds.

Key Objectives:

- Empower the logistics force to meet Air Force goals and objectives by creating dynamic new roles, responsibilities, and skill sets to complement the enterprise approach.
- Utilize change management techniques to assess, modify and drive logistics transformation at the stakeholder level.
- Transform legacy financial processes to better match enterprise business processes and minimize financial transactions.

Effect Four: Integrated Technology

The goal of Integrated Technology is to enable and enhance the integrated business processes by establishing total transparency across all systems, and information. This visibility must extend to both the organic logistics enterprise and beyond, to include suppliers, contractors, other services, and extended customers. eLog21 calls for implementing a standardized solution suite of enterprise-wide systems across the Air Force, with common access, and common processes – for both deployed and home station activity. By leveraging flexible, extendable COTS applications these systems can reach across all data sources to enable planning, tracking, scheduling and management capabilities. These systems can be tailored to individual job functions and are accessible from anywhere across the globe on our network-centric infrastructure.

Network-centric infrastructure allows users to unplug from any location and re-plug at a new location and the systems will support them in the same way at both locations. A good example of network centric infrastructure is the ATM network. ATM users are able to interact with their banking network, at any ATM in the world. This network recognizes the user and can process transactions, such as withdrawals, regardless of geography or technological infrastructure. The user does not need to bring an ATM infrastructure with them to access funds, but rather can interface with existing infrastructure to conduct business. Technology Integration seeks to leverage the legacy systems significant investment of both time and money. The goal is to migrate the resident institutional knowledge within legacy systems without migrating legacy business processes.

With IT integration:

- Integrated systems give all members of the Air Force access to the same information securely and reliably, from any place, at any time.
- Physical assets are captured and tracked in the information realm from production to disposal. This gives logistics users visibility of resources available throughout the enterprise and instant access to the location, delivery time, and quantity of assets.
- Systems architecture will enable currently disparate functional systems to work together seamlessly in the logistics process – such that, actions in a maintenance unit trigger transactions in inventory, finance, and procurement actions reducing and eliminating data duplication and manual information processing.
- Internal supply chains are linked with commercial vendors enabling logistics chain managers to assess the availability of parts across multiple sources to meet specific mission requirements.

With Integrated Technology, end-to-end business processes are enabled, an Enterprise View is established, and resources are leveraged to support enterprise goals. To achieve this capability, several key activities are required.

The first activity is the implementation of Integrated Technology tools. Once acquired, tools must be implemented to support the integrated business processes and enable the **eLog21** Vision. This implementation will require a transition from hundreds of legacy systems to the new enterprise system suite.

The second activity is the implementation of Portfolio Management tools and techniques to support IT investment throughout its lifecycle. Once implemented, technology must be continuously managed and updated to ensure that the technology is supporting Air Force goals and objectives.

Expeditionary logistics needs a revolution in current technology to enable the processes. **eLog21** demands full asset visibility, end-to-end integration of data, and access data at every level of the supply chain.

Key Objectives:

- Implement a DoD-compliant, enterprise-enabling architecture in support of **eLog21** systems and business processes including robust networks, "access anywhere" databases, and common data models.
- Implement flexible, scalable, standards-based COTS applications to access and control the network data.
- Implement Portfolio Management processes and toolsets to support IT lifecycle management.

Where We Go From Here

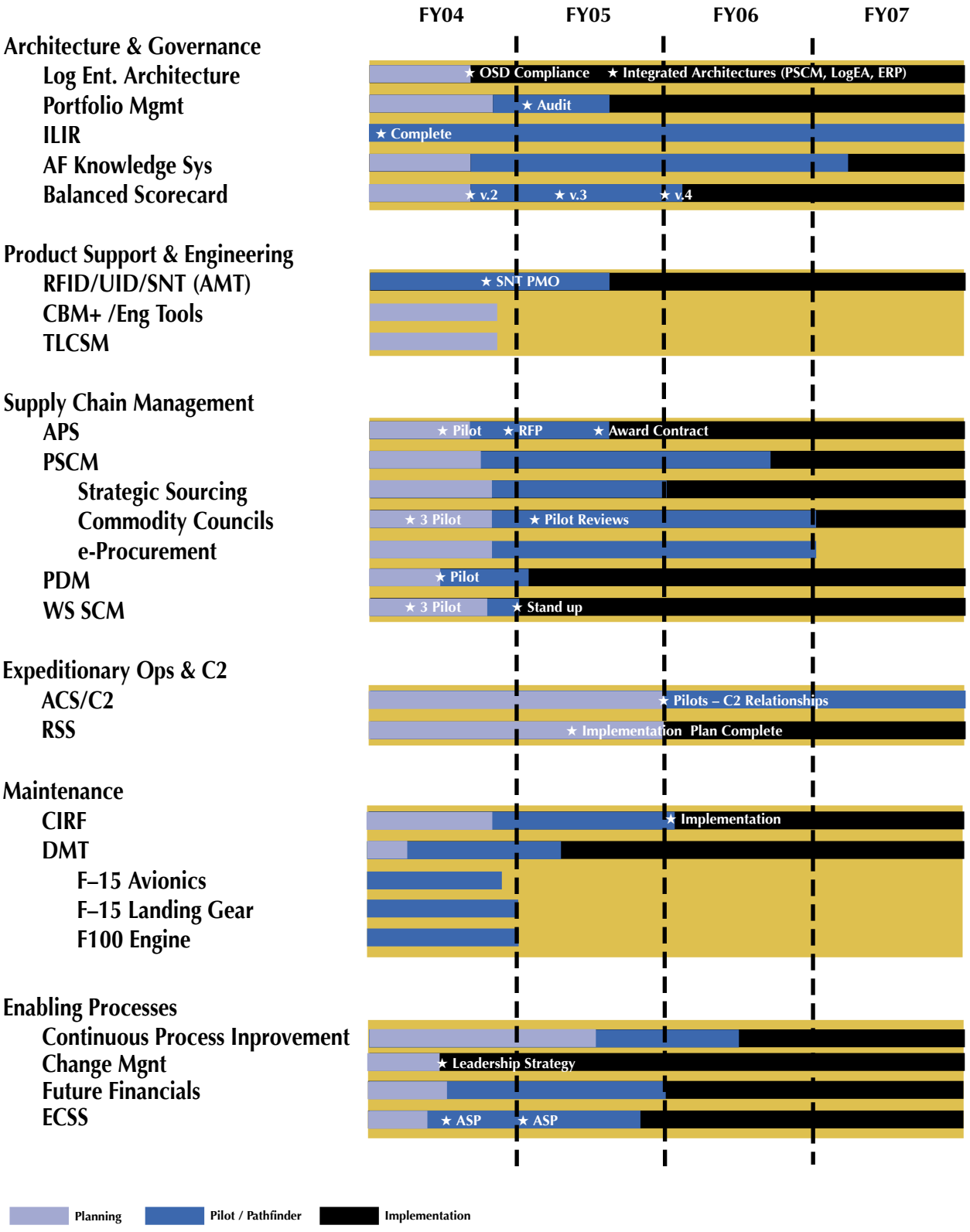
The current logistics processes are NOT broken but the Air Force must complement expeditionary operations by transforming logistics processes to get the Air Force to the fight, to sustain the fight, and to prepare for the next fight with overwhelming superiority at an affordable price. To do so, Air Force logistics must adopt an enterprise approach to meet global operational doctrine. Current business processes, organizational boundaries, and IT architecture limit how far we can take these improvements. The Air Force is transforming its legacy Cold War culture and underlying foundation from garrison based to an expeditionary force.

Change Management is key to the success of this transformation effort. It will help to foster organizational acceptance, enthusiasm, and cooperation, despite the uncertainty that any transformation holds. Change Management is an ongoing process throughout the eLog21 campaign that crosses all eLog21 logistics initiatives. This effort involves assessing and reducing risks associated with transformation to increase the probability of a successful implementation. It also involves generating a committed and involved senior leadership group. Finally, the Change Management effort will help prepare the workforce so it is properly equipped with the skills in the new logistics environment.

At the forefront of this change is a motivated and skilled workforce equipped with the necessary tools to execute their mission. The future eLog21 workforce is rooted in the formidable group of people we depend on today. Simple, intelligent, and powerful systems and business processes will empower them to meet any mission and sustain the warfighter in every battle. This transformation will ultimately make easier, the work being performed today.

By exploiting best business practices and technology, eLog21 enables the Air Force to move from the current silos of autonomy to a centralized business with end-to-end visibility and accountability. eLog21 drives warfighter focus throughout a consistent and reliable logistics enterprise. This ground shaking transformation requires commitment at every level. Indeed, it is difficult to find another example of a change or commitment of this magnitude in the history of Air Force logistics. In response to the challenges of the past half-century, the Air Force has adapted and grown in astounding ways. We must continue to adapt and accelerate change to take advantage of new opportunities as well as prepare for tomorrow's fights.

Appendix A: Integrated Master Plan



Appendix B: Initiative Details

Logistics Enterprise Architecture (LogEA)

Objective: LogEA will create a single authoritative source to define both operational and systems approach for Air Force logistics supply chain.

Background: The current Enterprise Architecture (EA) environment is an amalgam of architectural efforts, each addressing various aspects of logistics, and approaching EA from different perspectives. Specifically in the DoD arena the efforts of note are the Business Enterprise Architecture (BEA), the Force-Centric Logistics Enterprise (FLE) and the Enterprise Architecture Integrated Council.

Strategy: The LogEA will seek to do the following:

- Define and align organizational vision, mission, goals, and objectives with business and IT initiatives
- Explore innovative technologies
- Establish Air Force priorities for Program Objective Memorandum (POM) submission
- Provide foundation for achieving Air Force business vision

Ultimately, LogEA will link the system architecture to the operational architecture, and will integrate logistics functions that support business process engineering and IT management decisions. LogEA includes an operational architecture, systems architecture, and transition plan and governance structure.

Portfolio Management

Objective: Develop the process, governance, criteria, and discipline to focus near term actions and resources in order to achieve maximum warfighting capability from Air Force Installations and Logistics (AF I&L) information systems while meeting legislative requirements.

Background: The AF I&L community is undergoing a dramatic change in its warfighting mission. This effort demands the transformation of existing combat and support capabilities by leveraging information and process improvements across the Air Force enterprise to achieve significant operational efficiencies while driving down support costs. The AF I&L portfolio management approach enables this transformation by 1) establishing a dynamic process that analyzes the installations and logistics portfolio; 2) competitively selecting the best mix of information technology investments to meet mission needs; 3) controlling the individual investments as they move through their lifecycle; and, 4) evaluating their performance in terms of capabilities provided and cost expended.

Strategy: AF/IL released a series of policy memorandum detailing the implementation of portfolio management in the AF I&L community. This policy establishes portfolio owners to oversee investments in their respective functional areas (portfolios) and directs any and all AF I&L functional information systems be registered, regardless of ownership or source of funding.

AF/IL has halted all development activities to information systems and has established an information system approval process, which ensures any modernization work is consistent with the enterprise architecture. AF/IL has established a governance process to review investment decisions and evaluation criteria for information systems based on AF strategic vision, mission objectives, best business practices, and the AF I&L enterprise architecture. AF/IL is creating an Air Force Instruction (AFI) to document portfolio management policy and is developing a change management plan to implement culture change across the Air Force Installations and Logistics enterprise.

Installations and Logistics Information Requirements (ILIR)

Objective: Implement DoD's Net-Centric Data Strategy through consolidation of Air Force Installations and Logistics (I&L) data into a shared environment to supply cross-service and cross-domain users and applications with on-demand access to authoritative, relevant, and sufficient data for decision making.

Background: The ILIR IPT was initially established to identify data sources and information to meet Combatant Commander requirements (COCOM-129). I&L systems supporting these requirements were identified and data elements needed were mapped to their authoritative sources. Migration strategy and financial plans were developed and initiated to move data into the Air Force Knowledge Services' (AFKS') Enterprise Data Warehouse (EDW) to support business intelligence and analytical tools. The ILIR has since evolved into the Installations and Logistics Domain Data Panel, charged with developing information discovery services, metadata standards, common vocabularies, and management strategies.

Strategy: As the I&L Community of Interest (COI) data panel, the focus of this initiative is to create an atmosphere where I&L data is a corporate asset and the open exchange of reliable, consistent, and accessible data is commonplace. The staging of I&L data from legacy systems into a robust EDW supports the effective use of discovery services to find needed data, allow the efficient movement of data through an enterprise service bus, and presentation of fused data in a Common Operational Picture (COP). The net result is the ability of all users to make decisions, accomplish daily tasks, perform analysis, and extract authoritative data from a single source, with confidence.

Air Force Knowledge Service (AFKS)

Objective: AFKS will develop a process for identifying, prioritizing, and de-conflicting data warehouse requirements and establish the source for logistics data. This process will be done in conjunction with preparation for an ECSS.

Background: AFKS was established and adopted as the eventual source for all Air Force logistics data. Over time, AFKS has evolved for different uses for varying communities, i.e., shifting transactional modules from legacy systems into AFKS, as a source for analysis and reporting data only. The new structure was established to address funding stream issues, and to define a governance process for AFKS.

Strategy: The strategy will focus on:

- Simplify and communicate data capabilities

- Establish and communicate a common set of overarching goals
- Establish visible governance processes and relationships
- Build evaluation criteria

Capturing this information, along with relevant technical details in a clear and easily understandable format is critical to conveying AFKS capabilities to functional communities.

Logistics Balanced Scorecard (BSC)

Objective: BSC will improve the performance measurement of logistics capabilities and institutionalization metrics to focus logistics processes and efforts. The goal is a standardized set of warfighter focused metrics.

Background: Air Force metrics are predominately financial or production based, which drives priorities and practices not focused on warfighter capabilities. The Office of the Secretary of Defense (OSD) is developing a BSC across the services; this Air Force BSC effort will integrate and align with that effort.

Strategy: The focus of this initiative is to develop a logistics framework to translate the eLog21Vision and strategies into comprehensive set of objectives, critical success factors, and performance measures across a balanced set of perspectives. The framework represents a balance between:

- Short and long-term critical success factors
- Financial and non-financial measures
- Lagging and leading indicators
- External and internal performance perspectives

The net result is the ability to view the health and welfare of Air Force logistics community and to drill down into performance analysis to support managerial decision-making.

Asset Management Tracking (AMT)

Objective: AMT will provide better visibility of serialized components, and Product Markings Champion's Guidance, establish policy pertaining to AMT, and plan implementation throughout logistics to achieve the eLog21 Vision. AMT will seek to utilize existing and emerging standards and technologies including Universal IDs (UIDs), Serial Number Tracking (SNT), and Radio Frequency IDs (RFIDs).

Background: Air Force does not have adequate visibility of serialized components and has no automatic system update for supply and maintenance. The capability to track significant logistics items individually throughout their lifecycle and the logistics chain has the potential to enable more precise configuration control throughout the logistics systems. AMT is enabled by automatic identification technology (AIT).

Strategy: Develop a marking policy that supports OSD unique identifier policy. Contractors, ALCs, and MAJCOMs will accomplish the item marking. AMT will provide better visibility of serialized

components and update legacy systems in supply and depot maintenance. It will create data stores for collecting AMT transactions, analyze serial tracked items, and, leverage Air Force Knowledge Service (AFKS) and Portal infrastructure. It will provide near real-time visibility by part number, serial number, and Commercial And Government Entity.

Condition-Based Maintenance Plus (CBM+)

Objective: The intent of this initiative is to increase operational availability and readiness throughout the weapon system life cycle at a reduced cost.

Background: DoD does not adequately predict failures to produce broad-based planned maintenance programs. The result is: a labor force required to have extensive knowledge and training; diagnostic equipment that is cumbersome; and, time consuming and often unreliable, long repair cycle times that result in expensive supply pipelines. CBM+, with more accurate predictions of failures based on condition data, would result in dramatic savings and improved weapon system availability.

Strategy: CBM+ focuses on inserting into new and legacy weapon systems to support improved maintenance capabilities and business processes. It involves integrating and changing processes to dramatically improve system responsiveness. The desired end state is personnel who have the knowledge-skill sets and tools to maintain complex systems at the optimal time through the use of available IT, which improves maintenance decisions and integrates the logistics processes.

Total Life Cycle System Management (TLCSM)

Objective: The primary intent of TLCSM is to improve weapon system sustainment by establishing clear responsibility and accountability to meet specific warfighter performance goals.

Background: Sustainment of DoD systems consumes approximately 80% of logistics resources, or $62B annually. End-to-end customer support for system sustainment involves the integration of the logistics chain across government and industry throughout the life cycle of a system. DoD challenges in this area include:

- Sporadic attention to sustainment characteristics during the early requirements process
- Distinct breakages in systems responsibility between acquisition and sustainment phases of the life cycle
- Sustainment processes focused on functional optimization versus warfighter capabilities

Strategy: Program Managers (PM) are responsible for the overall management of the weapon system life cycle to include: timely acquisition of weapon systems, meeting warfighters performance requirements, integration of sustainability and maintainability during the acquisition process, and weapon system sustainment to meet or exceed warfighters performance requirements throughout the life cycle at best corporate value. Business case analyses will be conducted to support performance-based logistics support strategies. A product support campaign will be initiated to determine best business practices and process improvements throughout a weapon system life cycle.

Advanced Planning & Scheduling (APS)

Objective: Enable the documented improvements from the Demand Planning pathfinder by implementing a COTS Advanced Planning and Scheduling (APS) tool within the Air Force. Develop the processes, procedures, and business rules within the F101 engine workload and deploy the tool throughout the Air Force.

Background: Through the Logistics Transformation Demand Planning Pathfinder and the resulting Spares Campaign APS Pathfinder the Air Force validated the need, advantages, and applicability of a COTS APS to enable Forecasting, Collaboration, and Capacity Planning. APS is now being expanded to other areas in the supply chain.

Strategy: The two-pronged implementation approach follows:

- Continue momentum gained from the APS Pathfinder by implementing a "go live" demonstration (of core functionality) for the entire F101-GE-102 engine using the APS Pathfinder software
- Pursue "full & open" competition for long-term APS solution through MSG/ES to implement all Air Force weapon system items into the APS process within 3 years of contract award. Also, migrate F101-GE-102 engine to long-term solution within 12 months of the long-term contract award date

Planning Purchasing and Supply Chain Management (PSCM) Strategy

Objective: Reduce purchase costs, improve product quality and warfighter delivery of parts and weapon systems to the warfighter. Provide more responsive and flexible supply support to facilitate AEF and greater promise of vendor base for aging weapon systems with reduced cost of spares support.

Background: PSCM is a comprehensive approach linking purchasing, supply chain management, and strategic goals with Air Force operational goals. Through this initiative the Air Force is developing policies, processes, and tools that combine functions and seamlessly link demand planning, purchasing, inventory management, supply chain, supplier, and supply base management to create a more effective and efficient supply chain. PSCM will yield significant performance improvements and total operating cost reductions.

Strategy: The PSCM Integrated Process Team (IPT) will complete the PSCM CONOPS and distribute to stakeholders. Develop and implement objectives to satisfy PSCM risk management, planning and scheduling, defining an approach and methodology, developing a statement of work, and implementing new processes and organizational structure. Finally, develop PSCM strategic business plan with supporting Key Performance Indicators, establish commodity councils, develop AFMC PSCM business case, design IT solution requirements, and organizational structure. Also, design job roles, training and education requirements, develop and implement a stakeholder management plan, communication plan, and conduct executive leadership coaching and mentoring.

Implement PSCM Strategic Sourcing

Objective: Identify key suppliers and build long-term relations that allow leverage and management of them strategically.

Background: In the past, large inventories often masked quality and delivery problems, leading buyers to believe that they did not need supplier management strategies. However, as enterprises have learned that they can simultaneously lower, total costs, improve performance, and apply lean practices. They have become more aware of the critical role collaborative buyer and supplier relationships play in success.

Strategy: Build and expand on the previous corporate contracting efforts AFMC is establishing supplier alliances with key suppliers. WR-ALC has the lead to establish such an alliance with the Army, DLA, and Lockheed Martin. As the sourcing strategies are put in place future National Stock Number (NSN) purchases will be added to extant contracts. Strategic alliances will be set up with our key suppliers to address small, disadvantaged businesses and diminishing vendor support.

Establish Commodity Councils

Objective: Test the commercially used concept of utilizing Commodity Councils to strategically drive improved supplier relations and leverage volume ordering to improve responsiveness and reduce costs.

Background: Another best practice from PSCM strategic sourcing is the benefit of grouping the management of "like" items under a commodity council construct. Benefits include ability to leverage spend, reduce total operating costs, increased willingness from suppliers to engage in innovative supply chain improvements, and constructive interchange with cooperation across the enterprise. The PSCM IPT conducted a spend analysis to determine best council groupings and best overall fit was by Federal Stock Class.

Strategy: Establish a POC commodity council at each of the ALCs. Oklahoma City Air Logistics Center (OC-ALC) will lead the 1680/1650/1660 FSC POC commodity council, Ogden Air Logistics Center (OO-ALC) will lead the 1620/1630/2620 FSC POC commodity council, and Warner Robins Air Logistics Center (WR-ALC) will lead the 4920 POC commodity council.

Product Data Management (PDM)

Objective: Demonstrate and implement a complete and accurate product data management process (PDM) that provides more accurate forecasting/planning of repair and component requirements across the Air Force. This would enhance production throughput and improve weapon system configuration management.

Background: Product data management is fragmented according to functional needs. IT to support PDM is tailored to each functional area's needs and the functionally oriented PDM solutions force duplicative work in each functional area. The fragmented solutions make it difficult to understand the actual cost to repair an item, accurately project component needs across the Supply Chain, and results in extraordinary execution decisions (rob backs/cannibalizations, "repairing" XB3 consumable items, accelerated deliveries, etc).

Strategy: The two-phased approach is to:

- Develop and test reengineered PDM processes utilizing a combination of existing and COTS applications to improve the integrity of Air Force PDMs. Integrate the improved PDM process with the APS effort
- Develop an implementation plan to improve PDM solution across the Air Force based on the test results

Weapon System Supply Chain Manager (WS SCM)

Objective: WS SCM will enable a holistic focus on supply chain performance and relate supply chain input (money) to supply chain output (weapon system availability) to optimize spare parts availability. WS SCM will establish a manager responsible for linking processes and inputs to weapon system targets and goals.

Background: WS SCM grew from industry best practice, i.e., the "platform" manager, is an expert in supportability issues regarding production of a particular corporate product. WS SCM in Air Force logistics is split between various Product Group, Materiel Group and System Support Managers, System Program offices, sister services, and Defense Logistics Agency (DLA). No one person has whole perspective. There is a need to appoint a person with responsibility/authority to manage the supply chain for designated weapon systems.

Strategy: The desired end state is to have WS SCMs established for all major weapon systems and systems. AFMC will implement the following:

- Develop position descriptions and initial Return of Investment (ROI) to establish Weapon System SCMs and supporting staff organizations at each ALC
- Develop WS SCM template for follow-on WS SCMs
- Develop and conduct WS SCM training
- Field IT to enable WS SCMs to perform effectively
- Define authority and arbitration mechanism for WS SCM
- Develop master implementation schedule
- Publish governing and supporting documents

Agile Combat Support (ACS)/Command and Control (C2)

Objective: Enhance/develop information systems and decision support tools to enable ACS through Combat Support Centers (CSC).

Background: Existing systems, for several reasons support emerging combat support concepts such as CSC. Combat support resources are managed by "stove-pipes" and funded by commodity, with different organizations having commodity management responsibility. Corresponding IT was developed and implemented independently among the organizations. The result is a myriad of independent systems with little ability to share data or interface with other systems.

Strategy: Complete a thorough evaluation of combat support decision support tools for a particular function with implementation focused on a smaller set of tools worldwide.

- Ensure a systems infrastructure that can rapidly transfer information to maintenance facilities, inventory control points, CSCs and other key nodes-globally
- Ensure new tool productivity and interface with joint-service system is maximized

Regional Supply Squadrons (RSS)

Objective: Establish standard supply structure with RSSs and establish fleet-level advocate for spares Command and Control (C2). Improved spares C2 and weapon system availability through increased integration with suppliers, enhanced total asset visibility, and operational fleet level focus.

Background: The concept of the RSS was born during the Desert Shield/Storm experience, when the Air Force Contingency Supply Support Activity (AFCSSA) was activated to centrally manage supply support for deployed units. Following the construct of the AFCSSA, several MAJCOMs established RSSs. The Air Force Support Center further expanded RSSs, providing coverage for all MAJCOMs. This effort, in conjunction with the Support Center Align Supply Chain Management and Virtual Inventory Control Point (VICP) efforts are aimed at providing improved spares supply chain C2 by aligning the efforts on the same goal.

Strategy: Expand and enhance proven RSS operations by building a linkage with all elements of the supply chain:

- Establish centralized supply coverage for all MAJCOMs
- Establish a Lead Command RSS (LCRSS) function for designated lead commands to provide fleet and operations focused perspective
- Assign a more active role in distribution decisions, from depot and intermediate repair production on items designated as “fleet distributed” spares

Also, submit organization change package to Air Force Personnel Management for final approval. Air Staff will issue the Policy Directive implementing the revised strategy and tasks to develop/submit implementation plans.

CONUS Centralized Intermediate Repair Facilities (CIRF)

Objective: Establish CONUS CIRFs to provide intermediate level maintenance capabilities that serve multiple units from centralized locations for selected commodity assets. Determine best business processes that achieve synergies across the enterprise in terms of CIRF Locations, unit type codes (UTCs), and relevant commodities within the FY 06 POM cycle.

Background: The CONUS CIRF proposal grew out of successful OCONUS CIRF test/operations. Air Staff directed a CONUS CIRF IPT to evaluate the proposal for CONUS CIRF locations and provide guidance on FY 06 POM inputs. CONUS CIRF fits under the Maintenance Transformation strategic plan. CONUS CIRF is a total team effort that includes the Air Reserve Components and Air National Guard.

Strategy: Achieve economies-of-scale in a resource-constrained environment through efficiencies in operations and resource optimization. Work to expand RSSs into a more robust Logistics Operational Support Center by adding transportation, logistics plans, and maintenance personnel. Provide the CONUS and OCONUS CIRFs with a command and control element that is in line with LogEA.

Depot Maintenance Transformation (DMT)

Depot Shops Improvement

Objective: Depot Maintenance Transformation is divided into several areas:

- Implement a consistent, standardized process improvement strategy that will increase throughputs, agility, and responsiveness in depot maintenance shops
- Standardize shop floor metrics that relate to customer and shop floor
- Achieve 100% on-time delivery, improve affordability to the customer, and improve data system efficiency and to meet these goals by 2006
- Remove CDMAG from the Working Capital Fund and direct cite customer funds on future Contract Depot Maintenance (CDM) contracts to better assess the organic cost of depot maintenance on weapon systems

Background: Depot Maintenance Process Reengineering Transformation (DMRT) was an independent transformation effort that has been integrated into eLog21. An AFMC Depot Maintenance Business Process Reengineering and MRO Team were formed to lead and develop improved depot maintenance processes and practices. The team is not only building on findings and recommendations from DMRT, but also other past process improvement initiatives, to include the AREP, DREP, and lean enterprise initiatives at the ALCs. The intent is to establish and deploy standards that will allow eventual integration across the Depots. Removing CDMAG from the Working Capital Fund can be traced to an April 2002 memo signed by AF/IL and SAF/FM directing the Air Force to discontinue financing CDM through the working capital fund and instructed customer funds to be cited on future CDM contracts.

Strategy: Establish and implement a set of standardized shop floor metrics in all the Air ForceDepot Maintenance operations. Research best business practices, conduct value stream analysis, and define future state processes with an action plan for implementation. Transformed maintenance will have: the characteristics of a lean enterprise; involve one simple IT system using open architecture; bring all resources at the point of use at time of need; employ a flexible; use right-sized, state of the art facilities and equipment; assure proper alignment of responsibility, authority and accountability under a single manager; and, use pro-active planning and scheduling of workload in anticipation of customer requirements. Direct cite customer funds on all new or renewal Contractor and Government Furnished Material contracts by Fall 2004.

Continuous Process Improvement

Objective: Develop and implement an Air Force standard model for continuous process improvement with a common language, training, and measurement methodology. The goal is to provide commanders and Airmen a means to see and eliminate waste in all we do; to provide them the tools and methods to enable our AF core value "Excellence in All We Do."

Background: The Air Force depots have led the way in early adoption of Lean-based process improvement. The depot leaders and workforce have delivered impressive performance improvements form early implementation efforts. Additional Lean-based process improvement efforts across Air Force operational support (e.g., the AF civilian fill process, support equipment management, and C4I ISP) have demonstrated that the same process improvement methods in manufacturing and maintenance are readily applied across Air Force mission areas. This initiative seeks to provide the tools and method for continuous process improvement that do not exist today.

Strategy: Develop, test and institutionalize an Air Force model and language for continuous process improvement. Develop a standard method to measure maturity in applying Lean-based process improvement and link these lean indicators to performance results tracked in the Air Force Logistics Balanced Scorecard. Develop and deliver process improvement training to initiate, sustain, and ingrain continuous improvement practices within and beyond our Air Force Logistics processes. We will demonstrate the model in leading initiatives proposed and coordinated among the Major Commands.

Change Management

Objective: The approach to organizational change consists of three parts:

- Issue identification. Addresses the "people" issues and risks to promote successful implementation of major organizational, process and technology transformations
- Obtain agreement and action. Accelerates and increases probability of success by increasing understanding resulting in unified, decisive action, and by preparing and equipping the leadership and workforce to thrive in the new environment
- Focus on helping people. Accomplishes a critical initiative together. A formal sustained effort addressing "people issues," enhances probability of success, and reduces risk when implementing an initiative.

Background: Previous work with the Support Center and DMRT did not overtly included specific provisions for addressing change management issues, either informally or formally.

Strategy: The change strategy is simple: build meaningful agreements among stakeholders to improve probability for successful implementation of eLog21 business initiatives. It includes a leadership strategy, cross-functional teamwork on critical issues, active and passive communications, and effective training to prepare workforce for new roles and responsibilities.

Future Financials

Objective: Ensure that financial processes for logistics operations (wholesale and retail level) best supports eLog21 business practices. A broad view spans both working capital funded operations and appropriated funded operations at retail level.

Background: The current Air Force financial systems don't support the future way the Air Force plans to conduct business. Today over half of the repair and sustainment actions are performed by non-DoD personnel outside of the Working Capital Fund. Policies and procedures that worked well for the Air Force over the past decade are outdated for our transformed logistics processes and must be reviewed for applicability. The current information technologies are becoming increasingly too expensive to support, difficult to track costs, and very transaction orientated with no near real-time data for commanders and financial managers.

Strategy: Implement financial processes that best support commanders and expeditionary operations while eliminating non-value added activities. Options may consist of creating a single working capital fund, changing the point-of-sale, pricing methodology changes or returning to a free-issue environment between the SMAG and DMAG. Develop transition plans for the future financial environment. Recommended changes to financial practices will be harmonized with the Air Force Material Command approved FY06 proposal to transfer funding associated with indirect costs from MAJCOM budgets to AFMC's.

Expeditionary Combat Support System (ECSS)

Objective: The objective for the Expeditionary Combat Support System (ECSS) is twofold:

- Acquire and implement a modern suite of COTS-based IT solutions to enable the future logistics vision defined in eLog21
- Retire the current legacy systems across the logistics domain

Background: The ECSS initiative contains multiple sub initiatives to improve IT domain logistics. This initiative plan addresses acquisition of an Enterprise Resource Planning (ERP) solution and supporting bolt-on COTS applications to enable future logistics.

Strategy: ECSS is a COTS based system that will enable the eLog21 future logistics vision by leveraging an ERP as its primary system. An ERP is a commercial technology solution that integrates financial, manufacturing, distribution, and other business functions in a single technology solution. In other words, it is a technology system that enables the seamless flow of information across an organization using a comprehensive set of interconnected modules. A core technology system like an ERP also creates the standardization of business processes and tools across the entire enterprise, regardless of program or site.

The Result: Assured War-Winning Capabilities