AIR FORCE SUSTAINMENT CENTER



Cost-Effective Readiness

Readiness Optimization in a Budget Constrained Environment

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Introduction

This white paper introduces the concept of weapon system cost-effective readiness. Through two decades of war, the Air Force sustainment community has been very effective in meeting war-fighter needs. However, this level of effectiveness comes at a cost as existing inventory ages and new capabilities are introduced. According to the July 2012 RAND Project Air Force report, fixed-wing aircraft Operating and Sustainment (O&S) cost is growing at an unsustainable

> rate. In order to address the cost growth, this white paper will focus on the key inputs to the requirements and budgetary processes that drive O&S cost. Quite simply, sustainment cost will drive the size of the force that the Air Force can afford which, in turn, impacts its ability to provide global vigilance, reach and power.

"We have two choices: Accept the costs and reduce capability or change the way we do business"

-Lt Gen Bruce Litchfield **AFSC Commander**

Fundamentally, we have two choices: Accept the costs and reduce capability or change the way we do business. Today's fiscal environment requires us to better synchronize logistics resources across multiple funds holders and execution managers. By understanding and aligning the interactions between funding activities, we can drive effectiveness without reducing capability.

Cost-Effective Readiness (CER) analyzes key inputs to Weapon System Sustainment (WSS), Depot Level Reparables, and Supply Chain supportability. End-to-end integration of aircraft readiness funding reveals process gaps, waste and efficiency opportunities. By focusing on the inputs that affect costs, the Air Force can optimize readiness and sustainment processes which ultimately frees up funds for high priority Air Force needs such as procurement.

CER Defined

CER is a disciplined approach that optimizes available resources to best align with mission requirements. This is a paradigm shift from the previous concept of "readiness at any cost," to a cost management strategy that effectively aligns execution of constrained resources to warfighter needs.

Why CER is Needed

As the Department of Defense transitions from war-time to peace-time funding, declining budgets dictate the need to develop and implement cost-effective solutions to reduce sustainment costs, while maintaining the readiness needed to meet military goals and objectives. CER is achieved through increased integration of readiness processes at all levels. Only through a strategic-level examination of the factors that drive readiness costs, and the interaction between them, will the Air Force achieve cost-effective readiness ensuring its ability to fly, fight and win in the future.

CER Tenets

There are eight fundamental guiding tenets to CER:

- Provide more readiness for the same cost or today's readiness for less cost
- Focus on cost drivers to reduce budget requirements vice budget cuts that simply reduce capability
- Use scientific, data driven decision making processes to achieve the best cost benefit
- Fully understand and validate risk and take cost-effective measures to mitigate
- Fund to required readiness targets, not above and beyond
- Understand the interaction between requirements, budgeting and execution processes and integrate them at all levels
- Seek opportunities to trade volume for velocity
- Leverage industry strengths and Air Force strengths to maximize capabilities and efficiencies

CER Initiatives

There are three levels of integration that are encompassed within the Cost-Effective Readiness model. The three levels are tactical (Center), operational (MAJCOM), and strategic (Air Force).

Tactical Level \$

The Air Force Sustainment Center (AFSC), part of Air Force Materiel Command (AFMC), has embarked on a groundbreaking effort to transform its operations from effective to cost-effective. AFSC has leveraged best practices from industry while maintaining focus on warfighter support to create "The AFSC Way." The AFSC Way is based on a shared leadership model that emphasizes speed (productivity), safety, quality, and costeffectiveness in every process. This business model is emphasized in every work center across the 33,000 person enterprise in order to achieve "Art of the Possible" results despite declining budgets and fiscal uncertainty. The AFSC Way uses scientific methods based on the Theory of Constraints, critical path and lean principles to drive continual process improvement to increase speed (productivity), eliminate waste, and remove constraints in critical processes. It is all about building a high-confidence plan and executing to the plan while understanding and reducing costs.

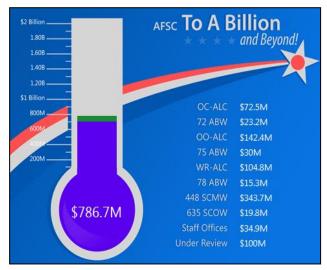
The focus on cost-effectiveness within AFSC has led to an initiative called "The Road to a Billion & Beyond" (R2B&B). The R2B&B is a cost-conscious rallying cry across the



Utilize the AFSC **Leadership Model to** achieve "Art of the Possible" results

organization that attacks each cost driver and challenges historical business practices utilizing a scientific, data-driven approach.

In FY13, the R2B&B campaign generated over \$700M in cost savings and avoidance. For example, through continuous process improvement initiatives, AFSC cut KC-135 Programmed Depot Maintenance (PDM) flow days in half (from an average of 229 to an average of 112 days). This resulted in increased capacity with minor resource adjustments enabling the program office to shift workload from contract to 100% organic depot maintenance at a 20% savings per aircraft totaling \$30M per year.



Those savings are for just one aircraft production line. AFSC made additional improvements in supply processes via strategic sourcing, reduction of procurement lead time, alternative parts utilization, and forecast accuracy.

As a \$16B a year enterprise, it is the duty of AFSC to be as cost effective as possible for the Air Force. But it is more than simply being good stewards of resources, it is about winning tomorrow's wars. The successes achieved at the tactical level in FY13 prove that integrated processes, a scientific approach and a focus on cost can achieve "Art of the Possible" results.

Operational Level \$\$

At the operational level, the integration of activities within AFMC and other MAJCOMs provide the opportunity to drive significant cost reductions. The reorganization of AFMC into the Five Center Construct (5CC) standardized processes and aligned both acquisition and product support under a single manager which provided the first steps toward CER at AFMC. As a result, the command can now focus on additional CER efforts such as life cycle management, should cost for both acquisition and sustainment programs, and Repair Network Integration (RNI) which are the cornerstones for better buying power. Tighter integration between requirements and sustainment execution unlock the opportunity for significant cost reductions. Recent AFMC CER efforts included leveraging reduced supply sales rates, focusing on reducing the cost of material, employing depot maintenance efficiencies, and realizing better than projected FY13 performance. These combined actions facilitated the Command offering approximately \$500M back to the Air Force in projected savings in FY15 providing a tangible example of providing today's readiness for less cost.

The emphasis on CER at the operational level requires resources, methods and initiatives that involve focused and agile planning. Several initiatives have been introduced that can help achieve CER such as increased utilization of depot capability via RNI concepts. The current repair network is very resource intensive with a \$14B budget and 46,000 maintainers. RNI

seeks to right-size capability and capacity at the network level by better and more efficient utilization of resources through efforts like centralization and consolidation. From a CER standpoint, decreasing redundancies enables more efficient use of resources that will allow for potential cost savings in manpower, equipment and facilities with minimal risk to the operational community. Another initiatve in support of CER is Performance Based Logistics (PBL) which provides the best mix of public (organic) vs. private (contractor) capabilities in order to optimize readiness and affordability.

Strategic Level \$\$\$

Given the successes achieved at the tactical level, imagine the possibilities to achieve CER at the strategic level. What if we better integrate processes from requirements to capability to budgeting by utilizing the CER tenets? Currently, some CER initiatives are in work at the strategic level as budgets continue to shrink. Under the CER construct, Air Force leaders will



better understand where they are taking risk and utilize process integration to mitigate the risks. The solution proposed by CER suggests that the way to meet the needs of the Air Force is to integrate processes, develop an executable plan, reduce the requirement closer to peace-time needs and surge the system if conflicts arise. The first steps in taking a scientific approach toward evaluating surge capabilities are underway with surge and recovery modeling

in both the Mobility Air Forces (MAF) and Combat Air Forces (CAF) led by AF/A4/7P.

Another example of a CER initiative currently underway is the integration and understanding of the variances between planned flying hours and actual flying hours in the Flying Hour Program. From a supply chain/depot perspective, over-estimating or under-estimating the requirement drives waste into the process by either procuring and positioning scarce resources in an area not needed or failing to have the necessary resources in other areas which drives costly work-arounds in order to accomplish the mission. Additional CER initiatives at the strategic level include right-sized War Readiness Engines (WRE) levels, reducing Readiness Spares Packages (RSP) from 30 days to 20 days where appropriate and analysis of peace-time/war-time aircraft availability.

Next Steps

The CER tenets proposed in this white paper, if adopted across all levels of the Air Force, ensure we have the capability to fly, fight and win in the future. As one of the three Strategic Priorities within the Enterprise Logistics Strategy (ELS), the application of CER concepts complements ongoing activities such as the SECAF WSS Directive, Cost of Logistics and the Product Support Enterprise Vision (PSEV). By providing proven scientific principles and tenets, CER will assist in the alignment of resources from planning, to budgeting, to execution, ultimately enabling future modernization and procurement. Through embracing CER tenets, we will truly accomplish readiness optimization in a budget constrained environment and achieve the "Art of the Possible."