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Air Force Materiel Command Reorganization Analysis

Final Report

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Summary

Background

The 2011 Budget Control Act reduces U.S. Department of Defense spending by \$487 billion over the next decade, and the Office of the Secretary of Defense (OSD) Resource Management Decision 703A2 directed that civilian staffing levels for all services return to fiscal year (FY) 2010 levels. This meant that the U.S. Air Force needed to reduce its civilian operations and maintenance (O&M) authorizations by 16,500; it chose to distribute these reductions across the force. The Air Force Materiel Command's (AFMC's) share of the reductions amounted to 4,500 authorizations out of approximately 22,000 civilian O&M positions. This directive, coupled with a reversal of OSD and Headquarters Air Force mandates to insource and strengthen acquisition skills, led AFMC to fundamentally reexamine how it operates, and the command published a plan for reorganization in November 2011. In the Defense Authorization Act for FY 2012, Congress directed the Secretary of the Air Force to have a federally funded research and development center provide an independent review of the proposed reorganization.

Purpose

In late January 2012, the Secretary of the Air Force asked RAND Project AIR FORCE (PAF) to conduct the required independent review of AFMC's proposed reorganization, as required by the Defense Authorization Act for FY 2012, and to accomplish the following five tasks:

- Describe current functional responsibilities, manpower authorizations, and disposition in the proposed restructure, including an assessment of life-cycle costs.
- Provide an independent assessment of how realignments would likely affect life-cycle management, weapon system sustainment, and support to the warfighter.

- Examine how the Air Force should be organized to best conduct life-cycle management and weapon system sustainment, with any analysis of costs and savings subject to the consideration of overall readiness.
- Recommend alternatives for meeting these objectives.
- Provide a briefing and a written report on the analysis.¹

The time available to complete these tasks was relatively short. As specified in Section 326 of the National Defense Authorization Act for FY 2012, the analysis was limited to how the reorganization would affect product development/support-system design and operations support (depot maintenance and Air Force supply chain operations).² We did not examine how the reorganization affected management of nuclear weapons, developmental testing, or laboratory and basic research.

Results

Key Attributes of the Reorganization

The reorganization reduces AFMC's 12 centers to five, including two new centers commanded by three-star generals: a life-cycle management center at Wright-Patterson Air Force Base (AFB), Ohio, and a sustainment center at Tinker AFB, Oklahoma. The Air Force Life Cycle Management Center (AFLCMC) would support product development/support-system design and planning activities executed by the service acquisition executive (SAE) through program executive officers (PEOs), system program managers (SPMs), and product support managers (PSMs). AFLCMC responsibilities include supporting the SAE by providing trained personnel to serve as PEOs, SPMs, and PSMs and developing the processes, providing the facilities and information systems, and fulfilling other organize, train, and equip functions in support of the SAE. The Air Force Sustainment Center (AFSC) would manage all depot maintenance and Air Force supply chain activities. Under the reorganization, the AFSC would supervise the activities of three air logistics complexes, a supply chain management wing, and a supply chain operations wing. The plan also calls for two new organizations to be created at the air logistics complexes: aerospace sustainment directorates (ASDs) and strategic planning units (SPUs).

¹ Appendix A lists both the congressional requirements and the PAF taskings.

² By *product development and support-system design*, we mean all the functions associated with the design, development, fielding, and modification of weapon systems, subsystems, and their components, including functions to ensure reliability, maintainability, and sustainability (for example, engineering design); initial support concept development; and system fielding and weapon system beddown planning. We limit *operations support* in this analysis to those functions associated with depot maintenance and Air Force supply chain management. These functions include system and subsystem overhaul and modifications to support the operation of the system over its lifetime, as well as supply chain management operations to provide component parts to operating locations.

RAND Project AIR FORCE Findings

The PAF research team analyzed AFMC's organization change request and unit manning documents,³ confirming that 1,051 spaces would be eliminated and that these eliminations would yield annual savings of approximately \$109 million. Our analysis also confirmed that AFMC would retain all critical line functions. As part of the organizational realignment, and in implementing the OSD product support business model, all program execution personnel report to the SAE. Formerly, SPMs of mature systems reported to the commanders of the air logistics centers (renamed air logistics complexes in the new organization). In addition, all depot maintenance and supply chain operations align under the AFSC commander.

Our analysis also indicated that the reorganization creates opportunities to achieve key product development/support-system design and operations support goals, including the potential to standardize core "best-practice" product development processes, streamline execution, and introduce support considerations early in product development—all long-standing issues that have persisted under many organizational structures. Additionally, the reorganization creates opportunities to improve operations support efficiencies by standardizing maintenance and Air Force supply chain best practices across all air logistics complexes and by facilitating command and control of Air Force supply chain operations.

At the same time, the reorganization creates some challenges. For example, it raises questions about the horizontal integration and collaboration between the SPMs (who are in the SAE execution management reporting chain) and maintenance and supply chain personnel (who are in the AFSC reporting chain). It also raises concerns about the career management and leadership development of personnel in the product development/support-system design and operations support reporting chains. Finally, we note that it expands the workload for PEOs and raises concerns about their training and experience in supervising new product support functions.

Our analysis of the reorganization indicates that the Air Force has recognized these challenges and has taken several steps to mitigate their potential effects. For example, it has developed mechanisms to foster horizontal integration, including establishing a new ASD at each air logistics complex to maintain integration across program management, depot maintenance, and supply chain personnel. Furthermore, SPMs will continue to change their geographical location (from the AFLCMC or an AFLCMC operating location to an air logistics complex) as weapon systems mature.

Under the previous organization, both formal and informal communication channels were required to support life-cycle management, and that will not change under the new organization. The formal channels remain in place, and, to the extent

³ Air Force Materiel Command, *Organizational Change Request for Air Force Materiel Command*, OCR 12-01, February 6, 2012. The PAF research team also received a file developed from the February 28, 2011, end-of-month AFMC unit manpower document using FY 2012 totals, which was the baseline for the reorganization.

possible, the Air Force is mapping informal channels to try to ensure that they remain intact.

Additionally, the Air Force has addressed issues of career and leadership development for those involved with operations support. However, the same issues for the PEO and SPM appear to warrant examination, as does the workload of some PEOs. The Air Force might wish to consider delegating some program execution activities to SPMs.

Our analysis was unable to judge the effects of the reorganization on support to the warfighter and efficiencies associated with product development/support-system design and operations support. Furthermore, the effectiveness and efficiencies of the proposed organization are, at this point, unknown and will depend on how the reorganization is implemented over time. Many factors influence weapon system support beyond the characteristics of the organization chosen to support such systems over their life cycles, including leadership, funding, and unanticipated events. Policy, processes, and incentives should be put in place to motivate integrated and balanced decision-making. Accordingly, we suggest that the Air Force develop and use a suite of metrics to track performance against goals. These metrics should include applicable existing metrics, as well as new metrics, to capture such characteristics as productivity, aircraft availability, supply chain performance, program execution, and the development of the workforce. In particular, processes that depend on integrated SPM, maintenance, and supply chain support warrant close monitoring. If the metrics indicate deterioration, the Air Force should ascertain the root cause of the decline and adjust accordingly.

Options for Consideration

We used selected insights from the academic literature on organizational design to assess the reorganization. Both theory and business reengineering literature identify well-understood goals as essential to designing organizations and focusing their efforts. The business reengineering literature indicates that process reengineering can lead to organizations that are more likely to achieve their goals. We note that the Air Force's doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) construct provides a useful framework to ensure that all key aspects of the reorganization receive consideration. Finally, the literature points out that all organizational designs will present both opportunities and challenges.

We developed four options to address AFMC's operational-level product development/support-system design and operations support goals, opportunities, and challenges. All build on the current reorganization and include processes for the following:

1. improving enterprise support-system design planning
2. enforcing enterprise support-system design planning guidance early in the acquisition process

3. standardizing best-practice product development and operations support processes
4. improving command and control support to the warfighter.

Each of these process improvements will result in modifications to the proposed organizational structure. Furthermore, the options are neither mutually exclusive nor interdependent.

Conclusions and Recommendations

Our analysis led to the following conclusions:

- The estimates for AFMC reorganization-authorized civilian positions and cost reductions are consistent with the findings of our analysis.
- All critical line functions appear to remain intact.
- The reorganization brings both opportunities and challenges; the impact of the reorganization on effective warfighter support and process efficiencies is currently unknown and will be affected by the implementation approach. In addition, many factors outside the reorganization will also determine effectiveness and efficiencies—for example, leadership focus, resource constraints, and other ongoing process improvements.
- The four options that we have identified here offer the potential to improve the effectiveness (support to the warfighter) and efficiency of operations.

Our recommendations are as follows:

- Concentrate on process improvements in implementing the AFMC reorganization.
- Measure the proposed reorganization for effectiveness and efficiency, perform root cause analyses, address any problems identified, and continuously improve processes.
- Consider the four options when implementing the reorganization.