



PROJECT AIR FORCE

Enhancing Air Force Materiel Command Support to the Warfighter

Kristin F. Lynch, John G. Drew, Patrick Mills

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Preface

Since 2012, the Air Force Materiel Command (AFMC) Center structure has twice reorganized. In the first restructuring, which took place in 2012, AFMC aligned the air logistics centers and supply chain management functions under a newly created Air Force Sustainment Center (AFSC). In the second reorganization, which took place in 2015, the U.S. Air Force consolidated installation and mission support responsibilities under a new Air Force Installation and Mission Support Center (AFIMSC) within AFMC. The Air Force wants and needs to know how to better leverage these two centers to provide better-quality information to component staffs so they can be aware of global resource capabilities and risks. This project was initiated to help move AFSC and AFIMSC, relatively new organizations, forward along that path. With years of research and several reports already written describing an overall vision (which much of Air Force leadership supports) and a range of actions available (or necessary) to achieve it, the next logical step seemed to be to focus very concretely on near-term actions each center could take. This analysis aims to recommend ways AFMC and its centers, specifically the AFSC and AFIMSC, can adapt and improve support to the warfighter. We compare the current state of AFMC capability management, including the organization construct currently in place, to RAND Project AIR FORCE (PAF) concepts developed over the past 20 years defining a combat support enterprise. We then identify gaps between processes, tools, systems, and doctrine in place and being used now in these organizations with the processes, tools, systems, and doctrine recommended in the previous PAF work and recommend near- and longer-term implementation actions to address the gaps.

The research reported here was commissioned by the U.S. Air Force and conducted within the Resource Management Program of RAND Project AIR FORCE as part of a fiscal year 2016 project titled “Enhancing Global Agile Combat Support Processes.” The work was sponsored by the Commanders of the Air Force Installation and Mission Center and the Air Force Sustainment Center and should be of interest to personnel involved in logistics, installation and mission support, or sustainment in the U.S. Air Force.

RAND Project AIR FORCE

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Summary

The U.S. Air Force recognized long ago its need to improve its global enterprise management of combat support capabilities and better integrate them with operations.¹ Over the past 20 years, RAND Project AIR FORCE (PAF) has analyzed how to enhance combat support planning, execution, monitoring, and control to better support the warfighter.² That body of work led to the development of a vision for the combat support enterprise, which has been accepted, at least in part, by senior Air Force operations and logistics leaders. The Air Force combat support community has moved forward with some of the recommendations suggested by PAF, including changing policy and doctrine, standing up analysis cells, and pilot testing new processes, but the most prominent changes have been organizational.

Since 2012, the Air Force Materiel Command (AFMC) Center structure was reorganized twice—once to consolidate operations support, such as depot maintenance and supply chain management, into the Air Force Sustainment Center (AFSC), and a second time to consolidate installation and mission support (I&MS) functions into the Air Force Installation and Mission Support Center (AFIMSC). These two new organizations serve as global managers for the functions for which they have responsibility and authority.

AFMC centers now perform most planning, preparation, and execution of combat support functions for contingency operations. This consolidated authority has the potential to provide more potent warfighter support if processes, tools, and policies can be better aligned and used. The possibilities include enhancing warfighter support by rebalancing combat support resources to increase capability and programming for requirements to support the next operational environment,³ which may not mirror the environment of the past.⁴

¹ As part of their warfighting responsibilities, combatant commanders (CCDRs) develop plans, assess risks to those plans, and manage those risks and resources. Component staffs (for example, Air Force forces [AFFOR] staffs) support CCDR risk assessments by providing service-specific capability and risk assessments based on the information they have available. The Air Force does its best to present needed capabilities in the near term and make investments and other allocations or reallocations to provide the capabilities needed in the longer term. Effectively managing Air Force capabilities requires the ability to synthesize and prioritize competing demands, integrate various sources of supply, and analyze capabilities and risks in a sophisticated way. We call this *global enterprise management*.

² See, for example, Robert S. Tripp, Kristin F. Lynch, John G. Drew, and Robert G. DeFeo, *Improving Air Force Command and Control Through Enhanced Agile Combat Support Planning, Execution, Monitoring, and Control Processes*, Santa Monica, Calif.: RAND Corporation, MG-1070-AF, 2012.

³ Patrick H. Mills, John G. Drew, John A. Ausink, Daniel M. Romano, and Rachel Costello, *Balancing Agile Combat Support Manpower to Better Meet the Future Security Environment*, Santa Monica, Calif.: RAND Corporation, RR-337-AF, 2014.

⁴ Alan J. Vick, *Air Base Attacks and Defensive Counters: Historical Lessons and Future Challenges*, Santa Monica, Calif.: RAND Corporation, RR-968-AF, 2015.

The Air Force wants and needs to know how to better leverage these two centers to provide better-quality information to component staffs so they can be aware of global resource capabilities and risks. This project was initiated to help AFSC and AFIMSC—relatively new organizations as they are currently organized—progress along that path. With years of research and several reports already written describing an overall vision (which much of Air Force leadership supports) and a range of actions available (or necessary) to achieve it, the next logical step seemed to be to focus very concretely on near-term actions each center could take to improve support to the warfighter. This analysis compares the current state of AFMC capability management to PAF concepts developed over the past 20 years that define a combat support enterprise. We reviewed current documentation, including program action directives, Air Force Instructions, and other reference materials provided by both personnel and organizations inside and outside AFMC, to gain important insights (for example, AFSC’s and AFIMSC’s current authorities and responsibilities and the relationships between major commands [MAJCOMS] and AFFORs and AFSC and AFIMSC and its detachments).⁵ We compared these materials to the PAF vision of combat support enterprise capabilities identified and defined through research conducted over the last two decades. We then identified gaps between processes, tools, systems, and doctrine already in place and being used now in these organizations and the processes, tools, systems, and doctrine recommended in the previous PAF work and recommended near- and longer-term actions to address the gaps.

Findings

In our comparison of as-is roles and responsibilities to the PAF vision of combat support enterprise capabilities, we found the following:

- The present AFSC and AFIMSC organizational structure can support global management processes supporting the warfighter.
- Global management of combat support capabilities is still divided among and between organizations.
- Vertical processes (within functional communities) for global management of combat support resources are in varying stages of development, with some almost complete and others requiring enhancement.
- Within any particular stovepiped functional area, the community appears to work from a common understanding of what is needed to accomplish the mission.
- Integration of horizontal (across stovepipes) and vertical (within stovepipes) processes still needs improvement to provide senior leaders with better visibilities into global combat support capabilities and constraints.
- Identified characteristics of successful global managers include (1) an established relationship with the warfighter, (2) an analysis cell to conduct global assessments of

⁵ Table 2.1 in Chapter Two shows the list of stakeholders with whom we met.

capabilities and constraints, (3) rule-based decision-support tools, and (4) standard processes that are well understood by the warfighter.

Gaps

The findings listed in the previous section led to the identification of several overarching gaps between the current processes and those processes outlined in the PAF vision for how to provide better support the warfighter. Several of these gaps apply to both AFSC and AFIMSC:

- Neither organization has a clear vision for global capability management across and among its stovepiped functions.
- Processes, instructions, guidance, and decision-support tools vary across functions and within each center.
- Individual functional analyses are not integrated to provide capability analyses.

Recommendations

For each gap identified, we suggest enhancements for both AFSC and AFIMSC focusing on communication and relationships, policy and instructions, and processes and decision-support tools. The recommendations for each center are listed as near-, mid-, or long-term recommendations. These recommendations can serve as a roadmap for improving support to the warfighter. Near-term recommendations may require some resources but should be fairly easy to accomplish quickly at low cost. Thus, we consider these recommendations to be the first steps that AFMC should take to improve support to the warfighter. Mid-term recommendations, while not appearing too difficult to achieve, may take longer to implement. And finally, long-term recommendations require investment of time and resources. This does not mean that AFMC should wait to begin addressing the long-term recommendations; all can be started immediately. However, the long-term recommendations most likely will take the longest to implement.

AFSC Recommendations

- Near-term recommendations:
 - Develop a unifying vision and strategy articulating the value of global enterprise management and how AFSC intends to implement global management processes to support the warfighter.
 - Develop a communication plan to educate personnel, both inside AFSC and outside (that is, the warfighter), on the vision and how it will be incorporated into the current organizational construct and processes.
 - Improve communication within and among AFMC centers so all centers are using the same warfighter requirements and assumptions to support global management processes and analyses are shared within and across AFMC centers.
 - Designate one place for warfighter requirements to enter AFMC. AFSC should also have one identified entity to obtain and distribute warfighter requirements within AFSC.

- Reenergize an analysis shop such as the Combat Support Planning, Execution, and Control (CSPEC) office to conduct enterprise-level warfighter requirements analyses.⁶
- Mid-term recommendations:
 - Document global management processes in tactics, techniques, and procedures and policy, including
 - how operational demands should be developed and translated to requirements
 - how requirements will flow to functional areas
 - how assessments will be conducted and shared across functional areas
 - how global assessment effects will be communicated with the warfighter.
- Long-term recommendations:
 - Assign responsibility and authority for integrated enterprise management processes to a single organization within AFSC. This responsibility includes
 - the ability to look across functional stovepipes horizontally and within stovepipes vertically to identify opportunities to better balance capabilities
 - providing insights into needed investments to enhance combat support capabilities and the ability to quantify how those investments impact Air Force capabilities.
 - Invest in development of decision-support tools to aid enterprise analyses and better communicate with the warfighter.

AFIMSC Recommendations

The AFIMSC is a much newer organization, still growing into its role as the global manager for I&MS capabilities. With that in mind, we offer these recommendations, some of which may already be in development.⁷

- Near-term recommendations:
 - Develop an internal, unifying vision and strategy so all AFIMSC personnel understand the AFIMSC purpose, capabilities, and how it can best support its external customers. This includes
 - identifying the critical processes needed to support the warfighter
 - streamlining functions and align staff to support those critical processes.
 - Develop an external strategy and vision articulating the type of support the AFIMSC will provide to the warfighter, documenting
 - the kind of support the warfighter can expect from AFIMSC
 - the way the warfighter will receive that support
 - the method the warfighter can use to request the support needed.

⁶ In the early 2010s, the CSPEC office was established in the Air Force Global Logistics Support Center to conduct enterprise assessment for spares and other commodities to support war plans and exercises. The office remains, but its current focus is solely on wargames.

⁷ Since the time of this analysis, the AFIMSC has implemented most of the near-term recommendations according to personnel in the AFIMSC Expeditionary Support Directorate, April 2018.

- Develop plans to communicate internal and external strategies and vision. Use these plans to educate personnel inside and outside AFIMSC about how this vision will apply within the current organizational construct and to existing processes.
- Improve communications across AFIMSC directorates, among AFMC centers, and among those organizations providing input to or receiving output from the AFIMSC and its detachments, such as the Air Force Personnel Center, AFSC, and AFFOR staffs. The goal should be to have all centers use the same warfighter requirements and assumptions to support global management processes and to share analyses within and across AFMC centers.
- Designate one place for warfighter requirements to enter AFMC. AFIMSC should also have one organization identified to receive and distribute warfighter requirements.
- Designate one entry point into AFIMSC for AFFOR staff information.
- Mid-term recommendations:
 - Review and refine the capabilities library contained in Appendix II of Program Action Directive 14-04.⁸
 - Standardize how the I&MS workload is divided across AFFORs, MAJCOMs, headquarters AFIMSC, and the AFIMSC detachments.
 - Codify I&MS global management processes and responsibilities in policy and tactics, techniques, and procedures.
- Long-term recommendations:
 - Assign responsibility and authority for enterprise management processes to a single organization within headquarters AFIMSC, either to an existing organization or by establishing a new organization with these responsibilities. This organization would
 - identify opportunities to better balance capabilities across functional stovepipes horizontally and within stovepipes
 - provide insights into needed investments to enhance combat support capabilities and the ability to quantify how those investments affect Air Force capabilities
 - invest in development of decision-support tools to aid enterprise analyses and better communicate with the warfighter.

Conclusions

The Air Force has designated global managers within AFMC to better support the warfighter. The existing AFMC organization is suitable for providing that support. The key to working within any organization is defining processes, codifying those processes in doctrine, and employing decision-support tools that are vetted and understood by all communities.

We found steps that can be taken to improve integration of combat support and operations. The first step for both centers is to engage with the warfighter and provide global assessments so

⁸ Air Force Program Action Directive 14-04, *Implementation of the Air Force Installation and Mission Support Center (AFIMSC)*, February 25, 2015.

warfighters can understand the value of AFMC's support. The recommendations in the previous section will help AFMC sustain and enhance global management over time and through leadership changes.

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That we received help and insights from those acknowledged here should not imply that they concur with the views expressed in this report. Responsibility for the content of the document, analyses, and conclusions lies solely with the authors.

Abbreviations

635 SCOW	635 Supply Chain Operations Wing
A2AD	anti-access area denial
ABDR	aircraft battle damage repair
AFB	Air Force Base
AFFOR	Air Force Forces
AFI	Air Force Instruction
AFICA	Air Force Installation Contracting Agency
AFIMSC	Air Force Installation and Mission Support Center
AFMC	Air Force Materiel Command
AFPC	Air Force Personnel Center
AFPC/DP2	Air Force Personnel Center, Directorate of Personnel Operations
AFSC	Air Force Sustainment Center
AOR	area of responsibility
C2	command and control
CCDR	combatant commander
CE	civil engineer
CSPEC	Combat Support Planning, Execution, and Control
DoD	U.S. Department of Defense
GACP	Global Ammunition Control Point
HAF	Headquarters, Air Force
I&MS	installation and mission support
JFACC	joint forces air component commander
MAJCOM	major command
MoE	measure of effectiveness
OSD	Office of the Secretary of Defense
OPLAN	operations plan

PAD	program action directive
PAF	RAND Project AIR FORCE
PSU	primary subordinate unit
POM	program objective memorandum
TTP	tactic, technique, and procedure
WRM	war reserve materiel

1. Introduction

As part of their warfighting responsibilities, combatant commanders (CCDRs) develop plans, assess risks to those plans, and manage those risks and resources. Component staffs (for example, U.S. Air Force forces [AFFOR] staffs) support CCDR risk assessments by providing service-specific capability and risk assessments based on the information they have available. For those air component staffs, such information as the status of theater forces and operating locations should be readily available. But there is information about a range of capabilities and resources that may not be readily available, although no less vital to assessing risks and conducting operations—namely, globally managed resources that are not under the direct control of the joint forces air component commander (JFACC), many of which are not even located in their theater. These globally managed resources directly contribute to the ability of theater forces to generate combat sorties and an operating location to support the beddown of a number of aircraft and people.

The Air Force has chosen, over time, to consolidate and assign management of some of its capabilities and resources to centralized organizations. In 2011, as part of a major reorganization to achieve reductions required by a Budget Control Act,¹ Air Force Materiel Command (AFMC) consolidated all operations-support functions, such as depot maintenance and supply chain operations, under the newly created Air Force Sustainment Center (AFSC).² In 2014, in response to the 2014 National Defense Authorization Act, the Air Force centralized management and oversight of its installation and mission support (I&MS) functions in the newly created Air Force Installation and Mission Support Center (AFIMSC), also under AFMC.³ The Air Force also subsequently transferred global management of war reserve materiel (WRM) to AFMC. This places the responsibility for a large share of two capabilities key to JFACC success under AFMC: generating sorties and supporting expeditionary bases.⁴

In addition to organizational changes within AFMC, defense planning guidance has also shifted to focus on operations in anti-access area denial (A2AD) environments. Defense

¹ The Budget Control Act of 2011 (Public Law 112-25, Budget Control Act of 2011, August 2, 2011) directed the U.S. Department of Defense (DoD) to reduce its future spending by approximately \$487 billion over a ten-year period following the passage of the law (U.S. Department of Defense, *Defense Budget Priorities and Choices*, Washington, D.C., January 2012a, p. 1).

² Resource Management Decision 703A2 called for all services to return to their fiscal year 2010 civilian staffing levels.

³ Public Law 113-66, National Defense Authorization Act for Fiscal Year 2014, Sec. 904, Streamlining of Department of Defense management headquarters, paragraph a, December 26, 2013.

⁴ Major commands (MAJCOMs) that provide forces still provide the wing-level maintenance capability, and the Defense Logistics Agency provides fuel, both critical to sortie generation capability. For the expeditionary bases, we include in this view of expeditionary bases the ability to open, protect, and sustain them.

planners, seeking to adapt to operating in an A2AD environment, are developing new tactics and concepts to address these threats. These operational concepts, while known by different names, involve many of the same attributes: dispersed operations, long sortie durations, beddown at austere locations, some prepositioning of assets, and a dynamic operating environment.

The new operational concepts will generate requirements for logistics and installation support that AFMC and its centers, and the Air Force more broadly, do not yet fully understand. Given the need to provide CDRs with accurate and timely information, it is incumbent on these centers to be able to effectively synthesize and prioritize competing demands, integrate various sources of supply, and analyze the capability to generate combat sorties and beddown force and their associated risks. We call this *global management*.

This analysis identifies targets of opportunity for AFMC centers to position themselves to provide proactive and enhanced support to the warfighter, so warfighters are positioned to achieve their operational objectives in any operational environment.

The Air Force recognized long ago its need to improve its global management of combat support capabilities and better integrate them with operations. Over the past 20 years, RAND Project AIR FORCE (PAF) has analyzed ways to enhance combat support planning, execution, monitoring, and control to better support the warfighter.⁵ PAF helped the Air Force develop conceptual models and associated analytic frameworks for managing global combat support functions and better integrating them with operational planning and execution.⁶ That work led to the development of a vision for the combat support enterprise, including identifying the capabilities needed in the combat support enterprise. Further, PAF developed an operational architecture focused on better linking command and control (C2) of combat support with operations.⁷ PAF recommendations to implement the vision as delineated in the operational architecture included changes in processes, policy, doctrine, organization, and training.

⁵ For example, see James Leftwich, Robert S. Tripp, Amanda B. Geller, Patrick Mills, Tom LaTourrette, Charles Robert Roll, Jr., Cauley Von Hoffman, and David Johansen, *Supporting Expeditionary Aerospace Forces: An Operational Architecture for Combat Support Execution Planning and Control*, Santa Monica, Calif.: RAND Corporation, MR-1536-AF, 2002; Terry L. Gabreski, James A. Leftwich, Robert S. Tripp, C. Robert Roll, Jr., and Cauley Von Hoffman, "Command and Control Doctrine for Combat Support: Strategic- and Operational-Level Concepts for Supporting the Air and Space Expeditionary Force," *Air and Space Power Journal*, Vol. 17, No. 1, Spring 2003; Patrick Mills, Ken Evers, Donna Kinlin, and Robert S. Tripp, *Supporting Air and Space Expeditionary Forces: Expanded Operational Architecture for Combat Support Execution Planning and Control*, Santa Monica, Calif.: RAND Corporation, MG-316-AF, 2006; Robert S. Tripp, Kristin F. Lynch, John G. Drew, and Robert G. DeFeo, *Improving Air Force Command and Control Through Enhanced Agile Combat Support Planning, Execution, Monitoring, and Control Processes*, Santa Monica, Calif.: RAND Corporation, MG-1070-AF, 2012a; and Robert S. Tripp, James M. Masters, Kristin F. Lynch, John G. Drew, David W. George, Robert G. DeFeo, Jerry M. Sollinger, and Raymond A. Pyles, *The Evolving Air Force Logistics Enterprise: A Vision and Next Steps*, Santa Monica, Calif.: RAND Corporation, unpublished draft, not available to the general public.

⁶ For example, see Tripp et al., 2012a.

⁷ For a detailed strategic- and operational-level C2 architecture integrating enhanced combat support processes, see Kristin F. Lynch, John G. Drew, Robert S. Tripp, Daniel M. Romano, Jin Woo Yi, and Amy L. Maletic, *An Operational Architecture for Improving Air Force Command and Control Through Enhanced Agile Combat Support*

The PAF vision for the combat support enterprise has been accepted, at least in part, by senior Air Force operations and logistics leaders. The Air Force combat support community has adopted some of the recommendations suggested by PAF, and some of the steps the Air Force has taken include revising policy and doctrine, standing up analysis cells, and pilot testing new processes. The most prominent changes, however, have been organizational ones, such as moving WRM authority to the AFSC and many installation support functions to the AFIMSC.

In the past, the Air Force has made organizational changes without first laying out its own plan for how these new organizations will actually add value beyond broad pronouncements of intent. This leaves it up to those practitioners standing up the organizations to develop and form over time the analytic infrastructure necessary to operate more effectively.

Neither the AFSC nor AFIMSC was formed with the expressed goal of improving support to the warfighter (for example, enhanced agile combat support resource-informed capability and risk assessments), but their existence and the scope of the resources and personnel under their management present opportunities. This consolidation of authority under AFMC has the potential to provide more potent warfighter support if processes, tools, and policies can be aligned and used. The possibilities include enhancing warfighter support by rebalancing combat support resources to increase capability and programming for requirements to support the next operational environment, which may not mirror the environment of the past.⁸

Organization of This Report

The remainder of the report outlines and analytical approach, findings, and recommendations. Chapter Two presents the context for the analysis and the analytic approach used for the analysis. Chapter Three presents findings and the gaps identified in the analysis. Recommendations for near-, mid-, and long-term implementation for the AFSC and AFIMSC are presented in Chapters Four and Five, respectively. Chapter Six summarizes the conclusions. The report also contains one appendix, which has excerpts from the PAF-developed operational architecture. This architecture defines processes and echelons of command responsible for executing enhanced combat support planning, execution, monitoring, and control.

Planning, Execution, Monitoring, and Control Processes, Santa Monica, Calif.: RAND Corporation, RR-259-AF, 2014.

⁸ On rebalancing, see Patrick H. Mills, John G. Drew, John A. Ausink, Daniel M. Romano, and Rachel Costello, *Balancing Agile Combat Support Manpower to Better Meet the Future Security Environment*, Santa Monica, Calif.: RAND Corporation, RR-337-AF, 2014. On this history of operational environments, see Alan J. Vick, *Air Base Attacks and Defensive Counters: Historical Lessons and Future Challenges*, Santa Monica, Calif.: RAND Corporation, RR-968-AF, 2015.

2. Analytic Approach

This analysis aims to identify ways that the AFSC and AFIMSC, given their current organizational construct, can better support the warfighter in light of the current and near-term fiscal and operational environments. The intent is to provide a range of recommendations for improving AFMC warfighter support that senior leaders can consider for implementation both in the near and long term. In this chapter, we first provide some context for the analysis and then discuss the analytic approach we used.

Context

In this report, we assessed how global managers within AFMC currently support the warfighter and what concrete steps could be taken to improve that support. We constrained the analysis to the current division of responsibilities within existing AFMC centers and did not assess competing ways of dividing or consolidating those responsibilities. We did so for two reasons.

First, most of PAF's research on this topic (some of which is referenced in the appendix) has focused on *how* the Air Force should perform global management tasks, not *who* should perform them. The former is concerned with designing and building analytic capability—that is, information, processes, tools, and skills needed to create information products to inform decisions. The latter is concerned with decision rights—who has the authority to make certain decisions. In fact, decision rights have only recently been reassigned. AFMC has reorganized and consolidated functions and responsibilities twice within the last five years. There has been little time to understand the effect of those changes and to see how well the system is performing today. It is premature to propose alternatives when the advantages and disadvantages of the new arrangements are not totally clear.

Second, our specific project charter was to propose actions the Air Force could implement now. Reassigning decision rights requires significant care, time, and coordination to plan and execute and will be much harder to change or reverse once accomplished. AFMC center leadership can take a number of actions now to improve global management processes, which can adjust along the way.

Because we did not seek to reevaluate whether AFMC's structure and organization could be improved, instead setting out to help it improve its processes within existing organizational construct, our recommendations focus on improving support to the warfighter, specifically

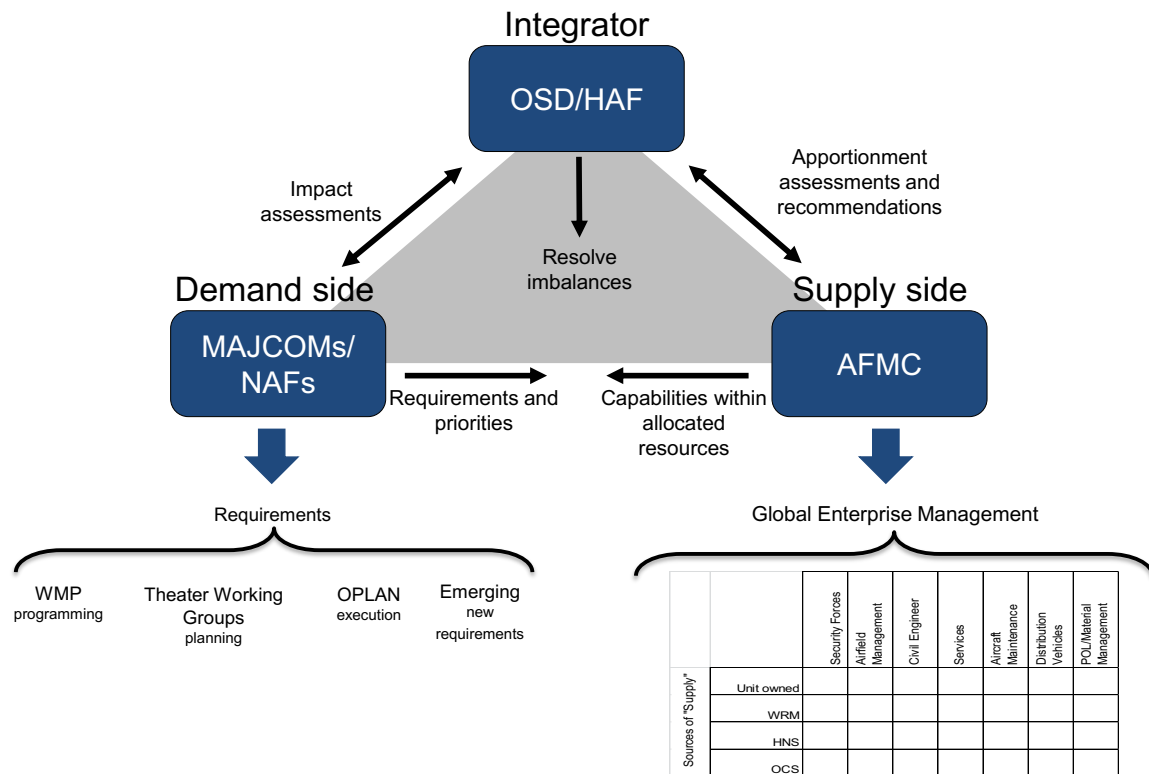
within the AFSC and AFIMSC, via changes to processes, tools, and systems.¹ Further improvements to AFMC's structure may be possible to enable better warfighting support, but as the rest of this analysis shows, there are many process enhancements the AFSC and AFIMSC can put into practice now within their current construct.

In addition to the scope described, we evaluated the roles and responsibilities of AFMC with a resource allocation framework. Many years of PAF research led to the development of the resource allocation framework, shown in Figure 2.1, to better integrate combat support capabilities and constraints into the warfighter planning and execution process.² The framework specifies demand-side organizations (which call for resources to meet operational objectives), supply-side organizations (which seek to meet those demands within approved resource levels across given time frames), and an integrator (who resolves imbalances between the two sides as necessary). The resource-allocation framework specifies the relationships between suppliers and demanders of combat support resources. The framework helps categorize existing relationships and identify new or enhanced roles and responsibilities needed.

¹ The other four AFMC centers—the Test Center, the Life Cycle Management Center, the Nuclear Weapons Center, and the Air Force Research Laboratory—are outside the scope of this analysis.

² Robert S. Tripp, Kristin F. Lynch, Charles Robert Roll, Jr., John G. Drew, and Patrick Mills, *A Framework for Enhancing Airlift Planning and Execution Capabilities Within the Joint Expeditionary Movement System*, Santa Monica, Calif.: RAND Corporation, MG-377-AF, 2006. This document and others explain how a resource-constrained strategies-to-tasks framework could be used to describe the roles and responsibilities of demands and suppliers of resources and capabilities. See, also, Leftwich et al., 2002; Mills et al., 2006; and Kristin F. Lynch, John G. Drew, Robert S. Tripp, Daniel M. Romano, Jin Woo Yi, and Amy L. Maletic, *An Operational Architecture for Improving Air Force Command and Control Through Enhanced Agile Combat Support Planning, Execution, Monitoring, and Control Processes*, Santa Monica, Calif.: RAND Corporation, RR-261-AF, 2014.

Figure 2.1. AFMC as a Supply-Side Organization in the Resource Allocation Framework



NOTE: HNS = host nation support; NAF = Numbered Air Force; OCS = operational contract support; POL = petroleum, oil, and lubricants; WMP = war and mobilization plan.

AFMC has the responsibility of a supply-side organization at a component level within the Air Force according to this framework.³ The MAJCOMs and numbered Air Forces make up the demand side. As shown in this example, Headquarters Air Force (HAF) or the Office of the Secretary of Defense (OSD) is the integrator (depending on the situation). Demands (shown in Figure 2.1 as requirements) come from war and mobilization planning factors used in programming for future resources, theater working groups used to plan for current resources, operation plans (OPLANs), and other emerging requirements.

The supply side (on the right side of Figure 2.1) makes recommendations about how to satisfy demand-side needs. There may be more than one way to meet a demand using the Air Force's organic or other resources. The bottom right of the figure shows the sources of combat support capabilities as a matrix, which we will further explain in Chapter Three. Only when resource requirements exceed allocated limits would the HAF or OSD be notified that

³ Supply, demand, and integrator roles are nested both within and outside the command or service at differing decision levels. AFMC has demand-side responsibilities that are mostly accomplished at the headquarters AFMC level. In this analysis, we focus on AFMC's supply-side responsibilities.

reallocation of resources across areas of responsibility (AORs) might be necessary to achieve the desired effects in the highest-priority AOR.

To provide warfighters with reliable supply-side support, AFMC needs managers who have a global view. With fiscal constraints and continued high-demand operational requirements, the Air Force cannot support a construct in which each base or theater maintains its own reserve of resources.⁴ Resources have to be managed efficiently as well as effectively. Global management allows allocation of resources to where they are needed, as requirements and priorities evolve. To enable a global perspective of capabilities and constraints, the Air Force must invest in information and analytics.

By placing the management responsibilities and decision authorities with a global manager, AFFOR and MAJCOM staffs would be able to develop more realistic plans for meeting contingency and training needs. With the current state of the system, the AFFOR and MAJCOM staffs (as demanders) develop their requirements *assuming* that sufficient combat support resources will be available to support operational plans,⁵ which is most often not the case. With the development and institutionalization of global managers for combat support resources, demanders could rely on the global managers to identify combat support enterprise capabilities and constraints. The AFFOR and MAJCOM staffs could then proactively manage the capability shortfalls and associated risk to mission identified by the global managers.

Further, AFMC could use the capability shortfalls identified by the global managers to inform future planning and programming decisions. By quantifying projected shortfalls and constraints, global managers could influence program objective memorandum (POM) inputs for combat support capabilities. Global capability assessments could be used to balance requirements and resources across and within functional stovepipes. By combining global capabilities and constraints in one functional area with those in other areas, the supply-side organization can provide an integrated and balanced view of Air Force capability across materiel, personnel, and other functional stovepipes. This view would provide an integrated set of capabilities with meaningful data to operational planners on the demand side to use in their planning and execution actions. These POM actions are within the purview of AFMC as the Agile Combat Support Core Function Lead. By virtue of the scope of its responsibilities, AFMC

⁴ Eric Peltz, Hyman L. Shulman, Robert S. Tripp, Timothy Ramey, and John G. Drew, *Supporting Expeditionary Aerospace Forces: An Analysis of F-15 Avionics Options*, Santa Monica, Calif.: RAND Corporation, MR-1174-AF, 2000; Amatzia Feinberg, Hyman L. Shulman, Louis W. Miller, and Robert S. Tripp, *Supporting Expeditionary Aerospace Forces: Expanded Analysis of LANTIRN Options*, Santa Monica, Calif.: RAND Corporation, MR-1225-AF, 2001; Ronald G. McGarvey, James M. Masters, Louis Luangkesorn, Stephen Sheehy, John G. Drew, Robert Kerchner, Ben D. Van Roo, and Charles Robert Roll, Jr., *Supporting Air and Space Expeditionary Forces: Analysis of CONUS Centralized Intermediate Repair Facilities*, Santa Monica, Calif.: RAND Corporation, MG-418-AF, 2008; Ronald G. McGarvey, James M. Masters, Louis Luangkesorn, Stephen Sheehy, John G. Drew, Robert Kerchner, Ben D. Van Roo, and Charles Robert Roll, Jr., *Global Combat Support Basing: Robust Prepositioning Strategies for Air Force War Reserve Materiel*, Santa Monica, Calif.: RAND Corporation, MG-902-AF, 2010.

⁵ See Tripp et al., 2012a.

has the opportunity to propose a balanced portfolio of combat support capabilities for optimal warfighter support.

For the Air Force to manage its combat support resources effectively, it needs standard, repeatable processes to plan, execute, monitor, and control its capabilities. Standardized processes would provide consistency across the enterprise and allow for better proactive management of scarce resources. With this analysis, we evaluate the global management capabilities currently residing within AFSC and AFIMSC and recommend how to improve those global management capabilities to enhance support to the warfighter.

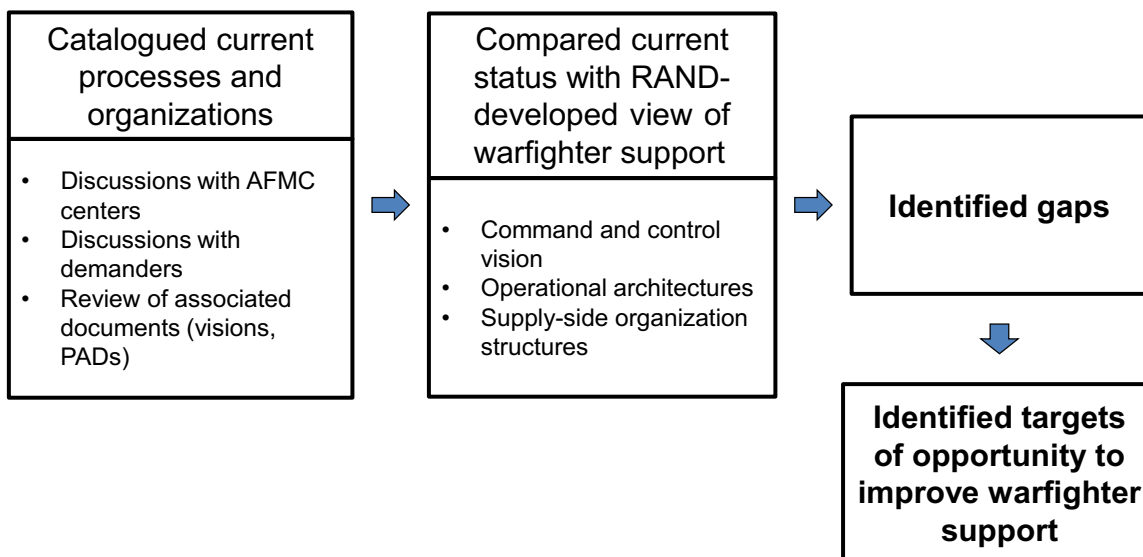
Analytic Approach

To evaluate AFSC’s and AFIMSC’s current roles as supply-side organizations and global managers for combat support resources, we began by developing some broad research questions.

- What are the roles and responsibilities of AFSC and AFIMSC in providing support to the warfighter?
- How are AFSC and AFIMSC currently accomplishing those tasks—that is, processes, tools, organizing construct?
- What analytic tasks must AFSC and AFIMSC perform to fulfill their roles and responsibilities?
- How do AFSC and AFIMSC communicate warfighter support to the warfighter and to other supply-side organizations?

We used the process outlined in Figure 2.2 to answer these research questions.

Figure 2.2. Analytic Approach



NOTE: PAD = program action directive.

We began the analysis by documenting the global management processes that exist within AFSC and AFIMSC. Our goal was to understand AFSC's and AFIMSC's authorities and responsibilities for

- force-shaping decisions
- capability assessments
- adjudicating competing resource demands
- allocating and sourcing requirements
- prepositioning resources
- developing CONOPS to support global management processes.

Further, we examined the relationships between MAJCOMS, AFFORs, AFSC, and AFIMSC and its detachments, including (1) the information-sharing processes between AFSC and AFIMSC, and the AFFORs and MAJCOMs (for example, how support demands for contingency operations are passed to the global enterprise); (2) existing capability assessments; (3) current planning and POM processes; (4) local exercises; and (5) separation of organize, train, and equip and warfighter support responsibilities.

To gain these insights, we reviewed PADs 06-09, 07-13, and 14-04, many Air Force Instructions (AFIs), and other reference materials provided by both demand- and supply-side organizations.⁶ We also met with stakeholders in key organizations, including:

- AFIMSC
- AFSC
- Air Combat Command (ACC)
- Air Mobility Command (AMC)
- U.S. Transportation Command (USTRANSCOM)
- U.S. Air Forces in Europe (USAFE)
- Pacific Air Forces (PACAF)
- 7th Air Force
- Air Force Logistics, Engineering, and Force Protection (AF/A4)
- Air Force Studies, Analyses, and Assessments (AF/A9)
- 635 SCOW
- Air Force Personnel Center, Directorate of Personnel Operations (AFPC/DP2)
- Air Force Materiel Command, Analysis, Assessments, and Lessons Learned Directorate (AFMC/A9A)
- Air Force Civil Engineer Center (AFCEC)
- Air Force Installation Contracting Agency (AFICA)
- Global Ammunition Control Point (GACP)
- Vehicle Supply Chain Operations Squadron (VSCOS)
- Air Force Petroleum Office (AFPET).

⁶ See the references section at the end of this document for a listing of the materials reviewed during the course of this analysis.

Stakeholders provided valuable insight into current processes and enhancements already envisioned in their respective AORs. They also updated us as organizations and processes evolved during the course of the analysis.

Once we understood the current roles and responsibilities of AFSC and AFIMSC, we compared those processes to the PAF vision of combat support enterprise capabilities identified and defined through research conducted over the past two decades. That body of PAF research contributed to the development of a vision for the combat support enterprise that has been accepted, at least in part, by senior Air Force operations and logistics leaders. This body of work suggests that to meet warfighter needs against evolving threats within constrained resources, the combat support enterprise should include, among other things:

- capability-based C2 processes and tools to meet dynamic MAJCOM and CCDR demands with available resources in execution time horizons and to facilitate resource trade-offs in planning and POM time horizons
- integrated, streamlined, and standardized processes to capitalize on efficiencies
- information system(s) to enable asset visibility and direct functional combat support actions.⁷

PAF's previous work included developing an operational architecture that documents combat support processes needed to work within the Air Force and joint C2 enterprise to help the warfighter achieve the desired operational effects.⁸

Comparing current AFSC and AFIMSC global management processes to the PAF-developed vision and operational architecture for enterprise management allowed us to identify gaps and seams between current processes and the PAF vision. From there, we identified targets of opportunity and alternatives to improve AFSC and AFIMSC support to the warfighter. In the next chapter, we discuss both the findings associated with current roles and responsibilities and the gaps between the current roles and responsibilities and the PAF global management vision.

⁷ A series of PAF reports on C2 and agile combat support highlighted the value of organizations focused on engaging with warfighters to guide resource allocation in a manner that improves operational capability and effectiveness. Those analyses provided the rationale for creating the Global Logistics Support Center, AFSC, and AFIMSC. See Tripp et al., 2012a; Lynch et al., 2014b; and Robert S. Tripp, John G. Drew, and Kristin F. Lynch, *A Conceptual Framework for More Effectively Integrating Combat Support Capabilities and Constraints into Contingency Planning and Execution*, Santa Monica, Calif.: RAND Corporation, RR-1025-AF, 2015.

⁸ The appendix contains some of the processes outlined in the operational architecture for the AFSC, AFSC global managers, the AFIMSC, and AFIMSC global managers. The complete architecture can be found on a compact disc enclosed within Lynch et al., 2014a.

3. Current Process Findings and Identified Gaps

In this chapter, we outline the high-level findings and gaps identified during this analysis. We identified these findings and gaps through analysis of current roles and responsibilities, review of current policy and procedures, and discussion with key stakeholders.

Findings

As discussed previously, we based this analysis on the existing (that is, as-is) organizational structure and evaluated the processes within those organizations. Every organizational structure provides opportunities and challenges.¹ In any organization, some workers and processes are grouped together and others are separated, creating gaps and seams. Every Air Force organization either feeds information or data to another organization or receives information or data from another person or organization. *The AFSC and AFIMSC organizational structure in place today can support global management processes.* However, the processes within these organizations should be aligned to work across the gaps and seams to minimize the risk to the mission. In this case, the processes should be aligned within each organization to provide the best support to the warfighter.

Within the current organizational structure, combat capabilities are divided among different functional areas (functional stovepipes). The Air Force can provide each capability in differing ways, for example, through a unit-owned asset or capability, WRM, host-nation support, or contracted assets or capabilities. The columns in Figure 3.1 show a sampling of the combat support functional capabilities identified in Air Force Doctrine Document 4-0.² The rows show what we are calling *sources of supply*, the different ways those functional capabilities can be provided. Although the establishment of AFSC and AFIMSC has consolidated the functional stovepipes and sources of supply, *global management of combat support capabilities is still divided among and between organizations.*

¹ See Robert S. Tripp, Kristin F. Lynch, Daniel M. Romano, William Shelton, John A. Ausink, Chelsea Kaihoi Duran, Robert G. DeFeo, David W. George, Raymond E. Conley, Bernard Fox, and Jerry M. Sollinger, *Air Force Materiel Command Reorganization Analysis: Final Report*, Santa Monica, Calif.: RAND Corporation, MG-1219-AF, 2012; and Don Snyder, Bernard Fox, Kristin F. Lynch, Raymond E. Conley, John A. Ausink, Laura Werber, William Shelton, Sarah A. Nowak, Michael R. Thirtle, and Albert A. Robbert, *Assessment of the Air Force Materiel Command Reorganization: Report for Congress*, Santa Monica, Calif.: RAND Corporation, RR-389-AF, 2013.

² U.S. Air Force, *Combat Support*, Air Force Doctrine Document 4-0, March 23, 2005.

Figure 3.1. Combat Support Global Management Responsibilities Are Consolidated but Still Divided Among and Between Organizations

		Functional Areas						
		Security Forces	Airfield Management	Civil Engineer	Services	Aircraft Management	Distribution Vehicles	POL/Material Management
Sources of "Supply"	Unit Owned	AFIMSC	ACC	AFIMSC	AFIMSC	AFSC	AFSC	AFSC
	WRM	AFSC	AFSC	AFSC AFIMSC	AFIMSC	AFSC	AFSC	AFSC
	Host Nation Support	AFFOR	AFFOR	AFFOR	AFFOR	N/A	AFFOR	AFFOR
	Operational Contract Support	AFIMSC AFFOR	AFIMSC AFFOR	AFIMSC AFFOR	AFIMSC AFFOR	AFIMSC AFFOR	AFIMSC AFFOR	AFIMSC AFFOR

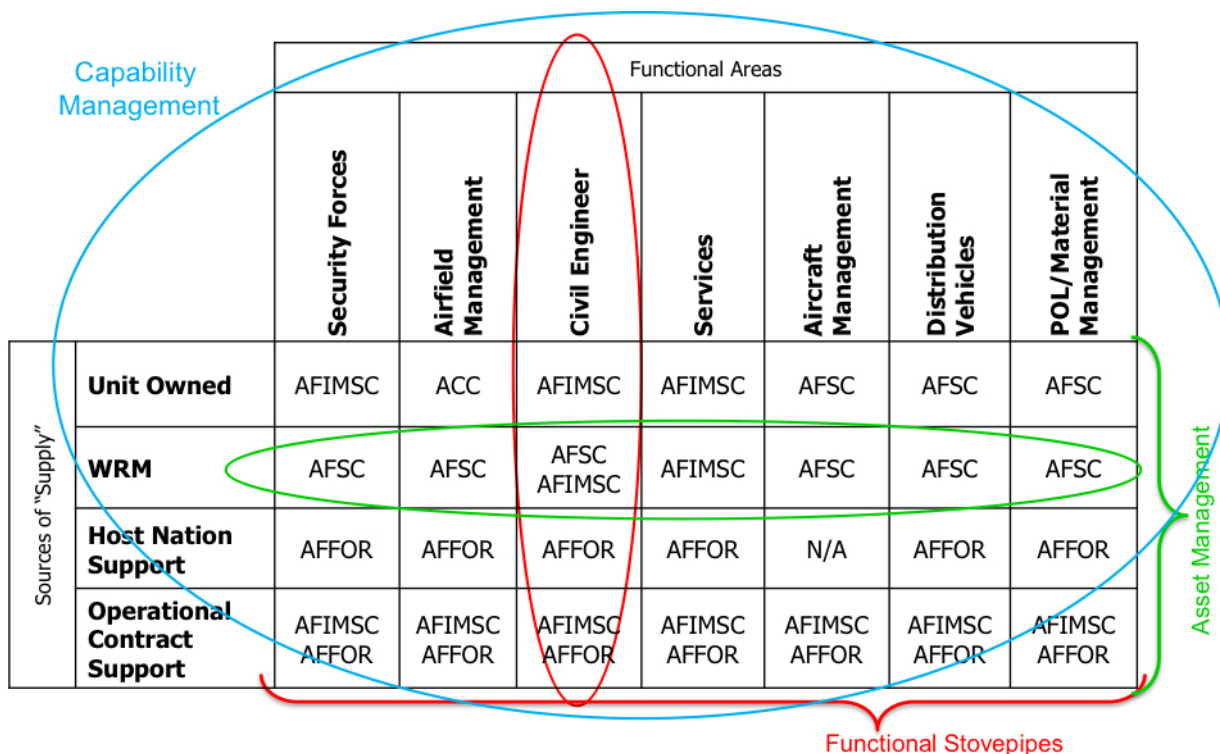
For example, unit-owned civil engineering assets are managed by the AFIMSC; however, civil engineering WRM responsibilities are divided between the AFSC, which is responsible for most of the civil engineering WRM, and the AFIMSC, which is responsible for some items, including rations. If host-nation civil engineering support is required, the AFFOR staff still have responsibility to coordinate that support. But depending on the circumstances, contracting for such support could be an AFFOR staff responsibility, or it could fall to the AFIMSC, specifically the AFICA, one of the AFIMSC's primary subordinate units (PSUs). The nature of that division of labor for contract support differs from MAJCOM to MAJCOM and across the AORs.

Within the functional stovepipes (shown in Figure 3.2 for one functional stovepipe in the red circle), *the vertical processes for global management of combat support resources are in varying stages of development*. The Air Force has identified global managers and centralized management responsibilities and decision authorities for some combat support resources (for example, munitions, vehicles, civil engineering). Some functional areas such as munitions and spares have well-defined processes to support the warfighter. They have developed and standardized planning assumptions and tools that have functional community acceptance. Other functional areas such as air battle damage repair and some of the I&MS functions are not as well defined or need further development or refinement.

This lack of vertical alignment and integration prevents many individual functional areas from being able to perform comprehensive risk assessments for AFFOR staffs. If no single entity

has visibility over the sources of supply for a functional capability, AFFORs could be missing capabilities that could be made available (for example, contract support capability AFICA could leverage), or they could assume existing support is available to them (for example, civil engineer [CE] WRM capability), when in fact another AOR has a more urgent claim for it.

Figure 3.2. Capability Management Requires Integration of Asset Management and Functional Stovepipes



Even for those functions where the global management processes could be enhanced, *within the stovepiped functional area, each community appears to work from a common understanding of what is needed to accomplish the mission.* For example, the security forces community appears to share a common understanding of what is needed to protect a bare base, whether the source of supply is unit-owned assets provided through WRM or contracted through host-nation support. Different organizations provide these security forces capabilities, but the functional stovepipes speak a common language and operate under a common set of assumptions or planning factors.

Integration across functional stovepipes still needs attention (shown in Figure 3.2 for one source of supply in the green circle). This is an issue on both the supply and demand side. Historically, each functional area assessed warfighting demands on its own, outside of any global demand-integration function. This led to combat support warfighting capabilities not being balanced for any particular set of contingencies or objectives. To the degree a functional

community assessed its warfighting demands and sought to balance its capabilities (for example,, the CE community's blue suit review), it was on its own. Past PAF research and Air Force experiments found such imbalances in combat support warfighting capability.³

Functional stovepipes being consolidated under AFMC's centers provide an opportunity to develop an integrated view of warfighter demands. However, the fundamental gap is functional, not organizational. The Air Force lacks a unified picture of warfighting demands needed for planning and assessment. Demands are generated within the functional stovepipes and not integrated across functions. For example, CE requirements are generated within the CE functional stovepipe, and security forces requirements are generated within the security forces stovepipe instead of both functional areas receiving an integrated requirement, such as the requirement to open a given number of new bases. Independent functional requirements lead to independent functional assessments.

Those independent functional assessments contribute to the supply-side issue of articulating to AFFOR staffs the sum of all functional capabilities. Just as there should be a unified picture of warfighting demands, there should be a unified picture of the ability to meet those demands instead of independent functional assessments, function by function. Previous PAF analyses proposed metrics for unifying disparate functional areas to communicate concisely how they translate into the ability to generate combat missions and support force beddown.⁴ The Air Force appears to have adopted those metrics as part of a suite of combat support capability assessments in its combat support core function support plan,⁵ but the analytic process to populate those metrics depends on the analytic capabilities of those functional stovepipes and their respective AFMC centers.

Capability management requires integration of asset management and functional areas as illustrated by the blue circle in Figure 3.2. *Improvement in both horizontal (across stovepipes) and vertical (within stovepipes) integration is needed to provide senior leaders with better visibilities into global combat support capabilities and constraints.* This would move the Air Force from individual functional or asset management to integrated capability management.

From our analysis of current processes and procedures and our discussions with current global managers, *we identified characteristics of successful global managers.* First, successful global managers have an established relationship with the warfighter. The warfighter understands the importance of the information the global manager can provide, and the global manager is linked into and understands the type of information the warfighter needs. Second, a successful global manager has an analysis cell to conduct global assessments of capabilities and constraints using rule-based decision-support tools and standard processes that are well understood by the warfighter. These analytic processes are codified in doctrine and policies, and the results are

³ Mills et al., 2014; Lynch et al., 2014b.

⁴ Mills et al., 2014.

⁵ Discussions with personnel from Headquarters Air Force, Studies, Analysis, and Assessments, August 19, 2015.

communicated in a way that resonates with the warfighter. Using standard processes, procedures, and decision-support tools allows the warfighter to understand how capabilities and constraints were derived.

Gaps

Our analysis identified several overarching gaps that apply to both AFSC and AFIMSC. First, *there is no clear vision for global capability management across and among stovepiped functions within either organization.* This is not to imply that both organizations should have the same stated vision of global management, but today, the warfighter does not have a clear understanding of what each center can and will offer in terms of warfighter support.

Second, *the quality and maturity of processes, instructions or guidance, and decision-support tools vary across functions and within each center.* Some are well-developed, others are in development, and yet others are still to be identified. This is not to imply that each function should have identical or even similar processes and procedures; however, most processes today are ad hoc and not clearly defined or understood by the warfighter.

Finally, *integration across functions to close organizational seams and provide capability analyses is lacking.* Currently functional area assessments, if conducted, are done independently without integration across functional stovepipes. The Air Force lacks the ability to provide integrated capability assessments to the warfighter that reflect the available combat support capabilities or constraints. For example, the resources required to generate combat sorties include mission capable aircraft (driven by maintenance and the availability of spare parts), fuel supply and distribution, and munitions. Communicating sortie generation capacity within a theater requires an integrated view of how much of these resources are available and how they work together to produce sorties.

For each of these gaps, we identified the strengths and weaknesses of current support to the warfighter for each center, AFSC and AFIMSC. Where there are weaknesses, the next chapter will suggest near- and longer-term enhancements focusing on communication and relationships, policy and instructions, and processes and decision-support tools.

4. Air Force Sustainment Center Recommendations for Enhancing Support to the Warfighter

In this chapter, we outline some recommendations for how to improve AFSC support to the warfighter. We divide the recommendations into three sections: those that can be easily implemented at low cost; those that will require more time to implement yet still are low cost; and those that will require time and resources to develop. We lay the recommendations out in this manner to serve as a roadmap for AFSC to improve support to the warfighter. That does not mean AFSC should wait to begin addressing the long-term recommendations; all can be started immediately. However, the long-term recommendations most likely will take the longest to successfully implement.

Near-Term Recommendations

Our near-term recommendations focus on improving communications and relationships between AFSC and the warfighter. The first recommendation is for AFSC to develop a unifying vision and strategy articulating the value of global enterprise management and how AFSC intends to implement global management processes.

Typically, vision and strategy statements are reserved for the Chief of Staff of the Air Force or perhaps a MAJCOM commander to guide the organization as a whole, especially looking out over decades-long time frames. However, AFSC is an organization in transition, absorbing new responsibilities and changing practices to accommodate them. AFSC needs a strategy to navigate these changes and a way of communicating that aligns and integrates the actions of individuals and separate communities within AFSC.

One recent example of this kind of transitional vision/strategy statement is the *AFSC Way*,¹ championed by Lt Gen Bruce Litchfield, the first commander of AFSC. Communication within AFSC, as it transitioned from separate air logistics centers with their own ways of doing business to a unified AFSC, took the form of the *AFSC Leadership Model*,² a white paper on Cost-Effective Readiness,³ the more detailed *The Science of the AFSC Production Machine*,⁴ and many briefings that emphasized the underlying principles.

¹ The *AFSC Way* is a unifying vision used to fuse the three independent air logistics centers under one center, the AFSC, and to enable improved depot performance and production.

² Bruce A. Litchfield, "Air Force Sustainment Center Leadership Model: The Guide to Achieving 'Art of the Possible' Results," unpublished paper, 2013.

³ Ginger Keisling, *Cost-Effective Readiness: Readiness Optimization in a Budget Constrained Environment*, Air Force Sustainment Center, April 1, 2014.

⁴ Kevin O'Connor, *The Science of the Air Force Sustainment Center Production Machine*, October 2012.

These documents provided some vision for and contained some of the hallmarks of good strategy,⁵ including

- *diagnosis* of a problem (for example, “unsustainable cost growth”)⁶
- *guiding policy* to focus attention, for example “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”⁷ and “throughput is king”⁸
- coherent action, for example, “[f]und to required readiness targets, not above and beyond”⁹ and apply scientific principles and Lean theories, for example, Theory of Constraints and Drum-Buffer-Rope.¹⁰

The principles and values espoused in these documents have since been reinforced and absorbed to such an extent that personnel no longer explicitly discuss them; they are simply the new business as usual.¹¹ We recommend a similar push to educate and align action within AFSC to focus on support to the warfighter and global capability management.

Once the vision and strategy are in place, a communication plan needs to be developed to educate personnel, both inside AFSC and outside (that is, the warfighter), on the vision and how it will be incorporated into the current organizational construct and processes. A structured communication plan should answer stakeholders’ questions and concerns. The goal is to identify the key messages and information that need to be communicated to personnel within AFSC and to the warfighter and establish a plan to deliver those messages from the appropriate sender. This means telling the warfighters what kind of support they can expect from AFSC, how they will receive that support, and how they can request the support they need. A communication plan should indicate the appropriate media and timing of such communications.

The second recommendation is to improve communication within and among AFMC centers. Currently, if the warfighter needs information about combat support, they have more than 20 functional stovepipes they have to go to individually. We recommend AFMC designate one place for warfighter requirements to enter AFMC. One option is to create a cell at headquarters AFMC to receive warfighter requirements. Another would be to use the Logistics Operations Center that already exists in the 635 SCOW at Scott Air Force Base (AFB), Illinois. Another option would be the Combat Support Planning, Execution, and Control (CSPEC) organization at

⁵ Richard P. Rumelt, *Good Strategy Bad Strategy*, New York, New York: Random House, 2011.

⁶ Keisling, 2014.

⁷ Keisling, 2014.

⁸ O’Connor, 2012.

⁹ Keisling, 2014.

¹⁰ O’Connor, 2012.

¹¹ Discussion with AFSC/CC on August 26, 2016.

Wright-Patterson AFB, Ohio.¹² Regardless of where the organization sits, AFSC should have one face to the warfighter, and the warfighter should know where that face is located, how to pass the information to the organization, and what they can expect back from AFMC and its centers. If the face to the warfighter is outside AFSC, AFSC should have one identified entity to obtain and distribute warfighter requirements within AFSC.

A benefit of having one entry point for warfighter demands (one at headquarters AFMC and one within each center) is that requirements can be distributed consistently across functions and sources of supply. All functional areas would receive the information, and that information would be the same, rather than inconsistent information passed to only those functions the warfighter thought to include. This would allow similar analyses to be conducted across AFMC in an integrated way.

The next recommendation is to reenergize a CSPEC-like analysis shop to conduct enterprise-level warfighter requirements analyses. These analyses would provide capability and constraint feedback to the warfighter for planning, exercises, and emerging requirements. The analysis shop should have tools, personnel with the appropriate skills, and the capacity to conduct the analyses. The analysis shop needs to be tasked with the responsibility of supporting the warfighter. It should be given the authority and responsibility to consistently engage with the warfighter.

Within AFMC, this analysis shop could reside in several places. It could reside on the headquarters AFMC staff and be the entry point for warfighter demands. Having the analysis shop at headquarters AFMC may provide the appropriate level of authority, located on a four-star staff. However, the focus may be diluted because AFMC's span of control includes product development and support-system design activities, in addition to operations support functions for the warfighter.

Another option would be to reenergize the CSPEC office that already exists at Wright-Patterson AFB. The CSPEC office already has personnel, equipment, and facilities in place. However, the analyses capabilities there have atrophied. Without continued interaction and demand for the analyses from the warfighter, the global enterprise analysis capability housed within the organization withered away. To reenergize this effort, AFMC would need to task the organization with enterprise-analysis responsibilities and give it the authority to conduct them. This would include a travel budget to remain engaged with the warfighter and senior-level exposure to fuel the demand for the analyses. This office would also need to expand its analytic capabilities beyond spares and the other commodities it currently can assess. To conduct enterprise analyses, it would need to include the ability to assess other functions, such as aircraft battle damage repair (ABDR) and vehicles.

¹² In the early 2010s, the CSPEC office, established in the Air Force Global Logistics Support Center, conducted enterprise assessment for spares and other commodities to support war plans and exercises. The office remains, but its current focus is solely on wargames.

Another option would be for an assessment cell to sit on the headquarters AFSC staff. An analysis shop at this level would be limited to those functional areas within the AFSC purview and would require coordination with other AFMC centers, unless higher authorities tasked an AFSC analysis shop to provide support to the warfighter for all AFMC functions. To establish such a shop at headquarters AFSC would take time and resources; however, there appears to be interest and support at headquarters AFSC, something the CSPEC office at Wright-Patterson AFB lacked.

Regardless of where the analysis shop resides, once its analyses are complete, they should be shared across AFMC centers. The analyses should communicate limitations and constraints to headquarters AFMC to help influence POM submissions and to guide where the warfighter needs the Air Force to invest in combat support capabilities. These shortfalls should also be communicated to the Air Force Life Cycle Management Center and the Research Laboratories so those organizations can investigate where to invest in acquiring or developing new technologies to better support the warfighter. The key is that consistent analyses are shared across AFMC.

The recommendations in this section focus on improving communications and relationships within AFMC and between AFSC and the warfighter. These recommendations require some resources but should be fairly easy to accomplish in the near term at low cost.

Mid-Term Recommendations

The next recommendation focuses on documenting global management processes in tactics, techniques, and procedures (TTPs) and policy. Because writing TTPs takes time, especially if processes are still in development, we recommend policy updates be a next step in the roadmap to improving AFMC support to the warfighter.

Funding constraints do not allow the Air Force to procure enough resources for every warfighter to have everything they need to support all operations in their AORs as outlined in OSD planning guidance.¹³ Resources must be shared globally to meet all demands. Global management of resources improves allocation and reallocation of those resources as priorities shift worldwide. The Air Force has taken steps to improve global management by designating global managers for most resources. The next step is for those global managers to document how they are going to provide assessments of worldwide resource capability and constraints for each combat support resource.¹⁴

Some functional areas already provide global assessments to the warfighter. Munitions, for example, has a global requirements determination process, an allocation board to distribute assets worldwide, and a suite of decision-support tools available for use by stakeholders. The processes

¹³ Tripp et al., 2012a.

¹⁴ Individual assessments then can be combined to provide an integrated assessment of Air Force capability to meet warfighter requirements.

are well understood by the munitions community and are codified in an AFI. Likewise for fuels, business rules, tools, and systems allow for worldwide planning. Air Force personnel input the types and number of aircraft, their expected usage, and expected beddown locations into Integrated Consumable Item Support (the fuels planning tool), and the system calculates the fuels requirement by location.¹⁵ Although the global manager for fuels is outside the Air Force (it is the Joint Petroleum Office and the Defense Logistics Agency Energy), fuels provides another example of how global management processes should be defined—in a well-articulated and easy-to-use manner employed throughout the Air Force to provide consistent requirements estimates in a way clearly understood by the user community.

Some global management processes are not as clearly defined. Within AFSC, for example, ABDR is in initial stages of defining its processes. As functional areas begin to define or continue to refine TTPs and policy, we recommend those TTPs and policy include the following:

- how operational demands should be developed and translated into requirements
- how requirements will flow to functional areas
- how assessments will be conducted and shared across functional areas
- how global assessment impacts will be communicated with the warfighter.

Even without formal processes and procedures, global assessments can be and are being completed today by individual global managers. Yet different global managers are at different stages in codifying their processes. As each area defines or refines its processes, we recommend codifying those processes in TTPs and policy so the entire community, within AFMC and the warfighters, understands the process, required inputs, and expected outputs.

Long-Term Recommendations

These long-term recommendations center on developing and enhancing global management capabilities.

First, AFSC leadership needs to assign responsibility and authority for enterprise management processes to a single organization within AFSC. The organizational structure is less important than defining the processes and aligning the authorities to allow the processes to succeed. However, the Air Force tends to have more success maintaining a path toward a vision and implementing new or enhanced processes when they have an organizational construct in place to support that vision. Having an organizational construct in place appears to allow the Air Force to sustain a course of action through leadership changes and shifting priorities.

While near-term recommendations call for designating a single entry point for warfighter demands and reenergizing global assessment capabilities, the longer-term solution requires designating an office in charge of bringing global assessments together to develop a robust capability for global enterprise management. This includes the ability to look across functional

¹⁵ Integrated Consumable Item Support is a Defense Logistics Agency decision-support system.

stovepipes horizontally and within stovepipes vertically to identify opportunities to better balance capabilities. It also includes providing insights into needed investments to enhance combat support capabilities and the ability to quantify how those investments affect Air Force capabilities.

This organization could reside in a number of different places within the current organizational structure. The CSPEC office at Wright-Patterson AFB could receive warfighter demands and conduct global assessments, while AFSC Logistics Directorate, Strategic Planning Division (AFSC/LGX) could bring together global assessments from different AFMC centers. Or warfighter demands could flow through the 635 SCOW to CSPEC for analysis, and then back to the 635 SCOW for integration with other global assessments.

The second long-term recommendation requires investment in decision-support tools to aid enterprise analyses. As previously stated, some global managers have rule-based decision-support tools that are understood and accepted by the user community as well as the warfighter (for example, munitions). Other areas are using best estimates from the experts that happen to be in the seat at the time of the assessment. The Air Force needs to invest in well-defined, easy-to-use systems using standardized input data to provide consistent assessments no matter which expert is using the system.

Further, these tools need to relate combat support resource levels and process performances to operational-relevant metrics. Today, combat support information provided to the warfighter tends to be presented in the form of inventory levels or process performance (for example, resupply time) rather than a metric the warfighter uses and understands, such as base beddown capability or sortie generation capability. Combat support personnel are not trained to communicate combat support capabilities and shortfalls in metrics that are meaningful to operators. Additionally, the tools to make this translation do not exist. Therefore, we recommend AFSC make a long-term investment in developing tools and systems to better analyze for and communicate with the warfighter.

In Chapter Five, we present similar near-, mid-, and long-term recommendations for improving AFIMSC support to the warfighter.

5. Air Force Installation and Mission Support Center Recommendations for Enhancing Support to the Warfighter

In this chapter, we outline recommendations for how the AFIMSC can improve support to the warfighter. The AFIMSC is a newer organization than AFSC, still growing into its role as the global manager for I&MS capabilities. While we were conducting this analysis, many changes were already occurring within AFIMSC in process development and other areas. The organization appears to be aligning itself to improve its support to the warfighter. With that in mind, we offer recommendations here, some of which may already be under development.¹

We present our recommendations in three sections: those that can be easily implemented at low cost in the near term, those that will require more time to implement, and those that will require longer-term investment of time and resources to develop. We lay out the recommendations in this manner to serve as a roadmap for AFIMSC to improve support to the warfighter. As with the AFSC recommendations, all can be started immediately, but the long-term recommendations most likely will take the longest to successfully implement.

Near-Term Recommendations

Before the AFIMSC can provide enhanced support to the warfighter, the organization itself needs to understand its internal purpose, capabilities, and how it can best support its external customers. We recommend the AFIMSC develop an internal, unifying vision and strategy so all AFIMSC personnel understand the role of the organization.

The AFIMSC, like the AFSC, is an organization in transition, absorbing new responsibilities and changing practices to accommodate them. Even more challenging than the AFSC, the AFIMSC has no preexisting organizational culture to leverage and has many skeptics unclear on what it can accomplish. Chapter Four describes a set of vision and strategy documents produced by the AFSC called *The AFSC Way*, which helped chart the path ahead for the AFSC to unify the three air logistics centers and develop a new way of doing business. Chapter Four also describes some features that could be worth imitating.

Once AFIMSC has an internal, unifying vision guiding its work processes, it can develop a strategy and vision articulating the type of support the AFIMSC will provide to the warfighter. This external vision should include how I&MS functions will be globally managed and how AFIMSC intends to implement I&MS global management processes.

¹ Since the time of this analysis, the AFIMSC has implemented most of the near-term recommendations according to personnel in the AFIMSC Expeditionary Support Directorate, April 2018.

Both the internal and external AFIMSC visions and strategies require separate communication plans to educate personnel, both within and outside the AFIMSC, on the visions and how they will be incorporated into the current organizational construct and processes. The goal of a communications plan is to identify the key messages and information that need to be communicated to personnel and establish a plan to deliver those messages. The plan should answer both internal and external stakeholder questions and concerns. For the internal vision, the plan should identify the critical processes needed to support the warfighter, streamline functions, and align staff to support those critical processes. For the external vision, the plan should tell the warfighter what kind of support they can expect from AFIMSC, how they will receive that support, and how they can request the support they need. A communication plan should indicate the appropriate media and timing of such communications.

The second recommendation, like the recommendation made in Chapter Four to AFSC, is for AFMC to improve communication within and among its centers by designating one place for warfighter requirements to enter AFMC. One option is for a cell at headquarters AFMC to receive warfighter requirements. Within AFIMSC, options could include the Expeditionary Support Directorate or the Installation Support Directorate. If the face to the warfighter is located outside AFIMSC, AFIMSC should also have an organization identified to receive and distribute warfighter requirements.

Regardless of where warfighters' requirements enter AFMC, the warfighter should know where the one entry point is located, how to pass the information to the organization, and what they can expect back from AFMC and its centers. A benefit of having one entry point for warfighter demands is that requirements can then be distributed consistently across functions and sources of supply. All functional areas would receive the information and would have the same information instead of inconsistent information passed only to those functions the warfighter thought to include. This would allow analyses to be conducted with consistent information across AFMC.

We also recommend focusing on improving communications between the Air Force Personnel Center (AFPC), AFSC, the AFFOR staffs, and headquarters AFIMSC. These organizations all play a role in supporting the warfighter; they should share their information and analyses as appropriate. For example, AFPC/DP2 conducts Joint Combat Capabilities Assessments quarterly on five to eight OPLANs, as directed by the Joint Staff. These assessments should be shared with AFIMSC so AFPC and I&MS functional assessments can align and be integrated for the Joint Staff.

Similar coordination is needed with AFSC, which is the global manager of most WRM assets, although the AFIMSC manages some WRM assets and most I&MS functions. When AFSC WRM global managers hold theater working groups, the AFIMSC WRM global managers should attend. When the AFSC WRM global managers conduct assessments of global WRM requirements, the AFIMSC WRM global managers should integrate those assessments with their own to provide an integrated capability assessment. Coordination across these organizations will

ensure that both organizations are using common, agreed-on demands and that assets are balanced.

Finally, until the division of workload responsibilities shared with AFFOR staffs can be clarified, the AFFOR staff needs one defined entry point into AFIMSC. That entry point can be through AFIMSC MAJCOM detachments or through an organization at headquarters AFIMSC. Either way, the point of entry should have a call-in number that is staffed 24 hours a day, seven days a week to provide support to the warfighter. The entry point could serve as a clearinghouse, directing inquiries and requirements to the appropriate personnel and organizations within AFIMSC so the AFFOR has to know only one place to call if they need I&MS support at any time.

In addition to coordination with outside organizations, communication within AFIMSC needs to improve. The current organizational construct with five PSUs—headquarters AFIMSC—and detachments in the AORs allows for many seams in I&MS support. The PSUs are functionally oriented, but they need to share current analyses and future plans across the I&MS enterprise with other PSUs, headquarters AFIMSC, and the detachments. Likewise, the AFIMSC detachments are AOR focused and may not always share AOR-specific information with all organizations within the I&MS enterprise. Identifying one face to the warfighter for AFMC and one entry point for warfighter requirements within AFIMSC should help ensure that all I&MS stakeholders are receiving consistent information and thus improve internal communication within AFMC. From there, AFIMSC needs to develop relationships to share analyses based on that information across the I&MS enterprise.

Mid-Term Recommendations

The first recommendation is to review and refine the capabilities library contained in Appendix II of PAD 14-04. While the division of responsibilities currently presented in the capabilities library is a good starting place, it is vague enough to have been interpreted differently across AFFORs, MAJCOMs, and detachments. As a result, AFFORs, MAJCOMs, and detachments do not divide the I&MS workload consistently with headquarters AFIMSC. We recommend the capabilities library be reevaluated and further defined to allow consistency across staffs.

We recognize that workload at each AFIMSC detachment and AFFOR staff may differ. The different types of component commands, whether based on region or geography (such as Pacific Air Forces and United States Air Forces in Europe–Air Forces Africa) or function (such as Air Force Special Operations Command and Air Force Strategic Command), have different roles and responsibilities. Thus, their supporting AFFOR staffs and AFIMSC detachments will also differ. However, there should be some consistency among staffs with similar responsibilities. The AFFOR and AFIMSC detachment staffs fall into different categorizations depending on command responsibilities. Those categorizations include

- functional or regional responsibility
- number and type of assigned forces (for example, large, small, worldwide, no assigned forces)
- number and type of operational plans supported (for example, OPLAN, contingency plan, worldwide, no named operational plans).

Once workload divisions are defined in the capabilities library, those in similar categorizations may still differ; however, workload should be more consistently divided among the AFFOR staff, the AFIMSC detachment, and headquarters AFIMSC.

In addition to codifying the workload division in the capabilities library, I&MS global management processes and responsibilities need to be codified in policy and TTPs. As discussed in Chapter Four, funding constraints do not allow the Air Force to procure enough resources for every warfighter to have everything they need to support all operations in their AOR, so resources must be shared globally. The Air Force has designated global managers for most resources. In particular, the Air Force designated AFIMSC as the global manager for I&MS functions. The next step is for AFIMSC to document how it is going to provide assessments of worldwide resource capability and constraints for I&MS support.²

Because the AFIMSC is a new organization, it is in initial stages of defining, refining, and specifying its processes. Each of the PSUs may have different global management processes and procedures, and those processes may not yet include headquarters AFIMSC. However, those processes need to be synchronized across the I&MS enterprise and documented in policy and procedure.

As an example of how processes, tools, and systems should be developed to support global management of resources, we use the munitions community. The munitions functional area has a global requirements determination process, an allocation board to distribute assets worldwide, and a suite of decision-support tools available for stakeholders. The processes are well-understood by the munitions community and are codified in an AFI. These processes are employed throughout the Air Force to provide consistent requirements estimates in a way that is clearly understood by the user community.

We recommend including the following information in TTPs and policy to clearly define AFIMSC global management processes across the I&MS enterprise:

- how operational demands will be developed and will enter the AFIMSC
- how requirements will flow to functional areas within and outside AFIMSC
- how assessments will be conducted and shared across functional areas within and outside AFIMSC
- how global assessment impacts will be communicated with the warfighter.

² Individual assessments within AFIMSC can be combined to provide an integrated assessment of I&MS capability to meet warfighter requirements. Then, I&MS assessments can be combined with other assessments (from AFSC and the Global Ammunition Control Point) to provide an integrated assessment of Air Force capability to meet warfighter requirements.

Refining workload division and defining consistent policy will take time, especially for a relatively new organization with many PSUs. Thus, we recommend workload division and policy definition be the second step in the roadmap to improving AFMC support to the warfighter.

Long-Term Recommendations

First, we recommend that AFIMSC leadership assign responsibility and authority for enterprise management processes to a single organization within headquarters AFIMSC. While near-term recommendations call for designating a single entry point for warfighter demands and bringing together individual PSU assessments, the longer-term solution requires designating an office in charge of bringing global assessments together. This capability should include the ability to look across functional stovepipes horizontally and within stovepipes vertically to identify opportunities to better balance capabilities. The capability should also include providing insights into needed investments to enhance combat support capabilities and quantifying how those investments affect Air Force capabilities.

This organization could reside in one of several places within the current organizational structure. Warfighter demands could flow through the AFIMSC detachments, and global assessments could be completed in Expeditionary Support Directorate or the Installation Support Directorate. Alternatively, warfighter demands could flow directly to headquarters AFIMSC, and assessments could be completed in a new organization on headquarters AFIMSC special staff. The organizational structure is less important than defining the processes and aligning the authorities to allow the process to succeed.

Second, we recommend that the AFIMSC develop decision-support tools to aid enterprise analyses. While some global managers have rule-based decision-support tools that are understood and accepted by the user community as well as the warfighter (for example, munitions), other areas use best estimates from the experts in the room at the time of the assessment. The Air Force needs to invest in well-defined, easy-to-use systems using standardized input data to provide consistent assessments.

Further, these models, tools, or systems need to relate combat support resource levels and process performances to operationally relevant metrics—not in terms of inventory levels or process performance, but a metric the warfighter uses and understands, such as base beddown capability or sortie generation capability. Combat support personnel are not trained to communicate combat support capabilities and shortfalls in metrics that are meaningful to operators. Additionally, for the most part, the tools to make this translation do not exist. Therefore, we recommend AFIMSC make a long-term investment in developing tools and systems to better analyze for and better communicate with the warfighter.

In the final chapter, Chapter Six, we present some overall conclusions from the analysis.

6. Conclusions

In this report, we assessed how global managers within AFMC currently support the warfighter and what concrete steps could be taken to improve that support. We constrained ourselves to the current division of responsibilities within existing AFMC centers and did not assess competing ways of assigning decision rights.

Nonetheless, there is ongoing internal dialogue in the Air Force about assigning decision rights for global management of combat support resources. One dimension of that dialogue concerns how consolidated or distributed that decisionmaking authority should be. Some of this is motivated by the emerging operating environment, which may require leadership to make decisions about combat support capability and capacity rapidly—assessing capability and risk, allocating scarce resources, and shifting or repositioning them geographically to meet emerging contingency demands—and with a level of coordination and on a time scale not heretofore accomplished and not feasible with current processes and organizations. It is true, even with the recent consolidations of responsibility, that combat support capabilities are still provided to JFACCs via a patchwork of organizations. Solutions to this call to mind a one-stop-shop for customer service to simplify interface and decisionmaking for JFACCs.

While this highlights a real challenge, we feel that this debate misses an important point. The Air Force currently does not have institutionalized processes for performing global capability assessments across most agile combat support functional capabilities—that is, it does not have the ability to make risk assessments and resource allocation decisions in an informed way. (We would argue the GACP for munitions is the exception that proves the rule.) As AFDD 6-0 states, “Facilitating *timely* and *informed* decisions is at the heart of C2.”¹ Consolidating decision rights into fewer hands would, in many cases, enable Air Force leadership to make *uninformed* decisions in a *more timely* fashion, not to make more informed decisions. This report seeks to address the deficit in the quality of global capability assessments and resource allocation decisions.

When contemplating any change to organizational structure or responsibility, including decision rights, the key question should be, What is the objective of this change? Consolidating authority could have many potential benefits—for example, realizing economies of scale, standardization of processes, more coherent advocacy, cross-community learning and benchmarking, and more coordinated direction and decisionmaking. Some of these benefits have already been realized since the formation of the AFSC and the AFIMSC, as their leadership can attest.

¹ Air Force Doctrine Document 6-0, *Command and Control*, June 1, 2007.

At the same time, there are potential downsides. A larger organization could simply be too unwieldy, which might necessitate further division of responsibilities within, creating new layers of management. Management processes could be inappropriately standardized or benchmarked (for example, no one would argue personnel should be managed exactly like spare parts, but the more like the resources, the more difficult to draw that line). Additionally, consolidating certain decisionmaking responsibilities puts an enormous knowledge burden on those at the top to have mastery of a wide range of topics to make truly informed decisions. Providing skilled personnel to support and manage the analytic processes described in this report is yet another unaddressed concern.

Ultimately, there is no optimal way to assign responsibilities within organizations; all have their downsides. Often, those in leadership are familiar with the current downsides and disadvantages, and they can envision the benefits of alternatives.

In the course of our research, we concluded that the existing AFMC organizational structure is suitable for providing needed capability and risk assessments to warfighters. The key to working within any organizational construct is defining processes, codifying those processes in doctrine, and employing decision-support tools that are well vetted and well understood by all communities—that is, the warfighters and the combat support community. In analyzing the current state of roles and responsibilities within AFSC and AFIMSC, we found that there are still steps that can be taken to improve integration of combat support and operations. In Table 6.1, we show a sampling of global managers within AFSC and AFIMSC and where they stand with respect to defining their global management processes, defining them in policy, and developing tools to support global management processes.

Table 6.1. Status of Some Global Manager Processes, Doctrine, and Tools

Characteristic	Munitions	Spare	WRM	ABDR	I&MS
Global manager	GACP	CSPEC	635 SCOW	AFSC/LGPM	AFIMSC
Decision-support tools	Robust	Some	Ad hoc	?	?
Doctrine/policy/processes	Well defined	In progress	Defined	In progress	In progress
Stakeholder input	Buy conference Allocation conference	WMP ASM DSOs	Theater working groups	Ad hoc	?

NOTE: WMP = war and mobilization plan; ASM = aircraft sustainability model; DSO = direct support objective.

The recommendations provided in Chapters Four and Five will help AFMC sustain and enhance global management over time and through leadership changes. The first step for both centers is to get involved with the warfighter and provide global assessments so warfighters

understand the value of AFMC's support in operational terms such as the number of sorties that can be produced and the number of operating locations that can be established, given available resources.

Appendix. Excerpts from the PAF Operational Architecture

In this appendix, we present excerpts from past PAF work. That work included defining enhanced combat support planning, execution, monitoring, and control processes and developing an operational architecture that focused on better linking C2 of combat support with operations.¹ The architecture describes processes and echelons of command responsible for executing those processes. Specifically, we present here selections from the architecture related to AFSC and AFIMSC roles and responsibilities. We present both a global integrated level and functional stovepipe level across several phases of operation. The complete architecture can be found on a compact disc enclosed within Lynch et al. (2014a).

AFSC Integrated Global Processes

- Readiness
 - Validate support plan supportability and impacts by individual resource.
 - Evaluate ability to meet measures of effectiveness (MOEs).
 - Develop optimized global support plans.
- Planning
 - Coordinate with global combat support functional managers to determine actual support plan requirements.
 - Reevaluate courses of action given identified constraints and ability to meet MOEs and develop suggested mitigation strategies for Air Force consideration.
 - Develop individual support strategies by resource.
- Employment
 - Monitor and support mission execution.

AFSC Functional Global Managers

- Readiness
 - Review the enterprise capability to support each AOR-specific plan.
 - Balance resources across global functional managers and identify constraining resources and ability to meet MOEs.
 - Integrate force and support requirements from all theaters/regions.
 - Develop and maintain an integrated global enterprisewide supportability plan.

¹ See Lynch et al., 2014a, for a detailed strategic- and operational-level C2 architecture integrating enhanced combat support processes.

- Planning
 - Identify standard set of support demands.
 - Balance resources across global combat support functional managers and identify constraining resources and ability to meet MOEs.
 - Develop global support plan with MOEs which identify constrained resources.
 - Coordinate with global combat support functional managers to determine actual support plan requirements.
- Employment
 - Monitor and assess employment/sustainment.

AFIMSC Integrated Global Processes

- Readiness
 - Review the enterprise capability to support each AOR-specific plan.
 - Balance resources across global functional managers and identify constraining resources and ability to meet MOEs.
 - Integrate force and support requirements from all theaters/regions.
 - Develop and maintain an integrated global enterprisewide supportability plan.
- Planning
 - Identify standard set of beddown demands.
 - Balance resources across global combat support functional managers and identify constraining resources and ability to meet MOEs.
 - Develop global beddown plan with MOEs that identify constrained resources.
 - Coordinate with global combat support functional managers to determine actual beddown plan requirements.
- Employment
 - Monitor and assess employment/sustainment.

AFIMSC Functional Global Managers

- Readiness
 - Validate beddown plan supportability and impacts by individual resource.
 - Evaluate ability to meet MOEs.
 - Develop optimized global beddown plan.
- Planning
 - Develop supportability and impacts by individual resource and evaluate ability to meet MOEs.
 - Reevaluate courses of action given identified constraints and ability to meet MOEs and develop suggested mitigation strategies for Air Force consideration.
 - Develop individual support strategies by resource.

- Employment
 - Monitor and support mission execution.

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