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The Air Force
Chief of Staff
Logistics Review

Improving Wing-Level Logistics

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Prepared for the United States Air Force
Approved for public release, distribution unlimited
The research reported here was sponsored by the United States Air Force under Contract F49642-01-C-0003. Further information may be obtained from the Strategic Planning Division, Directorate of Plans, Hq USAF.

Library of Congress Cataloging-in-Publication Data

The Air Force Chief of Staff logistics review : improving wing-level logistics / Kristin Lynch.
  p. cm.
  "MG-190."
  Includes bibliographical references.
  ISBN 0-8330-3658-0 (pbk. : alk. paper)

UG1103.A36 2005
358.4’1411’0973—dc22
2004017040

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Published 2005 by the RAND Corporation
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Summary

In response to indicators of declining readiness, heightened operations tempo, and evolving force employment concepts, the Chief of Staff of the Air Force (CSAF) initiated a review of Air Force wing-level logistics processes. This review, called the Chief’s Logistics Review (CLR), was designed to target process and process-enabler shortfalls that limited the logistics community’s ability to meet increasing readiness demands. This report presents background information and describes the analytic approach (including the RAND Corporation’s role in its development) and results of CLR (Phase 1), and it describes how solution options designed to improve wing-level logistics processes were tested and evaluated (Phase 2). This effort was unlike a typical RAND study in that it was a joint effort, with RAND acting as an analytic advisor to the Air Force. RAND was chosen to develop the analytic approach for this review because of its previous research and the confidence of senior Air Force leaders. RAND’s involvement was meant to ensure that the CSAF received all potential options and a costs/benefits analysis for each option.

The primary catalyst for CLR was a briefing sponsored by Gen John P. Jumper, then Commander, United States Air Forces Europe (USAFE/CC), in September 1999. Entitled “Posturing Aircraft Maintenance for Combat Readiness” and stemming in part from experiences during Operation Allied Force/Operation Noble Anvil, the briefing illustrated declining readiness trends, degraded warfighting skills, and impaired Air and Space Expeditionary Force (AEF) implementation. The view presented was one of declining readiness be-
cause of lines of authority that were too fragmented to ensure proper control of aircraft maintenance processes at the Air Force wing level. The recommended solution was a focused wing structure with a separate maintenance group controlling all facets of wing maintenance, an organizational structure similar to the one that had been in place before Gen Merrill McPeak had ordered it changed to the Objective Wing structure in the early 1990s.¹

In response to the USAFE/CC presentation and other ongoing concerns about declining readiness trends in aircraft maintenance, Gen Michael E. Ryan, CSAF, directed CLR. In providing guidance for the study, General Ryan questioned the contention that changes to current organizations were required to eliminate the root causes of declining readiness trends in aircraft maintenance. He emphasized instead that existing organizations should be looked at for process and training deficiencies, and he directed that the study focus on identifying actions required to resolve such deficiencies. The CSAF set the following guidelines for the review:

• Evaluate processes rather than organizations.
• Examine centralized versus decentralized execution for home/deployed forces.
• Gather insights from both logisticians and operators.
• Develop changes/adjustments within constrained funding boundaries.
• Develop metrics to compare solution options against the AEF operational goals.
• Identify accompanying benefits, costs, and risk.

Within these CSAF guidelines, RAND, as analytic advisor in a study run by the Air Force, related process analysis to AEF operational goals as a framework for the review. The AEF operational goals, as identified in previous research, are as follows:

¹ For more details and a historical perspective of the organizational structure of maintenance in the Air Force, see Appendix G.
• Rapidly configure support.
• Quickly deploy large and small tailored force packages with the capability to deliver substantial firepower anywhere in the world.
• Immediately employ these forces upon arrival.
• Smoothly shift from deployment to operational sustainment.
• Meet the demands of small-scale contingencies and peacekeeping commitments while maintaining readiness for potential contingencies outlined in defense guidance.2

CLR incorporated a structured methodology focused on identifying process problems and presenting options for their correction. Active major command (MAJCOM) participation and a sequential review process were used. Throughout the process, MAJCOM inputs were solicited and used to refine potential solutions for consideration by senior Air Force leaders.

During the course of the review, the CSAF maintained his focus on effecting proper process and training improvements within the existing Objective Wing maintenance structure for the Combat Air Force. He did not seek to realign sortie production and fleet management processes by putting them under a single authority, an approach frequently recommended by MAJCOMs.3 He further directed that the focus be on officer development in order to identify the subject matter content and level of training necessary at various stages in career progression. He emphasized that the study should lead to an identification of what and how much maintenance knowledge both fighter pilots and maintainers need to go to war. He did not object to minor realignments to improve process efficiencies. He agreed to some policy changes, many major training improvements, and some minor process realignments.


3 Although recommended by the MAJCOMs, General Ryan, CSAF during CLR Phase 1, was opposed to major organizational change or realignment. In his opinion, there had been enough major reorganizations within the Air Force, and he did not want to make any further significant changes.
The underlying theme for the analysis was the challenge of balancing the near-term sortie production requirements with the long-term fleet health necessary to meet future requirements. MAJCOMs recognized that day-to-day sortie production was often taking priority over scheduled maintenance tasks (for example, training, phase maintenance, and time-critical technical order changes) seen as essential for investing in future capability.

Following a series of reviews, a set of solution options was finalized and presented to senior leadership. The options proposed for maintenance targeted minor process realignments and investments in process enablers that would aid in achieving the near-term/long-term balance sought. Options for improving Supply, Transportation, and Logistics Plans were also proposed. Also the result of MAJCOM inputs and RAND analysis, these options included streamlining the wing-level distribution process by integrating Supply and Transportation into a single organization and improving wing-level contingency planning and execution by creating a standard structure for the logistics planners within the wing.

**Options for Improving Wing-Level Logistics (see pp. 7-17)**

CLR Phase 1 resulted in a set of improvement options that targeted four areas: maintenance, materiel management, contingency planning and execution, and technical training and officer development. Air Force leadership approved the following initiatives by targeted area, and all selected initiatives (in bold below) were then evaluated during the implementation test (Phase 2).

The approved maintenance initiatives were designed to improve the ability to balance near-term sortie production requirements with long-term fleet health requirements, with the end result of ensuring future readiness. These initiatives were as follows:

- Increase emphasis on sortie production and fleet health processes by aligning sortie production functions under the Opera-
tions Group and fleet health functions under the Logistics Group.

• Develop and enforce policy for current versus future readiness tradeoff analysis.

• Improve maintenance policy.
  • Develop a Senior Leaders’ Metrics handbook.
  • Improve enlisted maintenance training.
  • Improve officer (logistics and rated) maintenance training.
  • Pursue centralized intermediate repair facilities for wartime and peacetime.

For materiel management, the intent of the approved initiatives was to improve wing-level distribution:

• Provide guidance for materiel management pipeline analysis.
• Improve Regional Supply Squadron (RSS) policy.
• Develop training on RSS processes, tools, and metrics.
• Create a single authority for the distribution process by integrating the wing-level supply and transportation squadrons.
• Pursue enhanced combat support execution planning and control (CSC2) at regional activities.

For contingency planning, the approved initiatives were to improve the wing-level deployment planning and execution process:

• Create and report metrics for contingency planning against AEF goals.
• Improve policy for deployments and site surveys.
• Create a Joint Operations Planning and Execution System certification policy.
• Standardize throughout the Air Force the alignment of Logistics Plans by placing them within the Logistics Group.
For technical training and officer development, the approved initiatives were aimed at improving the skills and knowledge of the workforce:

- Increase the availability of training managers.
- Standardize nonrepetitive maintenance/deployment training tasks.
- Change Air Force recurring training timing to coincide with AEF cycles.
- Define logistics officer career paths into two tracks.
- Improve cross-flow management.
- Develop Weapons School–type training for logistics officers.

Implementation Test (see pp. 19–25)

Air Staff prepared a CLR presentation for the newly appointed AF/IL, Lt Gen Michael E. Zettler, to take to the CSAF for approval. The options were subsequently put forth in a presentation at the Fall CORONA in early October 2000, where a decision was made to evaluate the selected options during a six-month implementation test at a limited number of bases. RAND was asked to analyze the test and provide feedback to the Air Force on the test results. The implementation test was conducted for six months, from September 2001 to March 2002.

The implementation test was designed to evaluate the plan for implementing CLR initiatives Air Force–wide and to ensure that changes did not negatively impact wing-level operations. In this case, a successful test was defined as one in which an initiative was implemented without causing unintended consequences. Against that criterion, the CLR implementation test was a success in that there were no detrimental consequences from implementing CLR initiatives. Specific issues do warrant consideration, however, as follows.
Sortie Production and Fleet Health (see pp. 27–51)

- Encourage and facilitate the use of metrics to balance daily sortie production and long-term fleet health management at the wing level.
- Consider implementing additional maintenance and maintenance management policy improvements, and additional job performance aids, and further refine training and education opportunities.
- Consider implementing additional activities to monitor, measure, and evaluate policy enforcement.
- Proceed with Air Force–wide implementation of CLR sortie production/fleet health initiatives and consider alternatives to further enhance maintenance process execution.

Materiel Management and Contingency Planning (see pp. 53–91)

- Consider revisiting the Logistics Readiness Squadron (LRS) restructure from the viewpoint of maintaining the integrity of the distribution process as it is defined and conceptualized by Air Force theater distribution needs.
- Consider re-evaluating the Vehicle Management Flight and the possibility that the LRS restructure may have had an unintended adverse effect specifically on the transportation enlisted career field.
- Consider aligning core functions associated with deployment planning and execution, force reception, and force beddown in an organization specifically focused on those AEF-critical processes.
- Consider creating new metrics that focus on the distribution process with related segments and, in turn, show how the base-level distribution process fits into the larger global/theater distribution process.