Improving Wing-Level Logistics in the U.S. Air Force

An Analytic Approach for the Chief’s Logistics Review

In the late 1990s, concerns about declining readiness among U.S. air forces led General Michael E. Ryan, Chief of Staff of the Air Force (CSAF), to direct a review of wing-level logistics processes. A major concern was that heightened operational tempo was putting strains on the logistics community’s ability to meet increasing readiness demands. Day-to-day sortie production was often taking priority over scheduled maintenance tasks (for example, training, phase maintenance, and time-critical technical order changes), which are seen as essential for investing in future capability. In response to these concerns, General Ryan directed a study of wing-level logistics processes called the Chief’s Logistics Review (CLR). The purpose of the study was to identify process and training deficiencies within existing organizations that contributed to declining readiness and to evaluate potential solutions. RAND Project AIR FORCE (PAF) was asked, as an analytic advisor to the Air Force, to develop an analytic approach to ensure that the CSAF received all potential options and a costs/benefits analysis of each.

In Phase One of the project, PAF researchers developed an analytic approach to identify problems and process improvement options in four areas: maintenance, materiel management, contingency planning and execution, and technical training and officer development. CSAF selected the following initiatives to be field-tested (excluding those in technical training and officer development, which must be measured over a long period of time):

- **In the area of maintenance**, align sortie production functions under the Operations Group (OG) and fleet health functions under the Logistics Group to increase emphasis on each task (the existing structure aligned both functions under the OG, often sacrificing fleet health to meet sortie generation requirements).
- **For materiel management**, integrate wing-level supply and transportation functions under one squadron to create a single authority for the distribution process.
- **For contingency planning and execution**, standardize the alignment of logistics planning throughout the Air Force. Whereas different commands have conducted logistics planning in different parts of their organizations, this initiative would align such plans under the Logistics Group.

In Phase Two, these initiatives were field-tested at a limited number of air bases over six months. PAF researchers analyzed the results. The test was considered to be a success in that there were no detrimental consequences from implementing CLR initiatives. However, specific issues warrant further consideration:

- **To further improve maintenance processes**, the Air Force should facilitate the use of metrics to balance sortie production and fleet health; consider implementing additional maintenance management policy improvements and job performance aids; develop steps to monitor, measure, and evaluate policy enforcement; and proceed with implementing CLR initiatives.

- **To further improve materiel management and contingency planning**, the Air Force should continue to evaluate the Logistics Readiness Squadron structure, including the Vehicle Management Flight, aligning core functions such as deployment planning and execution, force reception, and force beddown. The Air Force should also create metrics to gauge its success at aligning these structures and processes.