



Measuring Capabilities of Air and Space Expeditionary Forces to Meet Policy Goals and Control Deployments

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Two recent transformations have affected the way the U.S. Air Force shapes and deploys its forces. The first is a Department of Defense (DoD) policy of capabilities-based planning, which places an emphasis on sizing and shaping forces to be responsive to a wide spectrum of functional and geographic operations. The second is the Air Force's reorganization of its personnel into Air and Space Expeditionary Forces (AEFs). In creating the AEFs, the Air Force's goals include specifying forces in terms of their capabilities rather than as numbers of squadrons or wings of aircraft and providing a predictable and fair distribution of deployments across personnel.

RAND Project AIR FORCE (PAF) introduced an analytical framework that expresses the capabilities of AEFs in terms of what forces can be deployed, supported, and sustained by a nominal AEF. The key to the analysis is that the forces can be specified by a list of parameters including numbers and types of aircraft, the characteristics of deployment sites, and the risks that the deployment sites have of conventional and non-conventional attack. This approach offers the flexibility to examine a variety of planning scenarios and provides the necessary details to examine the support and sustainment requirements of potential deployments. In this way, how well AEFs can satisfy desired DoD objectives could be analyzed against current and alternative AEF policies. PAF's method for quantifying AEF capabilities has many potential applications in policy analysis. For example, this approach

- provides a vocabulary for articulating AEF capabilities
- helps identify factors that limit deployment capabilities
- provides an analytical basis for identifying and balancing resources given policy requirements
- provides an analytical foundation for exploring alternative AEF policies
- provides analytical support for both planning and execution.

PAF recommends that the Air Force implement and maintain an analysis tool—integrated effectively with existing tools—that assesses AEF capabilities and considers the support and sustainment of forces. Recommendations for the implementation include the following:

- Develop and implement a rules-based tool that quantifies deployment requirements as a function of a limited number of parameters, such as number and type of aircraft deployed, base infrastructure at deployment sites, and level of the threat of conventional and non-conventional attack.
- Consider assigning all unit equipment and non-consumable war reserve materiel to the Air Force's Unit Type Codes (UTCs), which are units of capability specified as required manpower and equipment.
- Consider listing all equipment UTCs in the AEF libraries.
- Consider assigning to the equipment UTCs an availability code and readiness status.

Implementing these recommendations should facilitate capabilities-based planning, provide senior leaders and combatant commanders with a clearer understanding of Air Force capabilities, and make deployments more predictable. ■

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