

How Can the Mobility Air Forces Better Support Adaptive Basing?

Summary Analysis, Findings, and Recommendations

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ISSUE

The U.S. National Defense Strategy highlighted important new strategic and operational challenges and called on the U.S. Department of Defense to innovate in response to those challenges. The U.S. Air Force is exploring adaptive basing (AB) concepts as part of this innovation to reduce the vulnerability of combat air forces (CAF) and to preserve critical combat capabilities in highly contested environments.¹ These AB concepts will stress the Mobility Air Forces (MAF). Given the uncertainty of the emerging operational environment, enhancing MAF adaptability will create a significant national strategic advantage for the United States.



APPROACH

From a broad range of AB options being developed, we identified four concepts to represent a range of challenges to mobility operations. We analyzed the implications of each on the demand for tankers, airlift, and base enablers.² These concepts, and the baseline, are illustrated in the figure. We examined the sufficiency of current MAF capacity to support the CAF using AB concepts and then considered potential enhancements to better support AB operations.



CONCLUSIONS

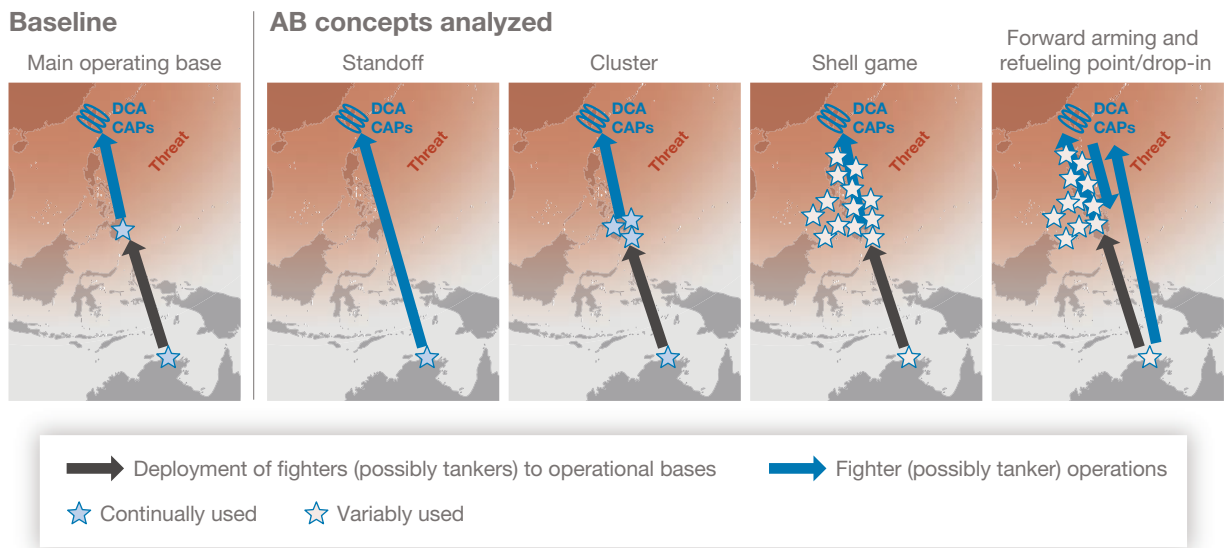
In terms of sufficiency, we find the following:

- Different AB concepts and different implementation approaches have vastly different implications for the MAF.

¹ Throughout the report, we use the term adaptive basing (AB) to represent a range of concepts in which fighters operate dynamically from forward austere bases. One of these concepts was agile combat employment (ACE). Since completion of this work, ACE has become a widely used term for these operations.

² We used operations in the Pacific for the analytical cases, but the results should be applicable across different theaters when one considers differences in distances, bases, etc.

BASING CONCEPTS ANALYZED



NOTE: CAP = combat air patrol; DCA = defensive counterair.

- Under most circumstances, the MAF could support small elements of CAF fighters (about ten 24-hour, two-ship DCA CAPs) using AB concepts with tankers from standoff—but only by engaging a large fraction of the MAF fleet. There are some cases in which the MAF would have difficulty supporting even this level of combat power.
- MAF units are not sized or structured to support AB concepts: The U.S. Air Force force packaging and equipping strategy is not designed to deploy small packages at large scale.
- Under most circumstances, base enablers (e.g., contingency response forces and base operation support) could support the AB cases analyzed, but an entire theater campaign would stress resources. Command-and-control coordination between the CAF and MAF, vulnerability of communications and navigation, and MAF culture offer additional challenges.

Several enhancements could help the MAF to support larger elements of combat power using AB. Our analysis suggests the following:

- Tankers will likely need to operate closer to the fight to meet large AB demands.
- Minimizing forward ground times and operating from multiple forward bases could enhance tanker survivability. Return to standoff bases as required for major maintenance.
- When possible, ground transportation could reduce the intratheater airlift requirement.
- New systems and concepts of operations (CONOPs) could shorten airlift ground times, enhance logistical operations, and cut the deployed footprint.
- Cross-training personnel could reduce deployed footprint, relieve shortfalls, and improve deployment and employment timelines.
- Increasing and expanding contingency response capability and capacity are required to support large theater-wide operations, if using AB.
- Joint, host-nation, contract support, and prepositioning could offset some airlift demand.
- Seeking agreements in advance with potential partners, such as the predesignated bases in the U.S.-Philippines Enhanced Defense Cooperation Agreement, is highly desirable.



RECOMMENDATIONS

- Air Mobility Command (AMC) should enhance integration with the CAF, joint, and component organizations to ensure that AB plans are developed in line with air mobility strengths and constraints.
- AMC should experiment with new CONOPs to allow the MAF to best support AB operations.
- AMC should coordinate with allied governments to enhance the potential for desirable basing and to better mitigate impacts on operations due to Chinese use of hard, soft, or sharp power.
- AMC should conduct a complete review of rules and regulations (e.g., Air Force instructions) to enable more-effective operations in challenging environments while taking prudent risk.
- AMC should consider how new equipment and technologies and new CONOPs could enable safer, more-efficient, and more-effective AB operations.



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