

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 2004		2. REPORT TYPE		3. DATES COVERED 00-00-2004 to 00-00-2004	
4. TITLE AND SUBTITLE Quick Look: The Next Phase: Air and Space Power in Current Operations				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) CADRE/AR,Director, Airpower Research Institute,401 Chennault Circle,Maxwell AFB,AL,36112-6428				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 2	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

CADRE Quick-Look

Catalyst for Air & Space Power Research Dialogue



The Next Phase: Air and Space Power in Current Operations

Anthony C. Cain, Col, USAF

Problem: Air and Space Power doctrine, command and control structures, and operating concepts are optimized for combat and are not designed for post-major conflict operations. Additionally, Air Operation Center planning processes are geared toward providing destructive effects that support joint campaign objectives. As objectives shift from attacking enemy forces toward restoring order and bolstering social, economic, and cultural stability, airmen do not have a way to articulate their continued relevance to the joint campaign.

Discussion: Despite nearly 12 years of work on refining effects-based operations (EBO), air and space power operators do not have a common sight picture that allows them to articulate how air and space power influences a full range of strategic, operational, and tactical objectives. In the absence of such a picture, air operations effectiveness degenerates into measuring effort (e.g. sorties flown) or measures of requests satisfied. In other words, airmen unintentionally train the requestor to ask for only as much as we can provide (i.e., after 11 months of working together, we may have trained the supported elements not to ask for more or different capabilities than we have typically provided). Unfortunately, the patina of EBO jargon provides the illusion of progress that simultaneously deceives other service components and airmen. Other service components have developed a perspective of air and space power that emphasizes its limits rather than the full extent of its capabilities. Consequently, ground force commanders who rely on air and space power to support their operations first begin to dictate mission requirements to air planners (i.e., CAS, ISR, Presence) and quickly shift to demanding the airframes they prefer to fly such missions. For their part, airmen reconcile themselves to the situation by arguing that air and space power has little to contribute, or that, as the supporting force, air and space power is providing exactly what the supported commander asks. Still, there is a nagging feeling among airmen that they could do more.

This situation exists because airmen have not completed the conceptual development of EBO to include how to assess effectiveness—especially after major combat operations wind down. Moreover, the Combined Air Operations Center is geared toward managing *destructive*, as opposed to *constructive*, air operations. In these types of campaigns, effectiveness should focus on the attitudes, quality of life, and will of civilian populations rather than on combat strength and effectiveness of enemy combatants. The capabilities required to be effective in this phase of the campaign emphasize restoring services, establishing stable institutions, and guaranteeing the social welfare of populations whose lives have been disrupted by brutal regimes and the ravages of war. As NATO leaders recognized in the aftermath of the Balkan wars of the 1990s, “Repaired buildings, well-stocked shops and even traffic jams are important signs of confidence in the future...and that, in turn, would eliminate the need for foreign peacekeepers.”¹

Measuring effectiveness in the aftermath of major combat operations inherently focuses on looking for second- and third-order effects. It is also inherently an operational and strategic exercise that requires a strategic vision that links the desired end state with operational planning and execution. Perhaps most importantly, it requires a consistent focus on tracking the results of joint and combined actions by looking for even seemingly minor indicators of progress. It is complex, difficult, and unglamorous work that is very different from planning and executing major combat operations.

The Berlin Airlift offers a poignant example. Future Military Airlift Command Commander, General William Tunner assumed leadership of the airlift to thwart the Soviet blockade of Berlin in 1948. Tunner recognized that the strategic objective required him to maintain an indefinite supply line for the former German capital and that the US-led coalition did not want to allow the Soviets to escalate the situation toward combat operations. He organized the airlift operations center to provide round-the-clock flights, he categorized the types of commodities carried to and from the city, and he established rigorous metrics that allowed him to determine the effectiveness of his operation. In Tunner’s view, an airlift

The College of Aerospace Doctrine, Research and Education (CADRE) *Quick-Looks* are written by military defense analysts assigned to Air University (AU) are available electronically at the AU Research Web Site (<https://research.au.af.mil>) or (<http://research.airuniv.edu>). Comments are encouraged. Send to: CADRE/AR, Director, Airpower Research Institute, 401 Chennault Circle, Maxwell AFB AL 36112-6428 or e-mail: cadre/arr@maxwell.af.mil.

Quick-Look 04-3

operation is fundamentally different from a combat operation—the relentless schedule of takeoffs and landings combined with the steadily increasing graphs of tons delivered per day represented one measure of effectiveness.

In terms of second and third order effects, the attitudes of Berliners shifted from despair to hope, from apathy to enthusiasm as they gained confidence that the allies would not abandon their city to Soviet rule. In addition to transporting food and coal, Tunner's airmen supported the recovering Berlin economy by importing raw materials and exporting finished goods thus dramatically demonstrating to the Soviets and to the Berliners that the allies had the will and the means to withstand intimidation. After nearly one year of operations, the Soviets lifted the blockade.² This illustrates a key component of constructive air operations—second and third order effects are as important as the primary effects, prevailing on both friendly and adversary target populations. As friendly populations find their lives steadily improving, the attraction of competing ideologies decreases.

Modern air and space power operations should refine EBO concepts to consider the full range of air and space power effects possible for post-major combat operations. This should occur, not because it applies to the situation in Iraq and Afghanistan, but because our doctrine should communicate to airmen and other services how air and space power can most effectively achieve strategic, operational, and tactical objectives across the spectrum of political-military scenarios.

Possible Courses of Action:

1. Organize Air Operations Centers to maximize efficiency and effectiveness for post-major combat operations by merging Combat Operations and Mobility segments of the AOC to achieve seamless operability for effects-based planning. In other words, adopt an EBO mindset for the full range of air and space power operations—not just for combat operations.
2. Map the effects that describe how air and space power can contribute to achieving strategic, operational, and tactical objectives in post-major combat operations to a set of air and space power capabilities.
3. Develop a menu of measurements linked to potential effects that focus collection and assessment efforts for all phases of air and space power operations.
4. Codify EBO for constructive as well as destructive operations in doctrine to emphasize the potential rather than the limits of air and space power in post-major combat operations.

¹ Richard J. Newman and Douglas Pasternak. "Why NATO Counts Cabbages in Bosnia," *US News and World Report* vol 121, issue 8: 36.

² William H. Tunner. *Over the Hump* reprint 1985 (Washington, D.C.: Office of Air Force History, 1964).