



## Strategic Implications of the Expeditionary Aerospace Force

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*Editorial Abstract: The expeditionary aerospace force effort is a promising new force-management framework to maintain the Air Force as a global-force provider. General Cook, who was at the helm of much of its development, and his coauthors introduce the engagement-spectrum model, which links small-scale commitments to those of major theater war and its constitution requirements. This model enables the measurement of force-commitment levels and can warn of unsustainable levels that require action and/or additional funding from decision makers. The authors challenge us to apply the model at all levels of the Air Force to stabilize our units, raise retention, and ensure our readiness for global engagement in the twenty-first century.*

**T**HE DAWN OF THE twenty-first century casts a bright light on the United States military. Indeed, this nation's military capabilities are the envy of the world. Still, the experiences of the 1990s and the promise of challenges into the first decade of this millennium highlight the great advantages of each of our uniformed services and the tests they must endure—something especially true of the United States Air Force. As the Air Force struggles with a multitude of changes in this emerging era, it has begun to charter a path to become a more expeditionary, integrated, and effective instrument of power that our nation can flexibly apply as a seamless element of our joint war-fighting capability. Speaking of seamless operations, the Air Force has sustained a pace over the past nine years that indicates it is the service of choice for many operations that require rapid response with maximum force, while exposing the fewest number of Ameri-

can service personnel to danger. As airmen, we have grappled to meet the challenges of the post-cold-war era, during which time airpower has truly come of age and the Air Force has gone back to the future as an expeditionary force—capable of rapidly deploying, employing, and redeploying our great military might.

Several realities help provide an understanding of why the Air Force had to change: the geopolitical environment, the budget environment, and accelerating technological advances. By many accounts, the transition period that started with the end of the cold war will continue for at least another decade. So far, the national military strategy of engagement has successfully met the challenges of a world environment characterized by transition, turmoil, and uncertainty. Engagement within this environment, though, will continue to place strains on the US military as uncertain threats, both potential and actual,

drive responses across the entire spectrum of possibilities. At the same time, we do not anticipate any significant increase in force size to meet the demands of this challenging environment that has existed for 10 years now. Military budgets may fluctuate to some degree, but no one foresees a significant injection of funds to produce more equipment and personnel. The military must also deal with the reality of technological advances that continue to accelerate the rate of change in our world (although bureaucracies appear to fall further behind). Such rapid advances have compressed time to dramatic levels—we measure in seconds what used to be measured in weeks. Related to this phenomenon is exploitation of the electromagnetic spectrum: information, radio waves, TV, and so forth. Indeed, we may argue that technology has pushed us beyond three-dimensional warfare into a fourth and perhaps a fifth dimension: time and electromagnetism, respectively. Regardless of how we define the dimensions of warfare, we know that the military is executing the national military strategy of engagement within the context of these realities.

To continue to meet the demands of such realities and the national security needs of the United States and its interests abroad, decision makers will have to create new and innovative approaches to organize, train, equip, and employ aerospace power. The expeditionary aerospace force (EAF) effort constitutes an example of one such innovative approach because it recognizes the role of the Air Force as a global-force provider. Essentially, the EAF effort has provided the framework to organize, train, and equip by linking sustainable, small-scale commitments to major theater war (MTW) commitments and reconstruction/recovery requirements. We can understand this process within a strategic context by examining an engagement-spectrum model that offers the Air Force the framework to analyze the balance among all major phases of force application. It also establishes the basis for developing an investment and training strategy to meet the demands placed

on the Air Force as a global-force provider. To fully appreciate the significance of the EAF, we must first explore the impact of making the Air Force a global-force provider, as well as the underlying justifications and implications. This article then briefly introduces the engagement-spectrum model and the implications of its application as we continue to embrace the uncertainty of the first decade of the new millennium.

### The Role of the Air Force as a Global-Force Provider

The strategy of engagement, combined with the decrease in force structure in the 1990s, places the Air Force at a capabilities cusp, creating tension between current operational demands and the requirement to retain robust capability to fight major conflicts. This tension both highlights and demands a new emphasis on the role of the entire Air Force as a global-force provider. For example, we use forces assigned to Pacific Command to meet the demands of European Command and Central Command. The implications of this practice on a smaller force are profound because the actions of one commander in chief (CINC) are magnified in their impact on other CINCs in terms of potential risk. This is true for nearly all Air Force assets—low density/high demand (LD/HD), mobility, space, combat aircraft, and support. Thus, engagement has placed a new management burden on the entire Air Force.

Recent operations in Kosovo helped magnify this point. Prior to Kosovo, the Air Force found itself well into EAF planning to level the tempo load on the entire force. The impact of Kosovo operations on EAF planning specifically, and the Air Force as a whole, was profound. At the height of its involvement, the Air Force had committed a larger proportion of its combat force structure than at any time in recent history—more than in Vietnam and more than in Operation Desert Storm. Additionally, going into this major surge in operations, the Air Force had already endured several years of engagement with

sustained small-scale contingencies (SSC) to multiple locations overseas. In almost every one of these SSCs, the Air Force had to operate out of either expeditionary or temporary bases. Practically speaking, this meant that Air Force units had to man these bases *out of hide*. This sustained engagement had already produced a downtrend in readiness, and the added weight of Kosovo operations merely exacerbated an already tough challenge. The forces the Air Force had to draw on to support the SSCs, while also posturing and executing the Bosnia campaign, came from all over the service. Each major command made significant contributions to these worldwide operations, and by the end of Kosovo, the Air Force's chief of staff was in a position to direct reconstitution or recovery for units, allowing them to recapture the skills required for full-scale war operations.

Embodying the challenge and lesson of the Kosovo operations, then, is the question, How does the Air Force execute its responsibilities within the strategy of engagement? That is to say, How does this service retain its war-fighting capability so that it can *respond* (one pillar of the national strategy) to serious, *direct* threats to national interests while *shaping* the current environment and preparing for a less-certain future?

The problem amplified by the Kosovo operations—the one that the Air Force was already grappling with during initial efforts to build toward an EAF—poses serious questions concerning the Air Force's Title 10 responsibilities to organize, train, and equip. The EAF construct helps provide the framework to address these questions.

The EAF addresses the high demands that the strategy of global engagement places on the Air Force as a global-force provider. Current demands include maintaining high deployment tempos and multiple, sustained forward operating locations while retaining rapid crisis-response capability—and the ability to conduct two nearly simultaneous MTWs. These demands stress our people and assets, resulting in lower retention rates, decreasing readiness rates, increasing cannibal-

ization rates, and lower mission-ready rates. The EAF steps up to a dual challenge: sustaining our aerospace assets and retaining our people.

#### ***Expeditionary Aerospace Force***

As the sun set on the turbulent decade of the 1990s, the Air Force embarked on a bold venture to embrace the challenges presented by the strategy of engagement. The Air Force initiated the EAF implementation effort to position the service to aggressively embrace the new era by creating change in its structure, culture, and operational employment.

The EAF embodies the Air Force vision to organize, train, equip, and sustain its total force—active, Air National Guard, and Air Force Reserve—to meet the security challenges of the twenty-first century. It addresses these challenges through enhancing sustainability, readiness, and responsiveness, and by fostering an expeditionary-warrior mind-set. The fundamental objective of the EAF is to enhance the current operational capabilities provided by the Air Force to its clients—the war-fighting CINCs—while sustaining a viable force that can also provide those capabilities in the future.

The EAF is about truly embracing and understanding the concepts and implications of engagement and presence articulated in *Global Engagement: A Vision for the 21st Century Air Force*. The EAF is a proactive move away from the cold-war Air Force, reaffirming the vital role aerospace power plays across the full spectrum of conflict in support of the national military strategy. It recognizes the growing tendency to employ aerospace power frequently and over sustained periods as a part of that strategy. It also acknowledges that the demand for aerospace power is driven by its unique characteristics of range, speed, flexibility, and precision.

#### ***Force Management***

At its core, the EAF is about the structural and cultural changes that create more effective force-management tools. A key objective in-

volves understanding what the limitations of Air Force resources are and how overcommitting them to meet requirements today can result in less capability to meet essential requirements tomorrow.

The most talked-about change under EAF is the aerospace expeditionary force (AEF)—specifically, the construct by which a pair of AEFs defines the level of deployment that our combat and combat-support units can sustain. A pair of rotating, aerospace expeditionary wings (AEW), one of which is on call at any given time, provides the punch in our crisis-response capabilities.

The AEF force-management tool looks beyond simple aircraft counts to measure tempo by addressing the many deployments that involve only combat-support forces—known as expeditionary combat support. We also try to include metrics for the number of forward operating locations, which can stress some forces just as much as the number of aircraft deployed. A going-in objective entails controlling home-base tempo because it is critical to long-term retention and readiness.

The AEF force-management tool complements two existing tools for deploying forces. First, Air Mobility Command uses mobility commitment lines to control and measure the tempo of tanker and airlift forces. Second, both the Air Force and the joint community use the Global Military Force Policy (GMFP) to measure and try to control the demand for our LD/HD assets such as airborne warning and control system (AWACS), U-2, and special-operations aircraft.

We must protect the forces that accomplish the Air Force's Title 10 task to train, organize, equip, and sustain. MTW plans often assume that we will surge these forces forward and recover them later. However, under the stress of multiple rotational deployments, such a surge becomes counterproductive. Using these forces for deployments interrupts sustainment actions on MTW capabilities and delays efforts to recover, refurbish, and retrain returning forces. We often overlook this hidden cost of business—extremely important to sustaining a viable force—as we assess

our ability to sustain increased numbers of forces forward or assess force-structure cuts using only MTW scenarios.

Finally, although not specifically addressed by these management tools, nondeploying capabilities remain critical to expeditionary operations. Fixed assets that provide support to deployed forces, such as satellite-control stations, logistics depots, intelligence-production centers, long-haul communications, and so forth, are vital to reducing the footprint required to deploy forward.

By the conclusion of 1999, the Air Force had made significant progress on the EAF journey toward becoming a more viable service by initiating the following efforts:

- Restructuring processes to smoothly make the transition across the spectrum of military operations.
- Defining sustainable engagement: the levels of deployment/tempo our forces can sustain.
- Creating more effective force-management tools.
- Developing methods to determine when commitments exceed sustainable levels (surge) and establishing processes to manage this.
- Developing methods to plan for reconstitution.
- Developing methods to provide predictability and stability for Air Force members as an essential part of the service's mission—sustaining and retaining the force while meeting joint-force tasks.
- Emphasizing light and lean forces with a smaller forward footprint; more lethality, requiring less force for a desired effect; and rapid response, reducing demand for forward presence.
- Managing deployment and other requirements to keep within sustainable levels.

As the EAF concept evolves (it is a journey, not a destination), new aspects of the EAF have already helped shape how the Air Force responds to its role as a global-force provider and are laying the groundwork for innovative improvements for operating in the engagement environment. One major theme resonating from the experiences of operating in a heavily engaged environment is that the Air Force must have effective processes to manage the transition from SSCs up to MTW. Unfortunately, many models fail to address the complete spectrum to which the Air Force has had to respond. The engagement-spectrum model helps provide a framework for analyzing the relationships among different phases of engagement (from a strategic perspective) and helps illustrate the contribution of each element of the total Air Force to our struggle to meet the demands of a national security strategy at all levels.

### The Engagement-Spectrum Model

Typically, we think of the spectrum of conflict as a linear transition from peace to war and then back to peace. The engagement

spectrum (fig. 1) reflects the Air Force's experiences with the reality of engagement, which adds a baseline of long-term rotational deployments. Simplistically, we turn the traditional spectrum on its side and account for a continuum of long-term rotational requirements. The vertical axis of the model, then, represents a level of commitment for the Air Force in terms of resources, while the horizontal axis represents time. Hence, recognizing that in a strategy of engagement we always have a certain number of baseline forces engaged, the model allows for an increase in the level of commitment up through surges into actual war. Unique to this particular model is recognition that there must be a seamless transition back to some postconflict steady-state levels and that this transition requires time for recovery and/or reconstitution.

(At this point, one should note that although the model lends itself to discussion of Air Force commitment levels as a whole, one can also apply its key points to almost every unit and every functional area. We all have levels we can sustain indefinitely; thus, exceeding surge points will drive some cost. For example, the mobility community has a level

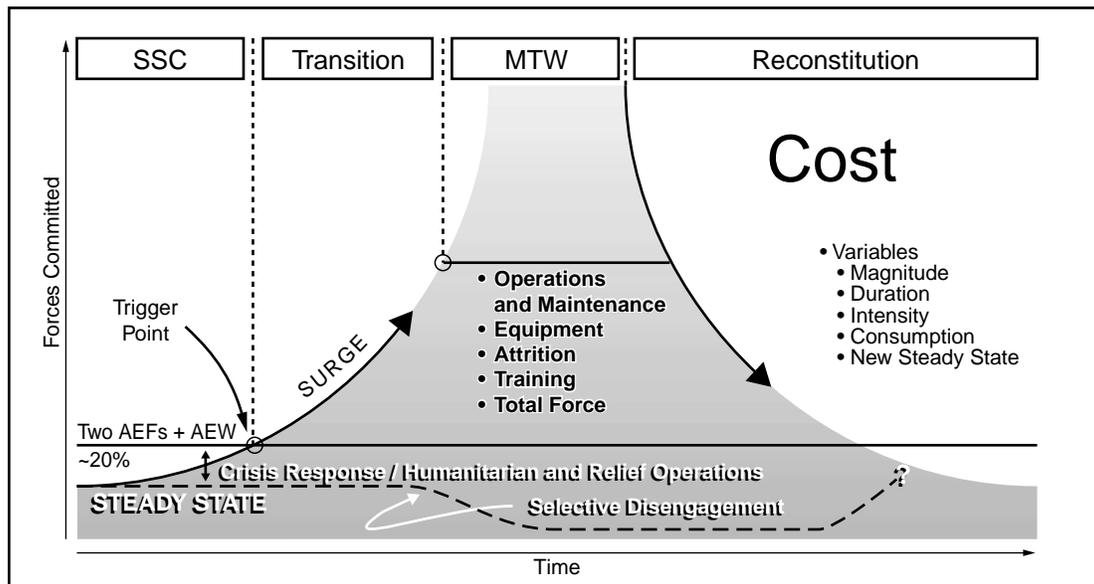


Figure 1. The Engagement-Spectrum Model: EAF across the Spectrum

of commitment it can sustain indefinitely, and that level varies for each major weapon system. The LD/HD weapon systems, such as AWACS, also have sustainable commitment lines. As a percentage of their specific force [these limits vary], the important point for this model is that each system can identify its particular key points.)

***Sustainable Engagement to Meet Small-Scale Contingencies***

The first notable characteristic of the model is that it attempts to reflect the ongoing commitment to the strategy of engagement. Although the model measures commitment in terms of AEFs, this commitment sits on top of fixed forces such as those dedicated to Korea. Today, we use AEFs as the force-management tool to define our level of sustainable engagement. We can meet the total operational commitment with forces from the two tasked AEFs and an on-call AEW, along with mobility and LD/HD assets operating below their defined surge lines. We can sustain this commitment over time, provided that we address recurring needs of the force—including personnel, maintenance, and equipment. Sustainable engagement includes a level of crisis response—an on-call AEW—that provides a cushion to preclude having the force surge every time a crisis occurs.

What defines the level that we can sustain indefinitely? It depends to a great degree on the mission of the particular weapon system, unit, or type of equipment. Again, at the broadest level, the Air Force says it can task no more than about 20 percent of its combat air forces for operational requirements without significantly impairing its ability to prepare for future major engagements. That is the balance point, which the Air Force can—and should—define for each of its functional areas.

From the perspective of the 1990s, with minor exceptions, the forces in two AEFs and the on-call AEW could have handled all of the contingencies between Desert Storm and Kosovo without requiring a major surge. Those events would have fallen in the crisis-

response zone for most assets. However, in Kosovo the Air Force's engaged forces did reach a level of effort nearing commitments envisioned in theater operational plans. When that happens—between the trigger point and full mobilization—we must consider other sustainment options, including presidential selective-reserve call-up or full mobilization.

***Trigger Point***

The model raises the obvious question of what happens when we exceed the sustainable steady-state line. At least three major considerations should begin after commitments pass this so-called trigger point: an acknowledgment that (1) the force is in surge operations (which we cannot sustain indefinitely); (2) the force is likely in a transition to MTW levels of commitment; and (3) definite costs associated with passing the trigger point should generate several actions to initiate recovery/reconstitution efforts. Let us look at each of these considerations in greater detail.

Surge operations begin when tasks exceed sustainable Air Force capabilities. Force-management tools provide trigger points to identify the time when requirements exceed sustainable commitment levels. Two AEFs and an AEW provide the trigger(s) for combat and combat support. Similarly, the GMFP governing LD/HD assets (AWACS, etc.) and mobility commitment lines defines trigger points for those forces. Another logical trigger should occur any time we tap into our train and organize, equip, or sustain forces for operational tasking. Note that surge is not necessarily a result of a single contingency. In fact, our experiences in the past decade showed that surge is an accumulation of contingency commitments that can come from a single event (e.g., Kosovo) or a number of smaller contingencies. In theory, commitments can build to an MTW level of effort but hopefully will level off well short of that mark.

Acknowledging that the level of force commitment may be approaching MTW levels is not in any way meant to make a political statement. From a military perspective, it is meant

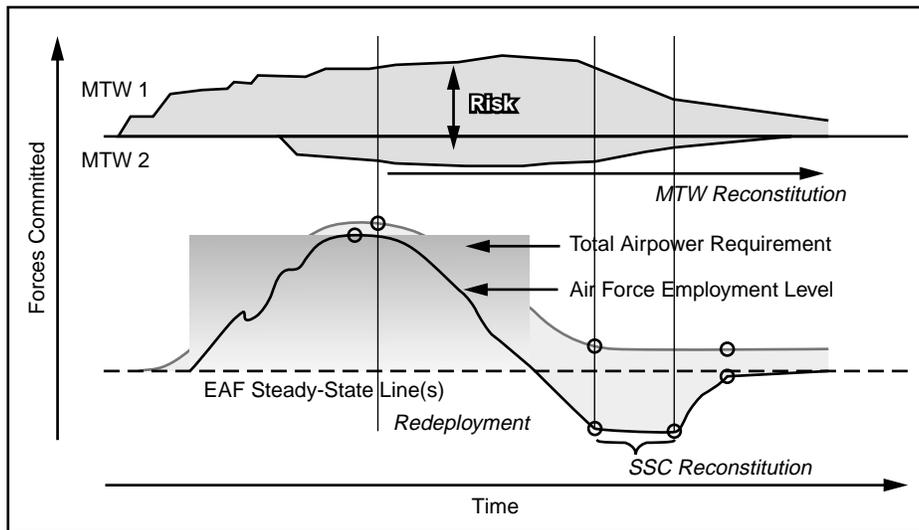
to serve notice to planners that at a particular level of commitment, the possibility exists that we will accept risk in other operational plans. This recognition may lead to considering alternative courses of action, or it may initiate activities to begin selectively disengaging from some other SSCs. However, Kosovo showed that selective disengagement can be complicated by CINCs who want to selectively *increase* engagement as a risk-management measure. As mentioned earlier, it is certainly possible to find ourselves at MTW levels of commitment in terms of force structure deployed or munitions expended without actually engaging in a major conflict. Because the force is in surge, multiple implications can immediately arise, such as initiating a presidential call-up of reserve forces, working toward an exit strategy, increased monitoring of other planning activities, and so forth.

The third consideration—one that often goes unnoticed—is that once the trigger point is exceeded, either through levels of forces committed or through consumables expended, a definite cost arises. As the model indicates, costs vary, depending on many things, such as magnitude, duration, and so

forth, of the contingency. Also, costs come in many forms, direct and indirect, and can include those for the actual operations, such as fuels, munitions, and equipment. Other costs may include those for sacrificed training (which increases future risk to operations plans) and those associated with employing the total force beyond what employers consider acceptable. All of these potential costs and others should enter into the equation as we calculate the impact of passing the trigger point, which must also immediately initiate activities to generate long-lead item reconstitution and recovery efforts.

**Reconstitution**

Any time an asset surges past its trigger point, some cost is incurred, and planning for reconstitution must begin simultaneously with the start of surge operations (fig. 2). Reconstitution efforts will continue beyond the end of the contingency operation. Factors to consider in reconstitution planning include levels of consumables and munitions expended; training lost; impact of personnel retention and attrition rates across the total force; and postcontingency, steady-state operational re-



**Figure 2. Reconstitution for Engagement and MTWs**

quirements. Note that any time the force begins to surge, one must disengage below the sustainable engagement level for a period of time to reconstitute the force. Additionally, after a surge, it is critical that the exit strategy return the total Air Force commitment back to a level it can sustain indefinitely. At this juncture, one must consider how neglect of reconstitution and recovery efforts would affect the sustainable engagement level in the future.

#### ***Engagement Model Applied***

Operations in Kosovo serve as a case study for the application of the engagement-spectrum model. Air Force assets going into Kosovo were committed somewhere around the 10 percent level, and as operation requirements increased, the Air Force surged well past the trigger point. The Air Force executed this operation—the first major contingency with the post-cold-war force structure—while a significant portion of its assets was already engaged in other parts of the world. Finally, after Kosovo, the Air Force had to go through a form of recovery or reconstitution while still engaged—with a goal of returning to a level of commitment it could sustain. By applying the concepts presented in the engagement model, the Air Force could measure and articulate the impacts of the Kosovo operations, in addition to other worldwide commitments, and rapidly build and execute the plan to recover.

So, the engagement-spectrum model helps us understand the challenges that the strategy of engagement has placed upon the Air Force. Additionally, the model provides an opportunity for each element of the Air Force to identify with the contribution it can make to ensure cohesive operations across the entire spectrum of military operations, including critical aspects of reconstitution. Lastly, the model helps shape thinking about how the Air Force will have to operate as an effective force toward the end of this decade. The model's success does not depend upon how well it fits the past but on how well it fits the future. Extending the strength of the Air Force into the next decade requires bold vi-

sion and the strength to develop innovative methods.

Looking to the future, the Air Force will still have to respond rapidly with its forces, anywhere in the world. In fact, one of the main assertions the Air Force makes today is the ability to project power worldwide in a matter of hours. In addition to global-attack missions, the Air Force is working toward a vision of delivering desired effects within 48 hours of an execution order, given 24 hours' strategic warning. We must build this ability to continue to compress time upon a solid understanding of the linkage with the desired outcome of the application of military force. We say that we are an effects-based force and that we apply capabilities to create the effect, so comprehending the demands of sustained worldwide operations as a global-force provider is crucial.

The basic elements of Air Force capabilities include people, equipment, and munitions, fused through doctrine, training, and command and control systems to create flexible capabilities. Applying these capabilities through comprehensive campaign plans to create desired effects is the role of the war-fighting CINCs. Preparing these basic elements and developing the construct that balances day-to-day operational demands with potential wartime demands fall under the responsibilities of the US Air Force. Initial efforts to identify trigger points and sustainable levels of engagement must continue. Additionally, planning systems must refocus efforts on the ability to transition from small-scale operations, to surge, to MTW, and back through reconstitution to small-scale operations. Current planning systems are much too unresponsive to accomplish the demands of the Air Force today, not to mention the Air Force at the end of this decade.

The Air Force's effort to make the transition into a fully capable expeditionary force has yielded many benefits. It has also raised multiple questions for further study: Do the Air Force and the Department of Defense have the planning systems today that can adapt to changes required in an accelerated world pace? Are we adequately resourced to work across the spectrum? Does our invest-

ment strategy match the demands we will have to meet? Does the acquisition process allow for the adaptations required while operating across the spectrum?

Clearly, basic Air Force capabilities will not change: people, equipment, and munitions fused with doctrine, training, and command

and control systems. We may change the capabilities we provide to the war-fighting CINCs to create the effects, but our ability to manage these basic elements innovatively—to increase the synergistic effects we expect from airmen—will set the tone of military operations for the next two decades. □

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*Who controls the Rimland rules Eurasia; who rules Eurasia controls the destinies of the world.*

—Nicholas Spykman, 1942