Historical Tensions for Airpower Leaders

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ow nations define and solve the strategic problems they face determines their future security. Notably, military leaders and the institutions they serve drift toward solving immediate problems with perhaps too little concern for long-term consequences. They are at their best when confronted with cleanly bounded issues and a known end state or precise objective. Legitimate concerns about the most appropriate way to defeat the enemy, win battles, and secure the foundations for political victory come to dominate thinking among military personnel because success in these endeavors secures the nation's freedom of action, protects sovereignty, and enhances the reputation of leaders, their units, and, by extension, their services. Thinking about how best to prepare to meet societal expectations, to confront long-term strategic challenges, and to remain efficient and effective during extended periods of peace, even those punctuated by conflict, requires a different mind-set—a different approach. If defense professionals wish to remain credible partners in the nation's strategic dialogue, they must contemplate the foundations of their service to the

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Form Approved OMB No. 0704-0188 nation and society as well as the most productive means of attending to these relationships.

The complexity of the strategic environment we face demands that airmen in particular must present coherent options. Since 1989 (especially since 1991), in addition to state-centric conflicts, security challenges have included a mix of scenarios involving counterinsurgency, counterterrorism, counter drug trafficking, counterproliferation, nation building, humanitarian assistance, state failure, and civil wars. Pundits call these kinds of conflicts "wicked problems" because of the absence of a readily discernable solution (in fact, no solution may exist) and because no problem-solving methods offer insight into potential answers. This environment has placed political and military leaders in an intellectually defensive crouch. No one wants to take blame for a defeat, yet no one has a clear plan for "victory." Airmen in particular, though recognizing the cost, in terms of both dollars and human lives, of the current conflicts, intuitively understand that more dangerous and more capable threats hover on the near horizon. Yet, making a compelling case for airpower in conflicts that do not necessarily lend themselves to applying airpower in traditional ways is becoming increasingly difficult.

In the past 20 years, the types of conflicts and challenges that have confronted state leaders have also prompted discussions, on the one hand, about employing forces designed for a particular strategic context outside that context and, on the other hand, about replenishing and modernizing those forces for potential conflicts that lie ahead. In other words, in the absence of a clearly defined existential threat to the state, efforts to maintain credible force structures designed to strike at the heart of an adversary's power run headlong into arguments about current priorities.

If the strategic context were not daunting enough, airmen find themselves confronting a historical tension between fielding strategic or tactical capabilities. Nearly every modern air force has dealt with this tension, which derives from the earliest theories of the most effective means of employing airpower. From the dawn of powered flight, aviation enthusiasts have written about and argued for an independent, war-winning role for air forces.

Additionally, to combat very different kinds of threats, airmen have used weapon systems designed with an eye toward deterring state competitors. Those same airmen have argued that although they have adapted their systems, procedures, and tactics intended to meet a "most dangerous" threat on the horizon to the needs of the current fight, they may respond better in the future with systems designed for the "most likely" threats represented in current conflicts. Clear evidence indicates that this historical tension between fielding strategic and tactical systems, which has existed since at least the end of the First World War, continues to frame the debate about the air capabilities required by our nations.

Obviously, the answer to this dilemma entails forging effective air forces by making sound strategic choices. As the current strategic environment evolves, less powerful adversaries will find incentives to adopt indirect strategies to attain their goals—an approach described by Gen Sir Rupert Smith as a permanent change in warfare. Adversaries will use what he called "war amongst the people" to cripple forces that rely on sophisticated technologies, hierarchical organizations, and centralized command and control. According to Smith, firepower is a liability because adversaries will embed themselves in the very populations that conventional forces seek to protect.¹ Certainly, we have observed this tactic in much (not "all," but much) of today's combat. But should it really be the sole foundation that drives the strategic choices nations will make for tomorrow's airpower? Given budget pressures, can they prepare for more than one future?

These trends have occurred at the fringes of conflicts for more than half a century; nevertheless, traditional militaries have persisted in seeing them as anomalies, preferring to preserve capabilities to deal with the "most dangerous" threats. They have resisted any adaptations of organizations, training, and equipment that would improve their capacity to counter enemies who have become more networked than hierarchical, more flexible than rigid, and more resilient than brittle. In short, military institutions do not have a long track record of recognizing and adapting to trends that may indicate shifts in the character of threats to national security.

The question then becomes, how should they prepare themselves to do so, given the constraints imposed on their knowledge and understanding of adversaries who do not feel compelled to play by the same rules? Unfortunately, this question represents one of the most wicked problems that strategists face—one for which the answer consistently may be the unsatisfying "It depends." It depends on local political, social, cultural, environmental, economic, and military contexts. Consequently, at the strategic level, military institutions face the unenviable task of having to prepare for every contingency while lacking the cer-

tainty that those preparations will best match the character of conflict when the time comes. To solve this dilemma of fighting current conflicts yet at the same time preparing for a wide range of future threats, the military must develop flexibility as the key to strategic effectiveness.

Making Strategy in Uncertain Times

A review of recent literature that attempts to define emerging threats to national security reveals a consensus that myriad challenges encourage a near-term focus. A team from the US National Defense University reflected this accord, noting that

the global security environment for the next two decades will feature accelerating, and possibly momentous, changes in the international system. The large-scale trends most often cited are increasing globalization (with both beneficial and disruptive side effects); the continued rise of China and India; the quickening pace of technological innovation; the accelerating proliferation of mass disruption/destruction technologies; the growing power/capacity of nonstate actors relative to nation-states; the persistence of corrosive regional, ethnic, and religious conflicts; and increasing resource scarcity.²

The complexity of this environment raises the stakes for strategic clarity and coherence, but leaders must contend with the paradox that the crises produced by this environment amplify the difficulty of devising coherent strategies.

Perhaps more than any other factor, the proliferation of communication capabilities that accompany globalization has pressured leaders to move reactively from crisis to crisis. The ubiquitous news cycle, accompanied by unfiltered imagery and often equally unfiltered commentary, focuses attention on evolving tactical crises. Leaders find their ability to devise and implement strategic programs stifled by the pressure of immediately compelling events.

The media's competition for the public's attention has further diluted strategic thought. Complex issues that cannot be condensed into easily communicated sound bytes rarely attract the interest of popular media venues. Military leaders and their staffs are also drawn into this emphasis on the present, especially when called on to carry out national policies. Legitimate concerns over limiting collateral damage, civilian casualties, and the destructive effects of war have become commonplace influences on the design of strategic and operational campaigns.

Added to this crisis-focused perspective is the realization that the military is just one of many strategic priorities that concern leaders. If the strategic environment were characterized by existential threats or the potential for major combat operations, the national will would quickly mobilize and lend priority to robust defense investments. However, the well-publicized economic and social stresses that command attention overshadow concerns about long-range strategy in the absence of overt threats. In the event we consider this situation unique to our times, we should recall US senator James Wadsworth's comment on proposals to modernize the Army Air Service's equipment during the 1920s: "The designers are registering tremendous improvements in every way and therefore we should hesitate before we purchase a large number of planes in any one year, lest we find that we have committed ourselves to the extent of our financial abilities to a type doomed to be outclassed."

Immediately following the First World War, the British government adopted what became known as the Ten-Year Rule, which remained in effect from 1919 to 1932 and assumed that Britain would not engage in major wars for 10 years. Conditions in Europe supported the logic behind the policy, but military leaders bemoaned the erosion of operational capabilities and warned of the increased cost of rejuvenating forces should war occur.⁴ As an aside, the Ten-Year Rule proved accurate in terms of its prediction of the strategic threat. After 1932 (especially after 1933), the series of crises in Europe raised the strategic stakes for Britain. Unfortunately, the effects of the global economic crisis combined with the deterioration of operational and tactical capabilities to constrain Britain's ability to rebuild its forces in time for war.

The United States and Britain were not alone in their zeal for economizing during the interwar years; France also restricted military spending to turn limited resources toward recovering materially and socially from the devastation of the war. For example, France's Ministry of Defence adopted a prototype policy for procuring aircraft throughout the 1920s. Rather than investing in new series or types of aircraft, the government funded prototype development but stopped short of placing orders for fleets of aircraft. Its refusal to follow through with significant purchases drove several aircraft companies out of business. By 1933, even when faced with a clear threat from a revanchist Germany, fiscal pressures forced the newly created independent Armée de l'Air to procure a multipurpose, multiplace hybrid aircraft—the BCR (bombardment-combat-reconnaissance). As Patrick

Facon, Thierry Vivier, and others have shown, a revolution in wing and engine design that appeared shortly after the government had committed to the BCR program outclassed this aircraft series. If France had enjoyed the luxury of delaying the war until late 1941 or 1942 or if it had postponed the modernization decision until 1937-38, its Armée de l'Air possibly would have had more competitive airframes.

More recently, US Defense Department officials have struggled to reconcile the cost of modernizing systems for all the services with the absence of a clear threat that matches the sophisticated capabilities of new weapons. At a time when domestic policy makers seek to rein in mounting debt and trade imbalances, spending vast sums on war-fighting systems without an apparent adversary is difficult to justify.

Air Forces as a Special Case in Force Development

The evolution of aviation differs from that of other military forces. In addition to the tactical role envisioned for each airplane, one must take into account its technical requirements regarding range, speed, payload, command and control, sustainment, and countering threats. Thus, air forces tend to evolve as systems rather than as weapons. In 1926 Maj William C. Sherman, US Army, wrote that "the airplane is not, for example, merely a special variety of motor-propelled vehicle, comparable in general to other means of transportation; nor is it simply another form of artillery. It is a thing sui generis, and its full significance can be understood only after a thorough study of the intrinsic qualities of the air force itself." Foreseeing this essential difference between air forces and other military forces nearly 20 years earlier, Clément Ader outlined specialized functions for military aviation.⁶ This fundamental characteristic of air forces means that after the determination of viable design requirements, modifications have significant consequences in terms of procurement time and costs. Moreover, the public debate over the cost of airpower systems tends to force air services to point out the most dangerous consequences of deferring modernization decisions. Air leaders find themselves painting bleak scenarios to convince political leaders of the necessity of procuring new systems, only to be called back to testify when the procurement system does not function perfectly. Consequently, when air services incur criticism for the costs of and delays accom-

panying their sought-after systems, they have great difficulty delivering satisfactory explanations to a cost-conscious public.

Because of this systems characteristic of air forces, air capabilities tend to be specialized and therefore require greater investments to preserve them. The legacy of the Second World War—at least in the consciousness of US Airmen—emphasizes that the time necessary to mobilize industry; produce the planes, associated spare parts, and maintenance capabilities; train the crews; and get the forces into the fight could jeopardize a future war's outcome. This point became especially salient during the Cold War when the US Air Force, operating two-thirds of the nuclear triad, had responsibility for both deterring and fighting a nuclear war that would have been over long before any mobilization schemes could take effect.

Since the end of the Cold War, US Airmen more often than not have led the way on deployments as the first forces in-theater. If the first combat forces do not come from the US Air Force, then its mobility forces transport the first ground forces and their initial support capabilities. National leaders have come to rely on flexible, "on call" strategic airpower capabilities rather than run the risk of creating such forces when trouble arises. These capabilities, however, demand continuing investments to remain ahead of technological trends. Nevertheless, the trend is set. Despite demands for economy in defense spending, our nation will continue to call on its air forces as a first option in dealing with crises for the foreseeable future.

Implications for the Future

For nations with global strategic interests, airpower is an essential asset, and government, military, and industry leaders must arrive at coherent strategic approaches that ensure the availability of properly configured airpower when those countries need it. This is not to say that we should shortchange other military capabilities in favor of airpower. Rather, we must cultivate a clear understanding of the capabilities and limitations—in strategic terms—that our force structures possess. Much as operational war fighters try to define end states and campaign objectives at the outset of military action, a comprehensive strategic assessment must occur that results in an understanding among all participants of the long-term implications of decisions about force structure.

Airmen must develop a comprehensive awareness of the strategic context that confronts their nations. It is no longer sufficient (and perhaps never was) to ask national political leaders to deliver clear and unequivocal strategic guidance to the military so that the latter can "do its job and hand off to some civilian authority." Because of the flexibility that air systems afford those leaders, airmen in particular must become competent at and comfortable with advising officials at all levels of the decision-making process.

Finally, airmen must communicate clearly to decision makers the capabilities and limitations of their forces, including potential consequences for the life cycles of weapon systems if leaders decide to use airpower to address contemporary exigencies. Often this news will not endear airmen to their political leaders, but their duty compels them to make the case for preserving the continuing relevance of one of the nation's most important strategic capabilities.

The historical tension between investing in strategic air capabilities and those that appear more suited to current conflicts will likely persist. To paraphrase Sir Michael Howard, I am convinced that whatever capability airmen develop, it will be wrong. More important than fielding perfect systems, we must remain flexible enough to get them right and do so more quickly than our enemies can. Not only do airmen have a duty to prepare themselves to respond to the most likely near-term security threats, but also they have an equal duty to prepare forces for the most dangerous scenarios in the long term. In both instances, they must "get it right quickly" when the nation calls.

Notes

- 1. Gen Sir Rupert Smith, The Utility of Force: The Art of War in the Modern World (New York: Vintage Books, 2008). See, for example, p. 5 for his concept of "war amongst the people." Martin van Creveld offered a similar argument more than a decade earlier. See his book The Transformation of War: The Most Radical Reinterpretation of Armed Conflict since Clausewitz (New York: Free Press, 1991).
- Stephen J. Flannagan and James A. Schear, eds., Strategic Challenges: America's Global Security Agenda (Washington, DC: Potomac Books, 2008), 1.
 - 3. Randolph Perkins, "America Needs Aircraft," Aero Digest, June 1926, 329.
 - 4. See Brian Bond, British Military Policy between the Two World Wars (New York: Oxford University Press, 1980).
 - 5. William C. Sherman, Air Warfare (1926; repr., Maxwell AFB, AL: Air University Press, 2002), 8.
 - 6. Clément Ader, Military Aviation, ed. and trans. Lee Kennett (Maxwell AFB, AL: Air University Press, 2003).
- 7. In 1974 Sir Michael Howard wrote, "I am tempted indeed to declare dogmatically that whatever doctrine the Armed Forces are working on now, they have got it wrong. I am also tempted to declare that it does not matter that they have got it wrong. What does matter is their capacity to get it right quickly when the moment arrives." Michael Howard, "Military Science in an Age of Peace," RUSI: Journal of the Royal United Services Institute for Defence Studies 119 (March 1974): 7.