The Air Force, Grand Strategy, and **National Security**

Toward a Better Understanding of Airpower's Enduring Utility ROBERT EHLERS, PhD

Tor nearly 70 years, calls for an end to the independent Air Force and the absorption of its component parts into the other services have waxed and waned. During the past 15 years, however, attacks on the utility of the Air Force, and thus its retention as an independent service, have become increasingly strident. Robert M. Farley's latest call for an end to the Air Force is just one of many, if perhaps the most well known. His arguments have changed little from those he made in 2008 and remain just as unconvincing.¹

The reasoning for abolishing the Air Force and incorporating its equipment and personnel into the other services inevitably evokes the time-worn claim that the Air Force is the only service that cannot be decisive in its own right and therefore is a "supporting" service in the most basic sense of the word. The Army, by contrast, is the decisive service in any war that requires Americans to close with and defeat the enemy. The Navy keeps open our sea lines of communication and thus ensures logistical superiority for our troops on the ground. It also shows the flag and exerts pressure through freedom-of-navigation operations. The Marine Corps is a vital service that must not be pulled apart because it gives the United States a capability to deliver elite assault infantry and supporting air, armor, artillery, and other assets worldwide with very little warning. The Air Force, we often hear, is simply an adjunct whose missions support these more fundamental and important activities. According to this school of thought, the other services could very easily incorporate the various roles, missions, equipment, and personnel of a dismembered Air Force. Inconvenient cases in which airpower has made grandstrategic impacts of its own, and sometimes on its own, do not find their way into these lines of argument. The Berlin airlift, for instance, could and should have been an Army—or perhaps a Navy—operation according to the detractors' line of reasoning. However, anyone who understands the immense complexity of planning, executing, and coordinating a combined air effort of such massive proportions with the Royal Air Force recognizes the deep flaws in this argument. This effort, which literally fed and heated the inhabitants of West Berlin and kept the city out of Russia's orbit, underscored the fact that properly employing airpower demands the same kinds of domain-specific expertise necessary in the other services. This single example also puts to rest the false dichotomies created by those who champion the "supported" and "supporting" services rationale in which the Air Force is inevitably in the "supporting" role. Such claims ultimately fail to address what the Air Force really *does* for American national security, why it is uniquely capable in this capacity and across the range of mission sets it has honed for as many as 100 years, and why dismembering it and dividing its assets among the other services will produce a series of cascading effects that would prove as troublesome in operations short of war as they would catastrophic during major military conflicts.

Rather than engaging in what currently passes for debate regarding the continuing utility of and need for an independent Air Force, it is time to address the question of the service's utility from the perspective of grand strategy, policy formulation and execution, and American national-security outcomes, particularly efforts to achieve strategic aims short of war. As theorists from Carl von Clausewitz to Sun Tzu remind us with some urgency, war—or in a more general sense, armed conflict—is the very last policy resort.² Effective grand strategies seek to attain objectives short of war or, if war is necessary, at the lowest possible cost in blood and treasure. Further, they pursue continuing advantage and, in cases in which war occurs, the "better peace" that B. H. Liddell Hart says we must have once the fighting ends. This approach and these theorists ideas will give us much clearer insights into whether or not the Air Force has paid its way as an independent service engaged in the protection of the republic and its citizens or whether, as critics assert, it has had its day and should now stand down.

The ultimate yardstick by which we must measure any military service's utility is the degree to which it supports grand-strategic and subordinate policy efforts and thus, by extension, how well it contributes to the safety and prosperity of the American people. Clausewitz reminds us that "the political [policy] object—the original motive for the war [conflict]—will thus determine both the military [or other] objective to be reached and the amount of effort it requires."⁴We must read this admonition within our own context if we are to make sense of it—hence the bracketed words within the original quotation. In questions of orchestrating grand strategy and supporting policy efforts to maintain a continuing advantage over our adversaries, many national objectives fall short of the threshold of armed conflict—or at least should do so. Clausewitz focused on war not because he thought that resolving issues short of war was impractical. In fact, his work is brimming with cautions against going to war unless realizing a policy objective is otherwise impossible and with reminders that the objective must be of vital importance if one is to consider war. As he warns us, "The first, the supreme, the most farreaching act of judgment that the statesman and commander have to make is to

establish . . . the kind of war upon which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature." This trivalent warning concerns pondering whether or not to go to war at all, understanding why we are doing so if it appears unavoidable, and developing a realistic set of strategy and policy objectives that do not change based on the whims or misunderstandings of politicians and military commanders. If we can reach an objective short of war and if the country can employ a proper combination of assets to attain this end, then doing so is far preferable to resorting to armed conflict—and this scenario is precisely where airpower in general and the Air Force in particular have been particularly effective.

The product of a Continental power that had no navy to speak of and obviously no air force, Clausewitz discussed this range of issues, from coercion to war, within his own historical and geographic context. However, he would be the first to tell us to discuss them within our own context, which includes an Air Force ideally suited to achieving strategy and policy objectives short of war or to making its sister services dramatically more effective within it. The Berlin airlift is thus a useful reminder—and just one of many—that airpower has the capacity, when used expertly and in proper orchestration with other instruments of power, to deliver grand-strategic results. Nobody referred to the Air Force as the "supported" service while it orchestrated this crucial victory in 1948-49, but it was in fact "supported." That is, as long as we allow ourselves to think of the employment of the military services and the other instruments of power in this truncated fashion, then one service or instrument is invariably "supported" and the others invariably "supporting" for the duration of a given conflict. This kind of shallow reasoning has produced many policy and military failures and will very likely, and sadly, produce many more.

In its most basic sense, then, grand strategy is the process by which policy makers determine how to gain and maintain a continuing advantage over competitors, adversaries, and enemies. Policy is the collection of activities designed to attain grand-strategic objectives. The various instruments of power, including our military, are—at least in theory—employed in the most effective possible combinations with one another to achieve policy objectives and, by extension, strategic ones. Within this process, which, Clausewitz reminds us, is simple in the abstract but difficult in execution, the Air Force has played its role with varying levels of success, as have the other services.⁶ Additionally, the Air Force has done more than its fair share in securing the "better peace" that Liddell-Hart reminds us should be the paramount concern whenever we go to war or engage in any policy effort short of war. What matters here is the proper coordination of our various national assets, often in concert with those of other countries, to ensure the republic's security and prosperity. These dynamic and sometimes unlooked-for serendipitous interactions among the services, between the military and other instruments of power, and between American and allied or coalition efforts (Wechselwirkungen, as Clausewitz refers to these interactions of strategic consequence) often account for the difference between success and failure.⁸ Among other objectives, this article seeks to highlight ways in which the number, richness, and effectiveness of these interactions would be fundamentally weakened and in fact impoverished by the disestablishment of the Air Force.

The United States was among the first great "airgoing" countries and is now the last of them to have an independent air force capable of producing strategy and policy outcomes in conjunction with the other services and instruments of national power or on its own. Despite personnel and equipment drawdowns, the Air Force retains an exceptionally potent capability. When used creatively and with proper attention paid to its abilities and limitations as they relate to realizing national objectives, airpower can still alter an adversary's decision calculus. Further, it can give allies and associates everything from a major military edge to protection, reassurance, and extensive humanitarian aid on very short notice. Finally, the Air Force has the unique capabilities to project substantial lethal or nonlethal power anywhere on the planet, independent of any other services or instruments of power, within hours in the relatively rare instances when doing so proves necessary.

Colin Gray notes astutely that "debates over the past and future of air power more often than not address both ancient and irrelevant questions. . . . The air force must be independent of army and navy service cultures for the elementary reason that fighting in, for, and from the sky is a unique activity." It is an activity that has produced exceptionally lethal and nimble capabilities that render judgments about airpower based on its misuses rather than its proper ones either unsound or tenuous. Gray's chapters on airpower in his groundbreaking work Explorations in Strategy remain highly relevant and useful today, 18 years after their publication in 1998. So do his additional insights in *Modern Strategy*, which appeared a year later. In fact, if Gray were to rework these chapters now, many of the detailed observations would likely change in keeping with the rapidly shifting contextual realities of the twenty-first century, but his major arguments would almost certainly remain the same. Further, they would be just as relevant for public servants charged with understanding how and why an independent Air Force makes major and unique contributions to our national security that could not be replicated merely by shifting personnel and equipment into the other services. Gray's focus on both the "logic" of grand strategy, which he views as unchanging, and on its "grammar" (the instruments of power and processes used to obtain strategic ends, which are changing increasingly rapidly over time) gives us a critical set of lenses through which to view the utility of airpower. Further, they help us understand why airpower belongs within an independent service whose practitioners are expert (if imperfect) in its employment, just as practitioners in the other services are expert (if equally imperfect) in the contextually and operationally effective use of assets under their control.¹⁰

Although Gray would be the first to tell us that his work deals primarily with war and the unique contributions of the various services and domain-specific capabilities within this arena, he also gives us many insights into understanding the potentially important or even central role of airpower in *all* strategy and supporting policy efforts, whether at the level of armed conflict or short of it. This latter category, in particular, requires much more emphasis than scholars have given it to date. Airpower is an indispensable member of the combined-arms team in conventional war. Examples throughout World War II, the early stages of the Korean War, the 1972 Spring Offensive in Vietnam, Operation Desert Storm, Israel's uses of airpower in its wars with the Arab states, and many other examples make this fact crystal clear. Armies win faster and with much lower casualties when capable airmen, exercising direct control over air assets, work with ground and naval commanders (who retain direct control over their assets) to maximize combined-arms effects. These are all clear matters of historical record, holding just as true today despite the changing character of certain forms of armed conflict in the current century.

However, the story too often not told in the grand narrative of airpower's utility and suitability to remain concentrated largely within a separate military service is the one involving air operations in a myriad of national-security problems short of war. Just as Soldiers, Sailors, and Marines are best suited to employ force within their own domains and in a given context, so Airmen are uniquely capable of employing their domain-specific assets across a wide range of strategy goals and policy requirements. This problem is the most basic one with the works of Clausewitz and Gray, which do not discount the importance of achieving strategic objectives short of war but which also concentrate almost entirely on war itself rather than the myriad policy efforts short of it. Consequently, one must place certain of Gray's statements, such as "The Land Matters Most," firmly into context. 11 It very clearly matters most when a military must take and hold ground to help attain strategic and supporting policy objectives, but it matters much less if no need exists to take and hold ground. Similarly, although the Navy exerts a powerful role short of war with freedom-of-navigation and show-of-force operations, among others, it is not *the*, or even a, decisive force in major conventional war. However, that service may be so in various conflicts and crises short of war. Whether we consider Seventh Fleet operations off of Taiwan to deter Mao Zedong's army from invading,

the Navy's principal role in the blockade during and after the Cuban missile crisis, its vital role in escorting shipping during the "tanker wars" of the 1980s with Iran, and its power-balancing efforts in dozens of other instances, the service has often proven that the land does not always matter most. So has the Air Force.

Even in certain kinds of counterinsurgency and counterterrorism operations, land power is not sufficient to do the job. The first phase of the war in Afghanistan (2001–2) was almost entirely a special forces, Central Intelligence Agency (CIA), and airpower effort to enable the Northern Alliance to take decisive action against the Taliban. The land may have mattered most in the end, but it would have mattered very little without the Northern Alliance. Furthermore, the costs of a major US and International Security Assistance Force ground effort without the Northern Alliance to play the role of surrogate army and a major air presence to hammer successive Taliban defensive positions would have been much slower, costlier, and bloodier for the Army and Marines. The subsequent phase of the Afghanistan War and the Iraq War further serves to remind us that ground forces may not matter very much in terms of positive outcomes when the strategic objectives set for them are impossible to achieve or when policy makers forfeit any strategic advantage they may have gained—or both. Building a functioning democracy or any kind of centralized government, for that matter—has always been a Sisyphean task in Afghanistan, and the people who inhabit the cobbled-together state we call Iraq have never known true democracy or even wanted it. And so ground power could not deliver—not because our troops were not outstanding but because our policy makers were not. A shallow thinker might point to the Army's and Marines' major armed conflicts during the period of the independent Air Force's existence—Korea, Vietnam, Desert Storm, Afghanistan, and Iraq and conclude that they have had one win, one tie, and three losses, and that they are therefore not effective. To carry this nonsensical argument to its extreme, one might then make the case that it is time to disband one or both services, combine them, or reshape them radically to make them more responsive to nationalsecurity crises. However, this line of (un)reasoning overlooks the many instances when the Army and Marines played vitally important roles in conflicts short of war, the most obvious being deterrence along the inner-German border. Only slightly less noteworthy is the very successful deterrent action on the Korean Peninsula since the armistice was signed in 1953. In both cases, potential aggressors chose not to attack or still are not doing so. American ground forces, simply by their presence and will, formed a key foundation for the hugely positive changes in governance and economic growth in these critical regions of the world. Air and naval power played their own vital roles in these and many other cases of deterrence that led to major grand-strategic successes. To argue that any one service or instrument of power was uniquely useful (or useless) in these kinds of efforts is misguided. Instruments of power respond to policy makers' guidance, and they are either more or less effective in nearly direct proportion to the soundness of the policies they support. The Air Force is far from unique here.

Even when one removes armed conflict from the mix of national-security efforts in which airpower plays major roles, the list of its contributions remains long and weighty in terms of what it actually does to support American strategy and policy. The first and most important of these qualities is the coercive power it exercises as a result of its range, speed, and lethality. This capability, of course, is entirely independent of the nuclear-security assets the Air Force brings to the table. No other service has the insight, expertise, or seven decades of practical experience engaging in the support of deterrence or compellance—as Thomas Schelling and others used these terms in their works—over continental and global ranges.¹² The very existence of an extraordinarily agile, flexible, and lethal air capability makes the United States unique in the world. Accordingly, Colin Gray asserts that America is an airpower nation to a greater degree than any other.¹³ Geography, military and economic power, and the requirement for policy flexibility, given American commitments in the world, all reinforce this basic truth. Whether policy makers are tempted to misuse these uniquely American capabilities—and they often have done so as a result of either innocent or willful ignorance and egocentrism—is not the fault of Airmen or airpower any more than the improper and rash commitment of ground or naval forces is the fault of Soldiers, Sailors, and Marines. Nor does it constitute any sort of valid argument for disestablishing the Air Force and giving its component parts to the other services.

A related and equally important—and distinctive—airpower function is the provision of rapid reassurance and support to allies around the globe. The age of state rivalries and interstate conflict is far from over, as recent Russian actions in Estonia, Georgia, and—most recently—Ukraine make abundantly clear. Vladimir Putin's constant employment of his instruments of power, bluff, bravado, and a masterful deception effort against the United States and European Union remind us that states and state power persist and that both are highly consequential. The forward deployment of air assets to Saudi Arabia immediately after Iraq's invasion of Kuwait, to countries in Eastern Europe after various Russian provocations, along the Asia-Pacific Rim to counter Chinese provocations in the South China Sea, and to South Korea and Japan as a reminder that neither North Korea nor China has anything like a free hand on the peninsula or in the region, are just the most obvious of dozens of such examples. Whether or not the rapid deployment of airpower or even the threat of it has averted armed conflicts is open to argument. The question is also irrelevant. Airpower is ideally suited to operating

alongside and in effective combinations with other instruments of power specifically to ensure that nobody decides to risk war. Once again, the paradox of airpower's strategic efficacy is clear. It is extraordinarily lethal during military operations, but airpower's greatest benefit to American national security and that of its allies is simply its presence and firm employment as a means of warning adversaries and enemies that they will pay a heavy price for armed aggression.

A third unique characteristic of airpower at the level of grand strategy and in crises short of armed conflict is its ability to gain and maintain air superiority or simply to assert it by arriving in place and, having done so, to deter potential opponents from taking actions they otherwise would have taken. One such example was the period following Desert Storm, when no-fly zones in northern and southern Iraq prevented Saddam Hussein from exacting the full measure and kind of revenge he preferred on the Kurds and Shia Arabs. The no-fly zones were far from perfect. Saddam managed to kill Kurds and particularly Shia the oldfashioned way—on the ground and in his many prisons. However, the United Nations resolutions and the policy makers' will to minimize the abuse of these peoples—and to keep Saddam from moving his army without threat—came together to place severe restrictions on what he was actually able and willing to do, not only to peoples within his own borders but also to those in neighboring countries. Additionally, the impracticability (from many perspectives) of sending the Army and Marines in yet again to establish and enforce long-term "no-drive zones" left just one military service with the range of capabilities and expertise to do the job. Similarly, although far from perfect and in some cases not entirely effective, no-fly zones over Bosnia ultimately led to Operation Decisive Force, an air-ground operation coordinated with Croat and Bosnian Muslim troops that forced the Bosnian Serbs and their backers to stop the fighting.¹⁴

The ability of airpower, along with that of space power, to collect a massive amount of intelligence has also played an absolutely crucial role far beyond the bounds of armed conflicts. The unceasing, dangerous, and highly effective aerial reconnaissance missions around the periphery of the Soviet Union (and over it) told policy makers a great deal about the Russians' capabilities and occasionally about their intent. Increasingly, signals intelligence intercepts told us that their capability and will to continue the long confrontation with the United States were decreasing by the early 1980s—a set of insights that President Reagan used with great skill as he and his staff worked with key allies to craft a final push designed to bring about the collapse of the USSR. Reagan's attacks on the "Evil Empire" and his famous statement "Mr. Gorbachev, tear down this wall" were much more than mere sound bites. Rather, they were implements for fomenting the uprisings in Eastern Europe that played such a central role in the collapse of the Soviet Union. As this drama proceeded, huge quantities of intelligence delivered by aircraft and satellites—along with new weapons programs such as the B-2 bomber, Peacekeeper ICBM, and Pershing II intermediate-range ballistic missile, as well as dramatically improved Army–Air Force jointness with a new blueprint for war (AirLand Battle)—played an important collective role in convincing the Russians that they had lost and needed to take another path.

Air intelligence gave the Kennedy administration its first indications that the Russians had deployed SS-4 medium-range ballistic missiles and nuclear warheads to Cuba. Subsequent intelligence reports gave the president and his Executive Committee the detailed situational awareness they needed to deal with Khrushchev from a position of firmness but also restraint—an approach that allowed for a major grand-strategic victory, the avoidance of what could have been a nuclear conflict, and innovations such as a hotline to ensure the availability of an open communications channel between US and Russian heads of state to avert any further crises of this magnitude or the major armed conflicts that might come in their wake. Military chiefs called for a massive air strike on Russian missiles and other assets followed by a ground invasion of Cuba, but Kennedy chose a wiser course—one informed in large part by air intelligence.

Air and space intelligence capabilities developed over the past century have resulted in an immensely complex set of structural and procedural skills and insights that simply cannot be replicated by moving them from one service to another. Of all the services, the Air Force focuses most heavily on grand-strategic and military-strategic intelligence although it is equally adept at the operational and tactical levels. No other service can perform these missions, and the time it would take to get them to these levels of proficiency—if in fact they were to arrive at all—would be decades, not months or years. The Army considers its remotely piloted vehicles organic to specific units (much as it did with aircraft during the interwar years and early phases of World War II) and thus keeps two-thirds of them out of the fight at any given time rather than leaving them forward and mating them with specialists from incoming units. Although doing so has its advantages in terms of tactical responsiveness, it also leaves far too much of the fleet idle. 15 This situation raises the question about whether or not the Army would make proper use of major airborne intelligence, surveillance, and reconnaissance (ISR) assets at higher levels of strategy and policy to help avert armed conflicts rather than support troops on the ground once wars are already under way. By definition, the former is preferable to the latter in nearly every case. The Navy and Marines have effective ISR capabilities of their own, but they also tend to reside at the operational and tactical levels and thus concentrate on delivering

actionable intelligence during armed conflicts rather than before they begin in an effort to avert them.

Perhaps the least remarked but most persistent and diplomatically important aspect of airpower is its ability to project humanitarian relief into the furthest corners of the earth. Something that has attracted little notice is the fact that Air Force humanitarian operations, in concert with important but often "supporting" efforts by the other services, have saved a very minimum of 40 million people since the creation of this independent service in 1947. These efforts have been of varying strategic importance. Some, such as the Berlin airlift, have served vital national interests in very direct and unusually effective ways. Others, such as periodic tsunami-relief efforts in Bangladesh, make no clear contribution to US interests on their own but in concert with the many other humanitarian operations that occur either in parallel with or in temporal proximity to these kinds of missions. Although it is impossible to gauge with precision the long-term diplomatic advantages and improved perceptions of the United States that such operations convey, no one who has served overseas and discussed the favorable impact of these humanitarian efforts on those on the receiving side—whether "average" people, military officers, or policy makers—can come away with anything other than a clear understanding of the quiet, strong, and largely beneficial effects these operations have over time and space.

Unfortunately, even these missions can change in character and thus in their objectives right out from under the military, as the Somalia misadventure underscores. The mission shifted from feeding starving Somalis to pursuing warlords and building a state structure where none had ever existed, Siad Barre's shortlived simulacrum of a state notwithstanding. Given the extraordinarily restrictive rules of engagement in place for this effort and its fundamental impossibility in light of the contextual and cultural realities of Somali clan-based structures and loyalties, neither air-mobility aircraft nor fighters nor the then brand-new remotely piloted vehicles could have made a difference. Nor could a carrier battle group, a Marine expeditionary unit, or an Army Ranger battalion (the latter case tragically clear in this instance). As with any other instrument of power, the Air Force is only as effective as the policy makers who send it off to perform various policy efforts.

Even though space and cyberspace are parts of the larger Air Force mission (the former is very largely planned, executed, and monitored by Air Force personnel), their contributions matter only in terms of the ways in which expertise and mission requirements come together. Regarding space power expertise, the Air Force has led the effort since the very beginnings of the space age and continues to do so. The cumulative expertise thus developed is neither easy to replace nor likely to be so by other services, with the same degree of proficiency, should they take control of this mission. All services have limits regarding how many mission sets they can take on before beginning to lose focus on the most important ones and thus suffering a reduced level of aggregate effectiveness in mission performance.

Perhaps the cyber arena proves this point more clearly than anything else as a result of its ubiquitous presence (or, paradoxically, its nonpresence in terms of physical domains), the evident inability to find it a home, and continuing questions and problems regarding how best to apportion authorities for wartime activities and those in conflicts short of war. Similar arguments surrounded air and space capabilities as they emerged and matured. Each has found a good, if not a perfect, home in the Air Force in the century and half century, respectively, since coming into being. Cyber will also find a home although it is not at all clear that it will do so in the Air Force. In fact, it is not even clear that cyber should find a home there, considering how much the contextual factors at play with cyber differ from those involved in the ultimate placement of air and space power within the Air Force. Any claim that a new "war-fighting" capability must by definition reside with the newest service should be viewed with great skepticism. It made sense for air and space assets, but the case for cyber assets is nowhere near as clear. Nor is it likely to be, even with the passage of time. In fact, the opposite may well be the case, leading to an independent Cyber Force or operational control of this (non)domain by the National Security Agency through the direct control of the executive branch. Time will tell, but at this point any effort to argue that cyber is a capability uniquely matched to Air Force talents and Airmen's insights is doomed to failure, as are any attempts to pry the service away from its obvious roles and unique skill sets in air and space.

Unfortunately, cyber has given critics of the independent Air Force additional ammunition if only because the newness of cyber allows them to argue in extremes about all Air Force roles and missions even though "extremist" theories of airpower (Giulio Douhet and Hugh Trenchard after World War I and the most extreme of the "bomber barons" during World War II) have long resided in Gray's "ancient and irrelevant" category. This tendency to discuss things in extremes without ever arriving at an understanding of how airpower (and everything else) works in the real world, rather than in an abstract one, is fatal to any argument. Clausewitz's entire opening chapter in *On War* deals with absolute war and why, in the abstract world, all armed conflicts would inevitably gravitate to the greatest possible levels of effort and violence. However, he moves from there to the antithesis of this position—no war at all—and then arrives at a synthesis in which war assumes its real characteristics rather than its absolute ones. This Hegelian logic, so central to any kind of effective analysis, is missing from attacks on Air Force

independence. These inevitably set forth outdated ideas about the air weapon as the primary means for arguing that because airpower never achieved the early claims set forth for it by key theorists, it has therefore failed, by this test alone, to merit independent status within a separate service. Seeking a useful synthesis within which to judge airpower's efficacy within an independent service and as part of a combined-arms team would be a much more useful effort, but it is as of yet a relatively rare one.¹⁷ Some individuals have leveled charges that the Air Force clings to a "vision of warfare that does not, despite tremendous investment, meet the defense needs of the United States." 18 As it turns out, this "vision" is what came to be called strategic bombing during World War II—a concept long since abandoned by the Air Force and policy makers. Efforts to define the service according to these outmoded concepts and to argue from there that, by extension, it has no relevance to today's grand-strategic and policy contexts are untenable.

One particularly telling example of this tendency is the argument that heavy bombers built during the Cold War, from the B-46 to the B-2, were not useful because they were never utilized for their intended purpose. 19 Clearly, this assertion is not valid, given that their use in a nuclear exchange would have constituted the most egregious failure of strategy. These weapon systems were built more to be present than to be used—although they were quite capable of performing their wartime missions if called upon to do so. This was the peculiar logic of the Cold War—namely, that transparency about one's strength was the most effective deterrent to any temptation the other side might have to use its own nuclear-armed assets or even its major conventional ones, for that matter. Viewed in this light, the development and fielding of postwar heavy bombers were part of a major grand-strategic success and made clear the centrality of the Air Force to deterrence—and compellance—during the Cold War, and to the eventual American victory in that conflict. The even greater irony here is that the very aircraft said to be of no use because they were not employed in combat during the Cold War have evolved into new roles and missions in which they have flown in combat with great effect. Ask any Northern Alliance soldier about the utility of heavy bombers and the Global Positioning System–guided Joint Direct Attack Munition in the fall of 2001, and he will tell you without pause that they broke the Taliban's back along every major defensive position and allowed for its rapid dispersal, along with al-Qaeda Prime, in coordination with a surrogate ground force, CIA operatives, and special forces. Put simply, context changes, and inherently agile and flexible services such as the Air Force do best in such environments. Judged by any measure, the independent Air Force has proven its ability to change with the times and to engage emerging enemies and adversaries in new, ingenious ways in concert with the other services and the other instruments of power.

As various events referenced earlier make equally clear, we must also be constantly on our guard when arguments about disbanding the Air Force turn to the topic of temptations that policy makers have to employ such an agile and "easy" service and its inherent capabilities. It is simply wrong to assert that Airmen and their machines are to blame for strategy and policy failures because policy makers sometimes turn to them for an "easy solution" that is neither easy nor a solution but a palliative. Poor policy choices and unsound judgment at the level of national leadership do not constitute grounds for disbanding either the Air Force or any other service. Misuse of the Army and Marines in Vietnam, Iraq, and Afghanistan by policy makers as well as general officers does not render them irrelevant ipso facto. They were simply used for misguided policy ends and in some cases by officers who wanted to prove that their service was still the most important one. Air Force officers have sometimes made the same moral and professional errors, but one should not confuse cause and effect any more than one should use it to ascribe irrelevance to an entire branch of the armed forces. If, as Colin Gray says, "the strategic world is perennially beset with salespersons for this or that magical elixir," then we must be watchful, both for this tendency and its opposite number—the devaluation of a specific kind of national power based on equally faulty reasoning.²⁰ Similarly, one should pay very close attention to his argument that "strategic effect is unavoidable, which is to say that means and ends will conduct a strategic discourse whether or not a polity has [or supports] an explicit strategy (in the sense of plan)."21

A final and important point regarding the putative wisdom of disestablishing the Air Force and moving its assets to the other services is to consider the levels and kinds of emphasis they currently place on their air components and the inherent limitations of these instruments. The Army's Aviation Branch is comprised largely of warrant officers, is seen entirely as a supporting service at the tactical level, and is far below the traditional combat-arms branches in terms of overall emphasis as well as the promotion prospects for officers in the branch. Anyone who has served a full career and has worked with these officers understands the inherent and major problems that this state of affairs poses for the development of any broader view regarding airpower (and space power), much less the proper implementation of assets in support of this broader view. It is not suited, by temperament, training, or level of emphasis to take on the massive and complex range of Air Force roles and missions, particularly regarding those focused on matters at the levels of strategy and policy.

The Marine air-ground task forces and subordinate units, though self-contained with organic air assets, are concerned entirely with the support of Marine combat operations at the tactical level and very rarely look beyond that objective. During

Desert Storm, even after the coalition had air supremacy, Marine expeditionary force commanders continually found ways not to release their aircraft for the larger effort before the start of ground operations to undermine the Iraqi army's logistical support and its ability to mass and maneuver. The Marine general officers' mind-set was understandably concerned with direct support of their Marines on the ground. However, with no Iraqi attacks possible, given the coalition's air supremacy—especially after the annihilation of two Iraqi armored divisions largely from the air during the Battle of Khafji—the wisest use of aircraft lay in the destruction of Iraq's logistical, communications, and other vital war-making and force-sustainment capabilities. Despite these frictions, once the ground war began, the Marines had all of their aircraft back and in direct support of leathernecks on the ground.²² The joint force air component commander process worked very effectively, if nowhere near perfectly, despite challenges along the way.

Finally, the Navy's aviation component, though highly capable, has severe range and payload limitations. During the first phase of the Afghanistan War, Navy aircraft required three or sometimes four aerial refuelings by Air Force tankers on ingress to and egress from their targets. Shows of force and short-term, shortrange strike capabilities are exceptionally useful in various contexts, but they are worlds away from Air Force mission sets and capabilities. They simply cannot deliver the constant presence or weight of effort that Air Force assets bring to bear, whether in the strike, ISR, refueling, mobility, or communications roles, among others.

None of these three services is suited by habits of mind, experience, or capabilities to take on the huge range of missions the Air Force performs to support strategy and policy as well as operations and tactics. When these services do engage in air operations that have strategic effects, they almost invariably rely on Air Force expertise and assets to help them close the deal. It is of the utmost importance to note that every one of these services can and does support strategy and policy efforts to achieve national-security objectives short of war, as does the Air Force. They do so in their own ways, with their own habits of mind, with their own roles and missions, and with various limitations that only the other services, employed within a truly effective combined-arms effort, can offset. Perhaps it is time to address once again how this combined-arms dynamic, the larger interactions between the military and other instruments of power to create an even greater combined-effects dynamic, and American coordination and interaction with its allies and associates all come together to help realize strategic aims short of war, rather than expending inordinate amounts of mental energy on discrediting the utility of one service or another in ways both decontextualized and intellectually truncated.²³

It is well past time to begin assessing the value of various instruments of power, including the military and its services, in a much wider context than just the prosecution of armed conflict. Indeed, an effective grand strategy ideally should allow the United States to maintain a continuing advantage over enemies, adversaries, and competitors alike without fighting. This objective is not entirely possible in the real world but is feasible to a greater or lesser degree depending upon how effectively and realistically policy makers develop strategic aims and supporting policy actions and how they employ instruments of national power to attain them. In this sense, Airmen and the independent Air Force have proven repeatedly, regardless of their shortcomings in certain instances, that airpower gives policy makers a tremendous level of flexibility to achieve strategic aims short of war. In fact, they have used it toward this end more often than they have used it in violent ways—often as a panacea for their own lack of strategic insight. The employment of transport aircraft during the Berlin airlift; the presence of—but, thankfully, the nonemployment of—nuclear-armed bombers and missiles during the Cold War to deter the Soviet Union; the combination of effective photoreconnaissance and policy making during the Cuban missile crisis; the arrival of a C-141 at Ben-Gurion Airport every 45 minutes during the Yom Kippur (October) War in order to level the playing field and force a truce; the delivery of humanitarian aid all over the world to people who often understand and appreciate America's efforts in this regard; and the proper use of airpower during the Persian Gulf War to starve the Iraqi army of supplies and make its defeat easier for the ground forces are all cases in point.

Whether achieving American strategic aims short of war or making wars far less costly, these uses of airpower remind us that every service contributes to attaining strategic aims. The issue of overriding importance here is not the putative utility of the various services but whether or not policy makers and commanders use them within the proper context and in the proper ways. When one approaches this question of Air Force independence from the level of strategy and policy, the evidence is clear. Without an independent Air Force led by Airmen who understand the full range of capabilities and limitations associated with the assets under their control, any strategic discourse involving airpower will be more problematic. Consequently, its employment will likely prove far less effective than it could be, and our national security will suffer. Inflicting this kind of wound on ourselves by disestablishing the Air Force, or otherwise constraining a broader and deeper understanding of airpower's contributions to strategy and policy, would be the worst kind of folly.

Robert Ehlers, PhD

The author is a professor of security studies at Angelo State University in San Angelo, Texas. From 2010 to 2013, he served as director of the Center for Security Studies and chair of the Department of Security Studies and Criminal Justice, leading a 17-person team in the development of bachelor's and master's degrees across four key nationalsecurity disciplines: culture and regional studies, homeland security, intelligence, and criminal justice. A retired US Air Force colonel, former professor of airpower history at the School of Advanced Air and Space Studies, and former associate professor of history at the Air Force Academy, Dr. Ehlers earned his bachelor's degree in international studies from Ohio State University in 1986 and a master's degree in history from the University of Florida in 1992; he later returned to Ohio State to complete his doctorate in history in 2005. Dr. Ehlers is the author of Targeting the Third Reich: Air Intelligence and the Allied Bombing Campaigns (2009) and The Mediterranean Air War: Airpower and Allied Victory in World War II (2015), both part of the University Press of Kansas's Modern War Studies series.

Notes

- 1. Robert M. Farley, Grounded: The Case for Abolishing the United States Air Force (Lexington: University Press of Kentucky, 2014). He began this line of argument in an earlier article "Abolish the Air Force," American Prospect, 22 October 2007, http://prospect.org/. A critique of it by this author marked a step in what has now become a continuing debate. See "Retain the Air Force, Abolish Anti-jointness," Wright Stuff 3, no. 16 (4 September 2008): 1-10.
- 2. Carl von Clausewitz, On War, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 92-94, 581, 586, 605-7; and Sun Tzu, The Illustrated Art of War, trans. Samuel B. Griffith (Oxford, UK: Oxford University Press, 2005), 115. Although Sun Tzu tells the reader directly that the greatest acme of skill is not to win 100 battles but to defeat one's enemy without fighting, Clausewitz gives us more indirect but frequent thoughts about this issue. On War is concerned with how best to conduct a war once the decision to do so is made, but he reminds us that war is to be conducted "when inevitable" and only after very careful consideration. War is the extension of policy by other means—what human beings do only after diplomatic and other efforts to achieve strategic aims short of war fail to have the desired effect.
 - 3. B. H. Liddell Hart, Strategy, 2nd rev. ed. (New York: Praeger, 1968), 366.
- 4. Clausewitz, On War, 81. The words in brackets have been added to emphasize that Clausewitz's dictum applies with equal force in conflicts short of war.
 - 5. Ibid., 88.
- 6. Clausewitz wrote that "everything in strategy is very simple, but that does mean that everything is very easy." Ibid., 178. He was referring to military strategy, as we would call it today, but the principle extends with even greater force to grand strategy, which involves both an overarching set of enduring strategic aims and supporting policy efforts, including—among many others and by no means the primus inter pares—war.
 - 7. Liddell-Hart, Strategy, 366.
- 8. Carl von Clausewitz, Vom Kriege, 7. Auflage (Hamburg: Nikol Verlag, 2014). The term Wechselwirkungen ("interactions") is everywhere in the German edition of On War and first appears during Clausewitz's discussion, using the Hegelian dialectic, of the differences between absolute war (war in the abstract) and real war (war as it is within the constraints imposed by a myriad of factors). See pp. 30–36.
 - 9. Colin S. Gray, Explorations in Strategy (London: Praeger, 1998), 55, 56.
 - 10. Colin S. Gray, *Modern Strategy* (Oxford, UK: Oxford University Press, 1999), 270–71.
 - 11. Ibid., 212.
- 12. Thomas C. Schelling, Arms and Influence (New Haven, CT: Yale University Press, 1966). The author introduces the concept of coercion, which includes deterrence and compellance, on pp. 2–3. He refers to all three terms frequently throughout the remainder of the book. Deterrence involves using the threat of force to keep an adversary from doing something while compellance forces him to do so. Bernard Brodie also discusses these concepts in his classic work Strategy in the Missile Age (Princeton University Press, 1959).
 - 13. Gray, Explorations in Strategy, 83–84.
- 14. See Col Robert C. Owen, ed., Deliberate Force: A Case Study in Effective Air Campaigning (Maxwell AFB AL: Air University Press, 2000).

- 15. Maj David R. Buchanan, USAF, "Joint Doctrine for Unmanned Aircraft Systems: The Air Force and the Army Hold the Key to Success," student paper (Newport, RI: Naval War College, 3 May 2010), 10–11, http://www.dtic.mil/. See also Sandra I. Erwin, "Air Force to Army: There Are Better Ways to Deploy Surveillance Aircraft," National Defense, January 2010, http://www.nationaldefensemagazine.org/. The rebuttals after the article fall short precisely because they do not mention the major inefficiencies and consequent reduction in aggregate effectiveness brought on by the deployment and redeployment of remotely piloted vehicles with a dedicated unit rather than their continuous employment in-theater, either with the arrival of new cadres to operate them or with remote operation from outside the theater—or a combination of the two. For Army training issues, see Brendan McGarry, "US Army Mulls Merging Drone Training after Scathing Audit," Defense Tech, 5 June 2015, http://defensetech.org/.
- 16. It is impossible to know with precision how many people the Air Force and other services have saved from starvation and illness, but the 1992-94 Somalia mission alone saved well over a million while operations to feed the Kurds from 1991 to 1994 saved at least 400,000. The delivery of water-purification machines to Rwanda after the genocide there saved at least another million, and probably more, from cholera and other waterborne diseases, and food deliveries averted mass starvation. The Berlin airlift prevented starvation in West Berlin although the total number who would have died is open to debate. Airlift and ground-based operations in China between the end of World War II and the Communist takeover in 1949 saved several million people from starvation. Before this aid arrived, an estimated 10,000 per day were dying of starvation as a result of the Japanese expropriation of rice crops. Along with major deliveries of food, medical teams have saved many people in thousands of missions across the globe. The delivery vehicles are generally Air Force aircraft although the relief and medical parties are very often joint in nature and work with allies and associates. The author's estimate of 40 million is based on a review of every documented and accessible humanitarian effort since 1945.
- 17. See Robert Ehlers, Targeting the Third Reich: Air Intelligence and the Allied Bombing Campaigns (Lawrence: University Press of Kansas, 2009); and Ehlers, The Mediterranean Air War: Airpower and Allied Victory in World War II (Lawrence: University Press of Kansas, 2015). Both books offer insight into the importance of approaching airpower's utility within a nuanced grand-strategic, policy, military-strategic, operational, and combined-arms/combined-effects framework.
 - 18. Farley, Grounded, 1.
 - 19. Ibid., 105–6.
 - 20. Gray, Modern Strategy, 7.
 - 21. Ibid., 16.
- 22. For an excellent analysis of the Marine Corps's resistance to truly joint and properly phased air operations and the Navy's resistance to the same principles, see Mason Carpenter, "Joint Operations in the Gulf War: An Allison Analysis" (thesis, School of Advanced Air and Space Studies, Maxwell AFB, AL, June 1994). Although such concerns are normal, context matters. The Iraqis' inability to mount any kind of offensive action, particularly after their disaster at the Battle of Khafji, made clear both the opportunity to use all available air assets to attack Iraqi logistics and ground formations and the need to do so in order to maximize the effectiveness of ground operations and minimize casualties once the ground phase of the war began.
- 23. For a discussion of combined-effects power as a more holistic and effective concept than combinedarms operations, see Ervin J. Rokke, Thomas A. Drohan, and Terry C. Pierce, "Combined Effects Power," Joint Force Quarterly 73 (2nd Quarter 2014): 26–31, http://ndupress.ndu.edu/.