

Rescuing Icarus

The Problems and Possibilities of “Air-Mindedness”

LT COL JASON M. TREW, USAF, PhD

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Source: *Untitled Painting*, USAF Art Program, “Dusty Paintings Make Air Force History,” Peterson AFB, Colorado, 20 June 2011, <https://www.afspc.af.mil/>

Two groups use the term *air-mindedness*. For scholars studying aviation, the term refers to early twentieth-century attitudes toward flight. For professional air forces, it is about a perspective of warfare. To understand what airmen can learn from academics, it is useful to start with another topic the two have in common: the myth of Daedalus and Icarus.

In the cautionary tale, the young boy abused the power of flight for his own pleasure instead of using it to escape imprisonment as his father intended when he crafted the two sets of wings. One of the earliest known written versions of the tragic story appears in Ovid's *Metamorphoses*.¹ Only four paragraphs long, the poem's central theme clearly contrasts Daedalus' rational calculations and pragmatic motivations with the playfulness and high spirits—literally and metaphorically—that led to Icarus' downfall.

In 1990, Carl H. Builder played upon the contrasting images when Air University (AU) asked the longtime RAND Corporation analyst to write a piece to “remind incoming students of the obligations of the profession of arms, their heritage in history, and where those obligations might carry them with the future of the Air Force.”² In his final analysis, Builder concluded that the USAF lacked a shared sense of identity. Builder labeled this institutional crisis and titled his book *The Icarus Syndrome: The Role of Air Power Theory in the Evolution and Fate of the U.S. Air Force* (1994).

Builder's allusion to this myth was not unique. According to one historian, “Of all flying stories of classical antiquity it is this one which has left a lasting impression on future generations and fired the ambition of many imitators; and it is on this point, its moral effect, that the importance of the story rests.”³ Likewise, Builder's interpretation of the myth's moral is not exceptional. Daedalus is often the paragon of a mature craftsman; his son, a passionate, rebellious, self-destructive artist. Writers have variously attributed Icarus' disgrace to hubris, ambition, excessive dreaming, and the lure of instant gratification. His name has been invoked by psychiatrists as a condition characterized by narcissism, isolation, or an imagination that exceeds capabilities, dooming one to failure and mental conflict.⁴

Each time modern authors repeat the story, the father and son are presented as mutually exclusive examples. Furthermore, for Builder and many others, it is clear which model is superior. Daedalus is deified. In fact, Maxwell AFB, Alabama—the home to AU—recently dedicated a bronze sculpture of him.⁵ It may seem surprising then, that at the peak of Western society's excitement over aviation, both images were embraced by the so-called “air-minded” public. In fact, a better way to fulfill AU's original request for a manifesto on professional obligations, heritage, and the future of the Air Force is to reconceptualize air-mindedness to hold the ideals of both Daedalus and Icarus in creative tension. To explain what this means, it is important to first understand the genesis of air-mindedness.

The Origins of Air-Mindedness

In the decades after heavier-than-air flight became a reality, flying remained ineffective for many of the practical functions it would eventually perform in

transportation, commerce, and war. Indeed, decades passed before aviation began to influence the way most people lived their daily lives. Its psychological impact, however, registered much sooner. According to historian Robert Wohl, who traced the cultural impact of early aviators, the airplane became a symbol of societal regeneration in Western nations. In America specifically, the sky became the frontier that the wide-open West had once been. Opportunities abounded for the bold individual adventurer and a nation able to continually renew itself through expansion.⁶ Even the outbreak of World War I and the associated acceleration of aviation's destructive potential did not tarnish the airplane's reputation.

The 1920s inaugurated the era historians dubbed the "Golden Age of Flight." Many observers believed everyone would soon enjoy an age of "aerial mobility" as "flying would become as common as riding or even walking." Contemporary sources boasted that "democracy would prevail in the sky," and Americans could soon expect an "airplane in every garage."⁷ Children and their teachers were also on board. Aviation was the main theme in technologically-oriented series aimed at young Americans such as the "Bill Bruce" books in which the main character claims "nothing that he did gave the zest to life that the thrills of aviation had given him."⁸ Advocates urged curriculum changes, and some classrooms even received flight simulators.⁹

This enthusiasm for aviation became known as air-mindedness. According to the *Oxford English Dictionary*, which dates the first appearance to 1927, *air-minded* means to be "interested in or enthusiastic for the use and development of aircraft."¹⁰ The term was widely used during the interwar years.¹¹ For example, *The Saturday Evening Post* published a short story titled "Air-Minded," which described the "inspiring symbol" of "the steel bird."¹² Multiple jazz musicians, including the former Army Air Corps officer Glenn Miller, recorded their rendition of the song, "The Air-minded Executive," who was the "man of the year."

The excitement over human flight was not simply about the practical aspects of flight but also the expectations for advancing the individual's spirit—just as Daedalus' technology enabled Icarus' transcendence. As aviation was imbued with the power of spiritual rebirth, air-mindedness gained a sense of religious fervor. Flyers became "technological knights" powering a "new age of boundless revolutionary potential, moral and civilization-transforming forces."¹³

It was not just the flyers, however. Air-mindedness became a revolutionary imaginative capacity accessible to anyone willing to embrace aviation as a sign of freedom, a literal and symbolic transcendence from the limits of time and space.¹⁴ One modern author describes aviation as the "twentieth-century Enlightenment project."¹⁵ Another writer identifies the view from above as one of the "oldest imaginative resources" in Western intellectual currents.¹⁶ Flight "became a meta-

phor for the transformation of consciousness, its liberation from the constraints of normal day-to-day existence, and the redefinition of time and space.”¹⁷ In a study of culture and technology at the end of the twentieth century, one author concluded that flight represented “the one universal directional shift” in humanity’s ideas of progress.¹⁸ Echoing those from a century earlier, some recent scholars still claim air-mindedness has altered our capacity to “think, feel, and act,” “is central to the modern imagination,” or that “aerial imagination” is the world’s most transformational force, opening up “new cognitive possibilities.” Not surprisingly, flyers themselves often note a broader sense of consciousness.¹⁹

Because the “past is a foreign country,” to which we are strangers, it is difficult to recapture the sense of air-mindedness as a way of thinking about exciting possibilities, as an exhilarating experience of something divine, or as a symbol of humanity’s ability to harness technology and re-enchant an industrialized world.²⁰ Today, we are more familiar with aviation as a field of purposeful activity, defined by poles of constructive or destructive *effects*. We are less likely to perceive it as a sphere of *affects*—the psychological impact. This difference is precisely the distinction one 1920s pilot made between flying and flight. Flying was “factual, often sensuous, tangible.” In contrast, flight was “the essence of the spirit. It nurtures the soul. It is awesome. Often ethereal. Glorious. Emotionally wondrous and all-pervading. Intangible.” The aviatrix goes on to state, “We knew the ecstasy of discovery. Adventure—a part of every flight—was spine-tingling, inspiring.”²¹

Air-Mindedness through World War II

During the first half of the twentieth century, American advocates for military airpower capitalized on an idea that—as demonstrated above—already had high social currency. Even though the word was not yet in use, leaders in the nascent air service demonstrated the enthusiasm that was later termed *air-mindedness*. Consider the examples of Frank P. Lahm and Benjamin D. Foulois, who both become US Army Air Corps generals (Foulois became the future Air Corps chief). Each man helped create the earliest framework of an air-minded culture within the US military.²² The best examples, however, are three individuals whose own air-mindedness emerged in the same period as the term itself: Maj Alexander P. de Seversky, Gen William “Billy” Mitchell, and General Arnold. Each leader appreciated the potential of aviation for national development and a novel way of approaching the problems of war. At the same time, they realized how aviation necessitated and inspired innovative ways of thinking.

Following his experiences in World War I, Mitchell was convinced that building a fully developed air force was a national imperative,²³ and the prerequisite for that development was an appreciation of aviation’s potential. Of course, to realize

the advantages of aviation in practice, it was important to have leaders who were air-minded—leaders who could think differently about the problems of aviation and the problems aviation could solve. Thus, the foreword to his *Winged Defense: The Development and Possibilities of Modern Air Power—Economic and Military* (1925) opened with the claim that “few people outside of the air fraternity itself know or understand the dangers that these men face, the lives that they lead and how they actually act when in the air. . . what they actually do in improving the science and art of flying and how they feel when engaged in combat with enemy aircraft.” He went on to exclaim, “no one can explain these things except airmen themselves” and to label Army and Navy leaders as “psychologically unfit to develop this new arm to the fullest extent practicable.”²⁴

In his 1942 work, *Victory Through Airpower*, which was dedicated to Mitchell, de Seversky showcased his own air-mindedness:

I want to focus attention on the *new principles of warfare* shaped by the emergence of military aviation . . . a dynamic, expanding force, the growth of which must be anticipated by *courageous minds*. It happens to be a force that *eludes static, orthodox minds* no matter how brilliant they may be. *Air power speaks a strategic language* so new that translation into the hackneyed idiom of the past is impossible. It calls not only for new machines and techniques of warmaking but for *new men unencumbered by routine thinking* [emphasis added]²⁵

Later in the book, which Walt Disney turned into a World War II propaganda film, de Seversky referred to those who were “aviation-minded” as “emancipated minds.” In contrast, those “raised in totally different traditions,” that is, those in the Navy or Army, “seem psychologically incapable of recognizing aviation in its primary character as the new military force which. . . dominates the world.” Instead, they merely “tolerate [semi-independent military aviation] as a concession to modernity [and] the spirit of the times.”²⁶

The third example is General Arnold. Along the way to becoming the commanding general of the Army Air Forces, he exemplified both dimensions of air-mindedness. On the practical side, Arnold coupled his organization to the embryonic aerospace industry. On the psychological side, his numerous publications—including the series mentioned earlier, *Bill Bruce and the Pioneer Aviators* (1928)—presented “this new and thrilling game” as the last frontier for adventure for air-minded youth.²⁷ In giving career advice to Airmen, Arnold highlighted themes of awe, enhanced cognition, novelty, and perspective:

Flying offers the greatest recompense to the human being; it reveals to him beauties and bounties of nature . . . The airman looks down on the earth,

he sees it in broader outline; he alone can know all the beauties of land and sea, for he alone has seen them. As *his knowledge and his vision is greater*, so also are his responsibilities, the requirements of his profession. No other fighter is so alone as the airman who rides above the clouds in the vastness of the sky . . . He has more duties to perform in any other fighter; they are more complicated and less normal to simple pursuits...The terrific pace and speed of *air combat calls for a mental alertness and muscular reaction wholly foreign to all the other pursuits of man* either military or nonmilitary... The normal rules of human kind are indoctrinated by long practice...Not so with military aviation. Many of the *requirements of the aviator and combat are new, strange and unusual* [emphasis added].²⁸

For Mitchell, de Seversky, and Arnold, the US needed to realize the significance of the airplane. Commerce, diplomacy, and defense all required aviation power. In turn, aviation required air-minded individuals who appreciated its capabilities and could approach these issues with new, creative perspectives. Indeed, *Proficimus More Irretenti* was the motto of the Air Corps Tactical School: “We Make Progress Unhindered by Custom.”²⁹

Air-Mindedness in the USAF

In his capacity as the head of the air service months before his retirement, Arnold delivered the *Third Report of the Commanding General of the Army Air Forces to the Secretary of War*. In the chapter titled “Air Power and the Future,” he wrote a line—much quoted in USAF doctrine—that also revealed his grasp of the other dimensions of air-mindedness. “Since military Air Power depends for its existence upon the aviation industry and the air-mindedness of the nation,” Arnold wrote, “the Air Force must promote the development of American civil Air Power in all of its forms, both commercial and private.”³⁰ He differentiated capacity (“aviation industry”) from society’s appreciation of why that capacity is a worthy investment (“air-mindedness of the nation”).

Two years after the report, the service earned its organizational autonomy with the National Security Act of 1947. About this time air-mindedness began to fall out of common usage. The American public became disenchanted with aviation. Prophecies of ending warfare, poverty, and inequality waned with the trauma of another global conflict. Once celebrated as the “knights of the air,” pilots became less like mythical heroes and more like technicians, operating in an environment striving for safety, reliability, and regulation. Flying was no longer, in the words of one author, a “fusion of sensual and spiritual forces, a tension in which each individual takes part, which is almost invincible.”³¹ When the term next appeared in

official military discourse, the concept had lost much of its heritage and some of its most important dimensions.

In 1992, the USAF issued a drastic revision of its doctrine, Air Force Manual 1-1, *Basic Aerospace Doctrine*. One of its novel features was the inclusion of *air-mindedness*, which it defined as a unique, three-dimensional mindset reflecting the Airman's perspective of warfare. The operating environment of the Air Force, it claimed, naturally confers a global, strategic perspective upon the Airman, even when airpower is used to support limited operational objectives.³² Interestingly, the doctrine explicitly links the concept to Arnold, almost implying that he created the term: "The study of aerospace warfare leads to a particular expertise and a distinctive point of view that General Arnold termed *airmindedness*."³³ Not only does this distort the origins of the word, but it also restricts its meaning to a functional paradigm with no sense of creativity.

Future doctrinal references to air-mindedness further solidified the narrower conception: "Airmen must understand the intellectual foundation behind air and space power and articulate its proper application at the strategic, operational, and tactical levels of war; translate the benefits of air and space power into meaningful objectives and desired effects. . . [using] an effects-based approach to operations."³⁴ Even as airpower became one word in the 2011 version of AFDD 1, *Basic Doctrine, Organization, and Command* to signal the inclusion of space and cyberspace, air-mindedness was still presented as a way of thinking that is oriented to operational effects.

Even when Airmen write about air-mindedness in articles and academic papers, most mirror doctrine's focus on its practical dimension. For example, an Air Command and Staff College student focused on the era before World War I for the origins of an air-minded culture. In professional journals and popular magazines, this first generation of Airmen argued for the unique role aircraft could play on the battlefield. Although the author acknowledged that these Airmen "found a sort of spiritual outlet" among their cohorts, felt "personal fascination with flight" and quotes a primary source extolling the need for "imagination" and "prophecy," the paper instead focused on the operational principles they pioneered. The student noted that "Flying was clearly moving from the realm of fantasy to that of an accepted science, and enthusiasts were likewise becoming true 'airmen,' with a corporate sense of their specialized expertise and the particular body of knowledge that it implied."³⁵ The author did not consider whether the domains of imagination and science could co-exist.³⁶

In summary, to the degree this is about a different way of thinking, it is only thinking as it relates to warfare—it is not the suggestion of earlier writers that flying can ignite passionate creativity. What remains is a more restricted and less

inspirational version of air-mindedness. In this paradigm, there is no resonance with the metaphor of Icarus, and what is left of Daedalus' image is not a project of national import but only a style of warfare.

Rescuing Icarus

While there has been some divergence, air-mindedness has generally been cast in qualities reminiscent of Daedalus, the “archetypical craftsman.” As a metaphor for air-mindedness, he represents its practical dimension; the rational pursuit of a mechanical instrument and the pragmatic employment of that technology for political purposes. What is missing from this model—and what is missing from modern Air Force discourse—is the imaginative of his playful son.

On the surface, this may be difficult to accept. The boy perishes of his own imprudence, making him an odd candidate to honor. Imagination and innovation may be popular buzzwords, but artistry and play strike a tone that is easy for defense professionals to disparage given the serious nature of their work.³⁷ Yet, we rarely account for a more fundamental moral of the myth. Icarus died, yes, and Daedalus survived. But the father became unwilling, unable even, to wield his skills any further. Without his son, the wings become the father's last great invention. Indeed, this is why many value Icarus for his boldness, his creativity, his playfulness, and as Ovid himself put it, his “daring art.”³⁸ The boy variously symbolizes innovation, genius, passion, and even a spiritual savior.³⁹

The myth has had a special attraction for twentieth-century writers and artists who recognized its implications in the era of airplane and spaceship travel.⁴⁰ Louis Bleriot was “first to claim the legacy of Icarus” when he crossed the English Channel. For the poet Gabriel D’Annunzio, flying’s potential for death was the very reason it could produce a sublime experience.⁴¹ He also revised the story, portraying Icarus as the creative genius behind the idea to escape using manufactured wings. Daedalus is still the master craftsman, but his son is the inspiration. Arnold himself, writing in *Winged Warfare* with Ira Eaker, honored Icarus as a pioneer “test pilot.” Another coauthored work, this one with a revealing title, *This Flying Game*, begins with “Flying—what dreams it inspires! What ideas and thoughts it excites in boy and man alike!” Later they insisted that the inspiration of myths like Daedalus and Icarus “played no small part” in achieving actual flight.⁴²

“The U.S. Air Force,” the official USAF song, a project initiated by Arnold, also celebrates the dangerous intensity of flight, virtually written as a soundtrack to the myth. The first verse about the “wild blue yonder” exclaims, “we live in fame or go down in flame!” The second verse, referring to aviation pioneers, states, “how they lived, God only knew!” The third verse, a full quarter of the song, is used as a dirge to those who did *not* live. Finally, the fourth verse issues a self-congratulatory

warning to others: “if you’d live to be a grey-haired wonder / Keep the nose out of the blue!”⁴³ Icarus also happens to be the name of the US Air Force Academy magazine of creative writing. Furthermore, for years, Academy cadets have memorized another positive treatment of the Icarian symbol, the poem *High Flight*. Composed by American pilot John Gillespie Magee, it reiterates the themes of escape, playfulness, exclusivity, heightened consciousness, and divinity: “slipped the surly bonds of Earth,” “danced the skies on laughter-silvered wings,” “done a hundred things/You have not dreamed of,” and finally, “with silent, lifting mind I’ve trod/The high untrespassed sanctity of space,/—Put out my hand, and touched the face of God.” Poignantly, the 19-year-old writer suffered Icarus’ fate in a fatal midair collision only a few months after penning those words.⁴⁴

Still, the point is not to elevate Icarus above his father. Privileging one over the other is not just incomplete, it is fatally flawed. Airmen must tap into the skills of both, and to the degree the same incompatible, they must hold the divergent images together in creative tension: the rational *and* the romantic; the pragmatic *and* the philosophical; the industrious *and* the imaginative. Air-mindedness must be redefined into a way that treats Daedalus and Icarus as complementary instead of mutually exclusive. No longer a syndrome to avoid, Icarus becomes a solution to embrace.

Air-mindedness v3.0

To be air-minded should mean that one understands the value of the following three components and demonstrates them in practice:

1. A passion for cultivating airpower and Airmen to serve our nation
2. An appropriate proficiency in the employment of the unique qualities of high-dimensional operations
3. A strategic perspective for prevailing in complex, competitive environments.

In this triad of air-mindedness, the first leg harkens back to the original idea of enthusiasm for aviation and to Arnold’s quote specifically. Modern airpower, like the airpower of the mid-twentieth century, is founded upon the nation’s technological capacity and the willingness of its citizens to support such investments. It also requires human capital in the form of Airmen—that is, all members of the USAF team—who are unabashedly enthusiastic about what they can do for airpower and what airpower can do for their country.

The second leg encompasses air-mindedness as the paradigm of aerial warfare. It subsumes Mike Benitez’s recent proposal for a new USAF mission statement. In other words, it leverages the unique attributes of the air and space domains, which are literally higher, and the cyberspace domain, which he asserts is cogni-

tively higher: “to provide an agile global force capable of providing prompt, sustained, high-domain superiority to deter aggression and jointly win our nation’s wars.”⁴⁵ The second component also stipulates proficiency at a level appropriate for an Airman’s experience and responsibilities.

The third leg is not necessarily about strategy as a comprehensive plan or about the potential range or decisiveness of airpower. In a world that is doubly wicked—that is, both dangerous and disorderly—strategy should never be about victory, as AU Professor Everett Carl Dolman reminds us. Rather, the appropriate goal of strategy—a continuing advantage, according to Dolman⁴⁶—comes from a mindset that can abstract itself from the immediate, close-range problem. Imagining greater horizons, in space and time, allows an air-minded thinker to appreciate novelty and interdependence to go over the inescapable labyrinth, instead of trudging through it.

This proposed definition builds upon the historical and doctrinal foundations of the concept. At the same time, it sheds some of its harmful connotations that have inspired some to suggest the USAF should abandon the term. For example, this new definition must not portray *air-mindedness* as exclusive, automatic, or tautological; it cannot simply be defined by what Airmen do but also how they aspire to do it and why. As an operational paradigm, it is neither hegemonic—airpower is not presumed to be the only way to achieve a war fighter’s objective—nor fixated on one particular technology. It strengthens the claim that an Airman’s perspective is strategic, since it invokes a sense of intellectual playfulness but does not deny that Sailors, Soldiers, or Marines can also be strategically minded. Furthermore, just as it was used during the interwar period, air-mindedness is only weakly correlated with the ability to fly an aircraft. In other words, aircrew may demonstrate one sense of air-mindedness as they exercise their tactical proficiencies using airborne systems, but all Airmen are involved in some aspect of airpower operations. More importantly, every Airman can exhibit the passion and strategic perspective of air-mindedness, which are fundamentally its more meaningful and dynamic components. Finally, it implicitly pulls together the images of Daedalus and Icarus by acknowledging airpower’s effects and affects. Air-mindedness is not solely about the technical achievement of flight that elicits little attention today but about the human aspiration to invent creative ways to prevail.

Conclusion

Once human flight became a reality, the mythological possibilities of flight—particularly its capacity to alter one’s perspective and inspire creative thinking—began to decouple from its technological possibilities. Increasingly militarized, regulated, and routinized, postwar flying eventually lost its cultural cachet as a

frontier of human aspiration. It became too mundane and safe to elicit popular excitement or inspire radical creativity. Simultaneously, the threat of airpower-delivered nuclear holocaust made earlier air-minded enthusiasm seem naïve. The twentieth century began an era “when flight has released us into space and yet may kill not only Icarus but everyone else.”⁴⁷

Today, the way most Americans interact with aviation is apt to cause only negative emotions such as frustration or fear. Even for the USAF, which “worships at the altar of [airpower] technology,” there seems to be little acknowledgment of the inspirational component of flying.⁴⁸ Air-mindedness is merely an issue of growing, managing, and employing airpower’s capabilities. Furthermore, histories about the USAF and by the USAF project this emphasis on pragmatism back into time, underemphasizing the playfulness and spiritual nature originally inherent in flying. The enthrallment of Icarus is seen as a fatal distraction and relegated to a cautionary tale. Yet, when Icarus and Daedalus are viewed as two interrelated dimensions, and not mutually exclusive options on a single continuum, air-mindedness can be technical, practical, and political as well as inspirational, creative, and playful. The former strengthens the latter just as the son inspired the father, and today’s complex world requires Airmen to excel at both. ❁

Notes

1. Ovid, *Metamorphoses*, trans. A. S. Kline, 2nd ed. (CreateSpace Independent Publishing Platform, 2014), VIII: 183–235.
2. Carl H. Builder, *The Icarus Syndrome: The Role of Air Power Theory in the Evolution and Fate of the U.S. Air Force* (London: Transaction Publishers, 2002).
3. Berthold Laufer, *The Prehistory of Aviation*, Field Museum of Natural History Anthropological Series, Publication 253, vol. 18, no. 1 (Chicago, IL: Field Museum of Natural History, 1928), 63.
4. Michael A. Sperber, “Albert Camus’ The Fall: The Icarus Complex,” *American Imago* 26 (1969): 269–80, <https://www.jstor.org/>; *McGraw-Hill Concise Dictionary of Modern Medicine*, s.v. “Icarus complex,” 1 November 2016, <http://medical-dictionary.thefreedictionary.com>; and Jacob Nyenhuis, *Myth and the Creative Process: Michael Ayrton and the Myth of Daedalus* (Detroit: Wayne State University Press, 2003), 48.
5. Senior Airman Alexa Culbert, “Maxwell Unveils Daedalus Statue Commemorating WWI Pilots,” 42nd ABW Public Affairs, Maxwell AFB, AL, 7 April 2017, www.maxwell.af.mil.
6. Frederick Jackson Turner famously applied a frontier thesis to America’s continental expansion and commented on how the closing of *the* frontier impacted the nation. In contrast, David Courtwright argued the American frontier did not close. Instead, “it became multidimensional, with continuous, technologically premised, socially constructed, and mutually reinforcing movement on the land, in the nighttime, and through the sky” (David T. Courtwright, *Sky as Frontier: Adventure, Aviation, and Empire, Centennial of Flight Series* [College Station, TX: Texas A&M University Press, 2004], 14).
7. Joseph J. Corn, *The Winged Gospel: America’s Romance with Aviation* (Baltimore: Johns Hopkins University Press, 2002), 12–13.
8. Henry H. Arnold, *Bill Bruce: The Flying Cadet* (New York: A. L. Burt Company, 1928), 239.

9. Steve Call, *Selling Air Power: Military Aviation and American Popular Culture after World War II, Williams-Ford Texas A&M University Military History Series* (College Station, TX: Texas A&M University Press, 2009), 40-1.

10. *Oxford English Dictionary Online*, s.v. "air-minded."

11. According to Google nGram—which has some inherent flaws—it appeared most frequently in print between 1920–50 (Alan Vick, *Proclaiming Airpower: Air Force Narratives and American Public Opinion from 1917 to 2014* (Santa Monica, CA: Rand Corporation, 2015), 27.

12. Guy Gilpatric, "Air-Minded," *Saturday Evening Post*, 21 March 1931, 14.

13. Azar Gat, *A History of Military Thought: From the Enlightenment to the Cold War* (Oxford, England: Oxford University Press, 2002), 563.

14. Robert Wohl, *A Passion for Wings: Aviation and the Western Imagination, 1908–1918* (New Haven, CT: Yale University Press, 1996), 257.

15. Jeanne Haffner, *The View from Above: The Science of Social Space* (Cambridge, MA: MIT Press, 2013), 14, 16.

16. Jean-Marc Besse, "Aerial Geography," in eds. Alex S. MacLean et al., *Designs on the Land: Exploring America from the Air* (New York: Thames & Hudson, 2003), 339. Indeed, in the words of a sixth-century poet, the very idea of flying offers "wings to your mind" (Boethius, *Consolation of Philosophy*, quoted in Nyenhuus, *Myth and the Creative Process*, 40).

17. Wohl, *A Passion for Wings*, 162.

18. Stephen Kern, *The Culture of Time and Space, 1880–1918: With a New Preface* (Boston: Harvard University Press, 2003), 241–42.

19. Peter Adey, *Aerial Life: Spaces, Mobilities, Affects* (Malden, MA: Wiley-Blackwell, 2010), 9; Mark Dorrian and Frédéric Pousin, "Introduction," in *Seeing from Above: The Aerial View in Visual Culture*, eds. Mark Dorrian and Frédéric Pousin (London: I. B. Tauris, 2013), 1; William L. Fox, *Aereality: On the World from Above* (Berkeley, CA: Counterpoint, 2009), 3; Jeffrey T. Schnapp, "Propeller Talk," *Johns Hopkins University Press* 1, no. 3, 154, <http://muse.jhu.edu/article/23012>; and Jonathan F. Vance, *High Flight: Aviation and the Canadian Imagination* (Toronto: Penguin Canada, 2002), 101.

20. David Lowenthal, *The Past Is a Foreign Country—Revisited*, 2nd ed. (Cambridge: Cambridge University Press, 2015). Lowenthal took the title from a line in Leslie Poles Hartley's *The Go-Between* (1953): "The past is a foreign country: they do things differently there."

21. Louise Thaden, *High, Wide, and Frightened* (Fayetteville, AR: University of Arkansas Press, 2004), xi–xii. The work was first published in 1938.

22. Ronald G. Machoian, "Looking Skyward: The Emergence of An Airminded Culture in The U.S. Army" (Student Research Paper, Air Command and Staff College, 2002), 9, 28; and Lieutenant Frank P. Lahm, Sixth Calvary, USA, "Ballooning," *Journal of the Military Service Institution of the United States* 38 (May–June 1906): 510–13.

23. Mark Clodfelter, "Molding Airpower Convictions: Development and Legacy of William Mitchell's Strategic Thought" in *The Paths to Heaven: The Evolution of Air Power Theory*, ed. Phillip S. Meilinger (Maxwell AFB, AL: Air University Press, 1997), 101.

24. William Mitchell, *Winged Defense: The Development and Possibilities of Modern Air Power—Economic and Military (Alabama Fire Ant)* (Tuscaloosa, AL: University of Alabama Press, 2009), vii, 21.

25. Alexander P. de Seversky, *Victory Through Air Power*, Book Club ed. (New York, NY: Simon and Schuster, 1942), 5–6.

26. De Seversky, *Victory Through Air Power*, 84, 219–20.

27. Henry H. Arnold, *This Flying Game* (Funk & Wagnalls, 1936), xviii–xix.

28. Henry H. Arnold and Ira C. Eaker, *Army Flyer* (Harper & Bros., 1942), 8–9.

29. Robert T. Finney, *History of the Air Corps Tactical School 1920–1940*, 3rd ed. (Air Force History and Museums Program, 1998), v.

30. Henry H. Arnold, *Third Report of the Commanding General of the Army Air Forces to the Secretary of War, 12 November 1945* (Washington DC: Government Printing Office), 70.

31. Kessel, *La Ligne*, quoted in Robert Wohl, *The Spectacle of Flight: Aviation and the Western Imagination, 1920–1950* (New Haven, CT: Yale University Press, 2007), 165.
32. Coates, “Airmindedness,” 71; Air Force Manual (AFM) 1-1, Volume II, *Basic Aerospace Doctrine* (March 1992), 210, www.rcaf-arc.forces.gc.ca.
33. Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine, Organization, and Command* (14 October 2011), 18, www.airuniversity.af.edu.
34. Air Force Doctrine Document (AFDD) 2, *Operations and Organization* (3 April 2007), 2–3, www.airuniversity.af.edu.
35. Maj Ronald G. Machoian, “Looking Skyward: The Emergence of an Air-Minded Culture in the U.S. Army: Wright Flyer Paper No. 17” (New York: CreateSpace Independent Publishing Platform, 2012), 8, 14, 13, 21.
36. Some notable exceptions include Dr. Dale L. Hayden, (“Air-Mindedness,” *Air & Space Power Journal* 22, no. 4 (Winter 2008): 44, www.airuniversity.af.edu/aspj; and Charles J. Dunlap Jr., *Shortchanging the Joint Fight?: An Airman’s Assessment of FM 3-24 and the Case for Developing Truly Joint COIN Doctrine* (Maxwell AFB, AL: Air University Press, 2007), 7–8).
37. Yet, just as airmen through time have themselves invoked the name of Icarus, the precedents for a playful approach to strategy can be found in ancient history, common metaphors, and in the similarities between strategic theory and scholarship on play. . . “The Athenian Sophists Euthydemus and Dionysodorus applied their skills to military strategy, explicitly calling their approach (as reported by Plato in his dialogue *Laches*) ‘playful’ ” (Armand D’Angour, “Plato and Play: Taking Education Seriously in Ancient Greece,” *American Journal of Play* 5, no. 3 [2013]: 304). For more on the links between ideas of military strategy or war and the scholarship analyzing play, see Jason Trew, “Can Strategy be Playful?” PAXsims (12 November 2016), <https://paxsims.wordpress.com>, and Jason Trew, “#RescueIcarus: A Manifesto for Heroic Innovation,” *OTH Journal* (17 August 2018), <https://othjournal.com>.
38. Nyenhuis, *Myth and the Creative Process*, 46–47, 54; and Ovid, *Ars Amandi*, quoted in Boitani, *Winged Words*, 33).
39. Boitani, *Winged Words*, 35, 46; and Nyenhuis, *Myth and the Creative Process*, 53, 44–46.
40. Nyenthuis, *Myth and the Creative Process*, xvii.
41. Wohl, *A Passion for Wings*, 66, 263.
42. Henry H. Arnold, *Winged Warfare* (New York: Harper & Brothers, 1941), 213; and Arnold, *This Flying Game*, 3, 22.
43. David A. Lande, “Saved by the Wild Blue Yonder,” *Air Force Magazine*, September 2010, www.airforcemag.com; and Maj Robert Crawford, “The Air Force Song,” Official US Air Force Songs website, January 1997, www.afnoa.org.
44. Jonathan F. Vance, *High Flight: Aviation and the Canadian Imagination* (Toronto: Penguin Random House Canada, 2002), 268–69.
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46. Everett Carl Dolman, *Pure Strategy: Power and Principle in the Space and Information Age (Strategy and History)* (London: Routledge, 2005), 6.
47. Michael Aytron, quoted in Nyenhuis, *Myth and the Creative Process*, 233.
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Lt Col Jason M. Trew, USAF, PhD

Lieutenant Colonel Trew is a senior pilot and a graduate of the USAF School of Advanced Air and Space Studies. He is the 30th Student Squadron commander, Squadron Officer School, Maxwell AFB, Alabama.

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