



VANTAGE POINTS

PERSPECTIVES ON AIRPOWER
AND THE
PROFESSION OF ARMS



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Vantage Points

Perspectives on Airpower and the Profession of Arms

Compiled by

CHARLES M. WESTENHOFF
Colonel, USAF, Retired

MICHAEL D. DAVIS, PhD
Colonel, USAF

DANIEL MORTENSEN, PhD

JOHN L. CONWAY III
Colonel, USAF, Retired

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Foreword

There is no finer learning organization than the United States Air Force. At the tactical level, aircrews thoroughly debrief every sortie, supervisors carefully brief their shifts, and units maintain meticulous records. The Air Force uses precision instrumentation to record every test and debrief every Red Flag mission—these and other measures ensure the *integrity* of what we learn. We collect what we've learned in databases, lessons learned, tactics manuals, histories, and professional journals—we accumulate useful knowledge so we can *serve* more effectively. Whether newly enlisted or general officers, we continue to learn every day—we master what's important to attain professional *excellence*.

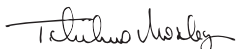
As we enter Air Force service, our primary learning goal is to become experts in our field. That's the first step toward leadership. As we master our individual duties, we gain insight into the broader organization. By the time an air traffic controller is qualified, he or she has learned about weather, radios and radar, airfield engineering, navigational aids, aircraft operations, and many other fields. The wider our professional grasp, the better our decisions.

Thousands of years before any aircraft flew, profound masters of the profession of arms encouraged learning. We inherit a practical focus from those soldiers, sailors, and statesmen: study successes and failures to understand what works.

Airmen have added tremendously to this severe school of study. The third dimension adds unprecedented vision, speed, range, and freedom of action. The application of air and space power in concert with other arms created joint operations, a distinc-

tive advantage of American arms. Airmen also contribute a unique perception of time, a penchant for maximizing the effects of scarce resources on a theater scale, and a habit of looking ahead—"lead-turning events."

This book presents both timely and timeless thoughts on our profession. It pairs them with images of Airmen who embody those thoughts and prove them in action. It is a reminder that professional growth is something we owe to other Airmen and our nation. We treasure the lessons we've learned because so many have been paid for in blood. In turn, we apply them—to fly, fight, and win—don't you ever forget it!



T. MICHAEL MOSELEY
General, USAF
18th Chief of Staff

Theory of War

To Be Prepared for War



When blows are planned, whoever contrives them with the greatest appreciation of their consequences will have a great advantage.

—Frederick the Great (Frederick II) (1712–86),
king of Prussia, 1740–86

The purpose of all war is peace.

—Saint Augustine (354–430), theologian and thinker

In order for a war to be just, three things are necessary. Firstly, the authority of the sovereign. . . . Secondly, a just cause. . . . Thirdly, . . . a rightful intention.

—Saint Thomas Aquinas (1225–74),
theologian and thinker

The supreme excellence is not to win a hundred victories. The supreme excellence is to subdue the armies of your enemies without having to fight them.

—Sun Tzu, *The Art of War*, ca. 500 BC

Nobody dislikes war more than warriors.

—Gen Daniel “Chappie” James Jr., commander in chief, North American Aerospace Defense Command/Aerospace Defense Command, 1975–77; first African-American Air Force four-star general

Never interrupt your enemy when he is making a mistake.

—Gen Napoléon Bonaparte (1769–1821), Corsican-born general during the French Revolution; emperor of the French, 1814–15 (20 Mar–22 June 1815)

You win battles by knowing the enemy’s timing, and using a timing which the enemy does not expect.

—Miyamoto Musashi (1584–1645), Japanese samurai; *The Book of Five Rings*, 1645

Generally in war the best policy is to take a state intact; to ruin it is inferior to this. To capture the enemy’s army is better than to destroy it.

—Sun Tzu, *The Art of War*, ca. 500 BC

Thus, what is of extreme importance in war is to attack the enemy’s strategy; next best is to disrupt his alliances; [and] next best is to attack his forces. The worst policy is to attack his cities; do so only when there is no alternative.

—Sun Tzu, *The Art of War*, ca. 500 BC

We must perceive the necessity of every war being looked upon as a whole from the very outset, and that at the very first step forward the commander should have the end in view.

—Gen Carl von Clausewitz (1780–1831), Prussian general and military theorist; *On War*, 1832

The expenses required to prevent a war are much lighter than those that will, if not prevented, be absolutely necessary to maintain it.

—Benjamin Franklin (1706–90), American philosopher and Founding Father

You will usually find that the enemy has three courses open to him, and of these he will adopt the fourth.

—Field Marshal Helmuth von Moltke the Elder, chief of staff, Prussian army, 1857–87

Forces that cannot win will not deter.

—Gen Nathan F. Twining, chief of staff, US Air Force, 1953–57; chairman, Joint Chiefs of Staff, 1957–60

Everything is very simple in war, but the simplest thing is difficult. These difficulties accumulate and produce a friction which no man can imagine exactly who has not seen war.

—Gen Carl von Clausewitz (1780–1831), Prussian general and military theorist; *On War*, 1832

Nothing is more important in war than unity in command.

—Gen Napoléon Bonaparte (1769–1821), Corsican-born general during the French Revolution; emperor of the French 1814–15 (20 Mar–22 June 1815)

Unity of command is not alone sufficient. Unity of planning, unity of common item procurement, and unity of doctrine are equally necessary.

—Gen H. H. “Hap” Arnold (1886–1950), taught to fly by the Wright brothers, 1911; first five-star General of the Air Force

The spot where we intend to fight must not be made known; for then the enemy will have to prepare against a possible attack at several different points; and his forces being thus distributed in many different directions, the numbers we shall have to face at any given point will be proportionately few.

—Sun Tzu, *The Art of War*, ca. 500 BC

How many a dispute could have been deflated into a single paragraph if the disputants had just dared to define their terms.

—Aristotle (384–322 BC), Greek philosopher; student of Plato; teacher of Alexander the Great

The point to understand is what the ultimate objective is, and instead of applying that objective to a land war and then organizing joint forces around the land war, let’s look at how we can apply military power directly to the objective.

—Maj Gen Charles D. “Chuck” Link, commandant, Air Command and Staff College, 1989–90; commandant, Air War College and vice-commander, Air University, 1990–91

Process is no substitute for careful thought.

—Gen John Shaud, chief of staff, Supreme Headquarters, Allied Powers, Europe, 1990

The “American way of war” has long been described as warfare based on either a strategy of annihilation or of attrition and focused on engaging the enemy in close combat to achieve a decisive battle. Air and space power, if properly focused, offers our national leadership alternatives to the annihilation and attrition options.

—AFDD 1

An effects-based approach should logically tie every action taken to objectives at all levels of war and should consider the imperatives imposed by those higher levels, even when planning tactical actions.

—AFDD 2

In the final analysis, victories are achieved because of the effect produced, not simply because of the effort expended.

—Brig Gen Haywood S. “Possum” Hansell Jr.,
memorandum to Army Air Force chief of staff
Gen Hap Arnold, 26 July 1944

Defending the United States, of course, has been the number one priority of the U.S. military since the founding of the republic.

—Secretary of Defense Donald H. Rumsfeld,
7 May 2002

The gravest danger our nation faces lies at the crossroads of radicalism and technology. Our enemies have openly declared that they are seeking weapons of mass destruction, and evidence indicates they are doing so with determination.

—Pres. George W. Bush, 17 Sept 2002

I will support and defend the Constitution of the United States against all enemies, foreign and domestic.

—Excerpt from oath taken by all Airmen

Always presume that the enemy has dangerous designs and always be forehanded with the remedy. But do not let these calculations make you timid.

—Frederick the Great (Frederick II) (1712–86),
king of Prussia, 1740–86

No enterprise is more likely to succeed than one concealed from the enemy until it is ripe for execution.

—Niccolo Machiavelli, *The Prince*, 1521

O divine art of subtlety and secrecy! Through you, we learn to be invisible; through you, inaudible; and hence, hold the enemy's fate in our hands.

—Sun Tzu, *The Art of War*, ca. 500 BC

Strategy is the employment of battle to gain the end in war; it must therefore give an aim to the whole military action, which must be in accordance with the object of the war.

—Gen Carl von Clausewitz (1780–1831), Prussian general and military theorist; *On War*, 1832

It is the soldier, not the reporter, who has given us the freedom of the press.

—Father Dennis Edward O'Brien, sergeant,
US Marine Corps

Every art has its rules and maxims. One must study them: theory facilitates practice. The lifetime of one man is not enough to enable him to acquire perfect knowledge and experience. Theory helps to supplement it, it provides a youth with premature experience and makes him skillful through the mistakes of others.

—Frederick the Great (Frederick II) (1712–86),
king of Prussia, 1740–86

Inserting ground forces in a region today may create more problems than it resolves.

—Dr. Richard P. Hallion, 1998; chief AF historian

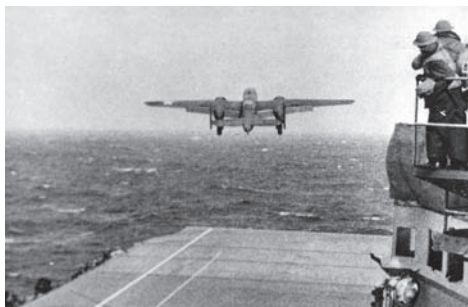
It is fighting at a great disadvantage to fight those who have nothing to lose.

—Francesco Guicciardini (1483–1540),
Storia d'Italia, 1564



Patriotism

The Survival and Success of Liberty



Let every nation know, whether it wishes us well or ill, that we shall pay any price, bear any burden, meet any hardship, support any friend, oppose any foe, to assure the survival and success of liberty.

—Pres. John F. Kennedy, inaugural address,
20 Jan 1961

The person who has nothing for which he is willing to fight, nothing which is more important than his own personal safety, is a miserable creature and has no chance of being free unless made and kept so by the exertions of better men than himself.

—John Stuart Mill,
British philosopher and economist

We will not be intimidated or pushed off the world stage by people who do not like what we stand for, and that is, freedom, democracy and the fight against disease, poverty and terrorism.

—Madeleine Albright, secretary of state, 1997–2001;
first woman appointed

We have to build trust in peacetime so that we can assume it in wartime.

—Maj Gen Gary “Dutch” Dylewski,
US Air Force, retired

Being a warrior is not an AFSC (Air Force specialty code), . . . it’s a condition of the heart.

—Gen John P. Jumper, 2003; chief of staff,
US Air Force, 2001–5

An officer’s ultimate commanding loyalty at all times is to his country, and not to his service or to his superiors.

—General of the Army George C. Marshall (1880–1959), architect of the Marshall Plan for the reconstruction of Europe; Nobel Peace Prize, 1953



Air, Space, and Cyber Power

Offense is the Essence of Air Power



Offense is the essence of air power.

—Gen H. H. “Hap” Arnold (1886–1950), taught to fly by the Wright brothers, 1911; first five-star General of the Air Force

Space is a realm in which many military operations are conducted more efficiently than by terrestrial systems.

—Gen Chuck Horner, commander, US and Allied Air Forces, Operations Desert Shield/Desert Storm

We have learned and must not forget that, from now on, air transport is an essential of airpower, in fact, of all national power.

—Gen H. H. “Hap” Arnold (1886–1950), taught to fly by the Wright brothers, 1911; first five-star General of the Air Force

The only real security upon which our military principles can rely is that you must be master of your own air.

—Winston Churchill (1874–1965),
WWII British prime minister

Air superiority is not the God-given right of Americans. It doesn't just happen. It takes a lot of people working hard to produce the capabilities that provide it for US forces.

—Gen Ronald R. Fogleman, chief of staff,
US Air Force, 1994–97; first Air Force Academy
graduate selected as chief of staff

Air control can be established by superiority in numbers, by better employment, by better equipment, or by a combination of these factors.

—Gen Carl A. “Tooey” Spaatz (1891–1974), first
chief of staff, US Air Force, Sept 1947–Apr 1948

What I hope we're beginning to understand is air-power's ability to destroy enemy forces without giving the enemy as much to shoot at.

—Maj Gen Charles D. “Chuck” Link, commandant,
Air Command and Staff College, 1989–90;
commandant, Air War College and vice-
commander, Air University, 1990–91

Air power is, above all, a psychological weapon—and only short-sighted soldiers, too battle-minded, underrate the importance of psychological factors in war.

—B. H. Liddell Hart (1895–1970), British military
historian; captain, Royal Army, WWI

So much damage from such a little thing.

—Slobodan Milosevic (1941–2006), overheard looking at an Air Force cruise missile at the Air Force Museum, 1995; former president of Serbia (1989–97) and Yugoslavia (1997–2000)

Once the command of the air is obtained by one of the contending armies, the war must become a conflict between a seeing host and one that is blind.

—H. G. Wells (1866–1946), English novelist,
The War in the Air, 1907

There are still those who fail to stand back and reflect on the fact that air assets operate in the one medium that surrounds the earth and that touches 100 percent of the earth's population, political capitals, and centers of commerce. Because of the long history of surface warfare and, perhaps, of our very existence on land, air power is not an easy concept to grasp.

—Gen Ronald R. Fogleman, chief of staff,
US Air Force, 1994–97; first Air Force Academy
graduate selected as chief of staff

Aerial forces menace all the territory comprised in their radius of action. They can set off from different points and arrive “en masse” on a chosen point. They lend themselves to the offensive because they leave the adversary, until the last moment, in uncertainty as to their objective.

—Arsene Vauthier, paraphrase of Giulio Douhet

Air power is not limited by oceans, by shorelines, by shallow water. It's not limited by mountains or mountain passes or rivers, shallow or deep. It's not limited even by distance.

—Gen T. Michael Moseley, chief of staff,
US Air Force, 2005—

In-flight refueling converts the tactical fighter into a strategic, long-range participant. It sustains combat air patrols, enables indirect routing, extends interdiction and strategic penetration depth and increasingly is an integral component of front-line strength.

—Air Vice-Marshal Tony Mason, Royal Air Force

Link air and space force together. Under the strategic principle that the one who controls outer space can control the Earth, superpowers and military giants are expanding their strength in outer space and the function of [their] air force[s].

—Maj Gen Zheng Shenxia and Senior Col Zhang Changzi, People's Liberation Army Air Force

You could give the same airplanes to two different air forces—one of them totalitarian and the other one under a democracy, and the democracy's going to win every time because the air war is about freedom of choice, it's about maneuver, and it's about a regime that's able to entrust a handful of men with a great deal of power.

—Maj Gen Charles D. "Chuck" Link, commandant, Air Command and Staff College, 1989–90; commandant, Air War College and vice-commander, Air University, 1990–91

The air ocean and its endless outer space extension are one and indivisible, and should be controlled by a single homogeneous force.

—Alexander P. de Seversky, Russian-born American aircraft designer; author of *Victory through Air Power*, 1942

Air superiority is not the God-given right of Americans. It doesn't just happen. It takes a lot of people working hard to produce the capabilities that provide it for US forces.

—Gen Ronald R. Fogleman, chief of staff, US Air Force, 1994–97; first Air Force Academy graduate selected as chief of staff

The Air Force's real strength no longer is the airplanes. The good old days of two incredibly maneuverable planes dogfighting are over and have been overtaken by data links, computers, and satellites.

—Richard L. Aboulafia, aviation analyst, Teal Group Corporation, 2005

The lesson from the last war that stands out clearly above all others is that if you want to go anywhere in modern war, in the air, on the sea, on the land, you must have command of the air.

—ADM William F. "Bull" Halsey (1888–1959), US Navy Third Fleet commander, WWII; *House Armed Services Committee Report*, Oct 1949

You cannot beat an air force with an army. You can't beat an air force with a navy. But you can beat either of those with an air force. It has to do with physics.

—Maj Gen Charles D. “Chuck” Link, commandant, Air Command and Staff College, 1989–90; commandant, Air War College and vice-commander, Air University, 1990–91

The US Air Force provides the Nation a unique capability to project national influence anywhere in the world on very short notice. Air and space forces, through their inherent speed, range, and flexibility, can respond to national requirements by delivering precise military power to create effects where and when needed.

—AFDD 1

The first principle that should guide air and space professionals is the imperative to control the high ground. This has been a rule of warfare ever since the dawn of time.

—The Honorable Peter B. Teets, undersecretary of the Air Force, Nov 2002

If you don't control the air, you'd better not go to war.

—Gen Chuck Horner, commander, US and Allied Air Forces, Operations Desert Shield/Desert Storm

The flexibility of an air force is indeed one of its dominant characteristics. . . . Given centralized control of air forces, this flexibility brings with it an immense power of concentration which is unequaled in any other form of warfare.

—Air Marshal Lord Arthur William Tedder
(1890–1967), Royal Air Force,
deputy Supreme Commander, D-day invasion;
Air Power in War, 1947

Air and space superiority provides freedom to attack as well as freedom from attack. Success in air, land, sea, and space operations depends upon air and space superiority.

—AFDD 1

Space power operates differently from other forms of military power due to its global perspective, responsiveness, and persistence.

—An Airman's perspective on space power (AFDD 2-2)

Space is an integral part of everything we do to accomplish our mission. Today, the ultimate high ground is space.

—Gen Lester P. Lyles, commander, Air Force
Materiel Command, 2000–2003

The air force has become the hammer of modern warfare on land. . . . Aviation gives modern battle a third dimension.

—Lt Col Ferdinand Otto Miksche, infantry officer
and military strategist, writing in 1942

We are not preparing the battlefield, we are destroying it.

—Sign posted in the “Black Hole” planning cell
during Desert Storm

Airpower is indivisible. If you split it up into compartments, you merely pull it to pieces and destroy its greatest asset—flexibility.

—Field Marshal Bernard Law Montgomery (1887–1976), WWII British army commander; led Allied victory over Rommel at el Alamein

It is easier and more effective to destroy the enemy's aerial power by destroying his nests and eggs on the ground than to hunt his flying birds in the air.

—Giulio Douhet (1869–1930), Italian airpower theorist and contemporary of Billy Mitchell; advocated the theory of strategic bombing in *Command of the Air*, 1921

Space superiority is as much about protecting our space assets as it is about preparing to counter an enemy's space or anti-space assets.

—Gen John P. Jumper, 2003; chief of staff, US Air Force, 2001–5

The proverbial first shot of space warfare has already been fired with the advent of jammers designed to defeat the capabilities our airmen derive from space.

—The Honorable James G. Roche, former secretary of the Air Force, 2001–5

The future battle on the ground will be preceded by battle in the air. This will determine which of the contestants has to suffer operational and tactical disadvantages and be forced throughout the battle into adopting compromise solutions.

—Gen Erwin Rommel, Germany's leading panzer commander, WWII

Air power can win battles, or it can win wars.

—Gen William W. Momyer, commander,
Tactical Air Command, 1958–61;
Airpower in Three Wars

Air power is the total aviation activity—civilian and military, commercial and private, potential as well as existing.

—Gen H. H. “Hap” Arnold (1886–1950), taught to fly by the Wright brothers, 1911; first five-star General of the Air Force

To fully exploit Air Force technological advances and operational capabilities, we must merge air, space, intelligence and information operations into a seamless capability.

—Gen Hal Hornburg, commander,
Air Combat Command, 2001–5

The very flexibility of air forces makes true cooperation essential. Air forces, at short notice, can be switched from one sort of target to another and, within limits, from one type of operation to a quite different type. There is, therefore, a constant temptation to use them piecemeal to meet an immediate requirement, rather than to use them on a long-term joint plan.

—Air Marshal Sir John C. Slessor,
chief of the Air Staff, Royal Air Force, 1950–52

Without a reasonable degree of air superiority, no air force can effectively assist land or sea forces or strike at the enemy’s war potential.

—Air Marshal Lord Arthur William Tedder
(1890–1967), Royal Air Force,
deputy Supreme Commander, D-day invasion;
Air Power in War, 1947

There are no silver medals in the air superiority event. You either win it or you get your ass kicked. When you get your ass kicked in the air, your people are getting their ass kicked on the ground.

—Maj Gen Charles D. “Chuck” Link, commandant, Air Command and Staff College, 1989–90; commandant, Air War College and vice-commander, Air University, 1990–91

We don’t need to occupy an enemy’s country to defeat his strategy. We can reduce his combat capabilities and in many instances defeat his armed forces from the air.

—Gen Ronald R. Fogleman, chief of staff, US Air Force, 1994–97; first Air Force Academy graduate selected as chief of staff

The successful prosecution of parallel war requires more than compressing sequential attacks into one simultaneous attack. Parallel war exploits three dimensions—time, space, and levels of war.

—Maj Gen David A. Deptula, *Effects-based Operations: Change in the Nature of Warfare*

Teamwork allows us to be an effective fighting force—a rapid expeditionary force capable of deploying anywhere in the world in a minimum of time and in austere conditions—not operating from where we are stationed, but from where we are needed, not when we can, but when we must.

—Gen Michael Ryan, chief of staff, US Air Force, 1997–2001

Successful operations depend on the entire wing organization working as a team with but one purpose in mind . . . to make certain of the destruction of the selected target at exactly the right time and place.

—Air Force Manual 51-44, *Fighter and Fighter-Bomber Employment in Tactical Air Operations*, 1953

Space Superiority has to roll off the tongue as easily as Air Superiority.

—Gen John P. Jumper, chief of staff, US Air Force, 2001-5



Doctrine

At the Very Heart of Warfare Lies Doctrine



At the very heart of warfare lies doctrine. It represents the central beliefs for waging war in order to achieve victory.

—Gen Curtis E. LeMay, commander, Strategic Air Command, 1949–57; chief of staff, US Air Force, 1961–65

If we should have to fight, we should be prepared to do so from the neck up instead of from the neck down.

—Gen Jimmy Doolittle (1896–1993), leader of the “Doolittle Raid” on Japan, 18 Apr 1942

A wise man learns from his experience; a wiser man learns from the experience of others.

—Confucius, Chinese philosopher (551–479 BC)

I have flown in just about everything, with all kinds of pilots in all parts of the world—British, French, Pakistani, Iranian, Japanese, Chinese—and there wasn't a dime's worth of difference between any of them except for one unchanging, certain fact: the best, most skillful pilot had the most experience.

—Brig Gen Charles E. “Chuck” Yeager,
US Air Force; broke sound barrier, 14 Oct 1947

We must not allow centralized control/decentralized execution to devolve to centralized control/centralized execution. That construct breeds excessive cautiousness at all levels, stifles initiative, and it is instructive to remember that it was the Soviet command model.

—Lt Gen David A. Deptula, 2001, principal air planner, Operation Desert Storm, 1991

Those who are possessed of a definitive body of doctrine and of deeply rooted convictions upon it will be in a much better position to deal with the shifts and surprises of daily affairs than those who are merely taking short views, and indulging their natural impulses as they are evoked by what they read from day to day.

—Winston Churchill (1874–1965),
WWII British prime minister

If you think education is expensive, try ignorance.

—Derek Bok, president of Harvard University,
1971–91

The way we teach around here nowadays is that doctrine is always wrong. The side that wins is the one whose doctrine is the least wrong and the one that has a system . . . flexible enough to adapt its doctrine once combat reveals [its] flaws.

—Dr. David R. Mets, professor emeritus,
Air University School of Advanced Air and
Space Studies

The success of our Air Force in meeting the challenges of this rapidly changing world depends on our understanding and applying our doctrine.

—Gen John P. Jumper, chief of staff, US Air Force,
2001–5

Doctrine consists of the fundamental principles by which military forces guide their actions in support of national objectives.

—AFDD 1



Education, Training, and Lessons Learned

***Leaders Are Not Born;
They're Educated***



I'm firmly convinced that leaders are not born; they're educated, trained, and made, as in every other profession.

—Gen Curtis E. LeMay, commander, Strategic Air Command, 1949–57; chief of staff, US Air Force, 1961–65

Any officer who aspires to hold high command in war must understand . . . the use of air power.

—Field Marshal Bernard Law Montgomery

The most damaging phrase in the language is: We've always done it this way.

—RADM Grace Murray Hopper “Grand Lady of Software,” pioneer computer programmer and co-inventor of COBOL (common-business-oriented language); compiler inventor; special advisor to commander, Naval Data Automation Command, 1977–86 (when she involuntarily retired at age 80)

In no other professions are the penalties for employing untrained personnel so appalling or irrevocable as in the military.

—General of the Army Douglas MacArthur (1880–1964), chief of staff, US Army; Supreme Allied Commander, Southwest Pacific Area, WWII; received the Japanese surrender in Tokyo Bay, Sept 1945

War is not an affair of chance. A great deal of knowledge, study, and meditation is necessary to conduct it well.

—Frederick the Great (Frederick II) (1712–86), king of Prussia, 1740–86

In sum the leader has to achieve a balance between the essential need for professional competence in his own technical field and that broader understanding of human problems which can only be achieved from a wide and largely self-acquired education.

—Stephen Wentworth Roskill (1903–82), British naval historian

Weed through the old to bring forth the new. . . . Draw upon all advanced and beneficial military thinking; make foreign experiences serve . . . [your] purposes; and enrich and develop . . . [national] military theories.

—Gen Fu Quanyou, chief, People's Liberation Army General Staff

War makes extremely heavy demands on the soldier's strength and nerves. For this reason, make heavy demands on your men in peacetime exercises.

—Gen Erwin Rommel, Germany's leading panzer commander, WWII

If you can't get them to salute when they should salute and wear the clothes you tell them to wear, how are you going to get them to die for their country?

—GEN George S. Patton "Old Blood and Guts" (1885–1945), flamboyant commander of the Third Army in WWII



Preparedness, Security, and Force Protection

Prepared for War, Preserving Peace



To be prepared for war is one of the most effectual means of preserving peace.

—GEN George Washington (1732–1799),
first US president

America must maintain a state of readiness for defense and counterattack. This is not just for the sake of being prepared. Of equal or greater importance is the fact that the visibility of our preparedness will deter attacks against us.

—Gen Curtis E. LeMay, commander, Strategic Air Command, 1949–57; chief of staff, US Air Force, 1961–65

The great lesson to be learned in the battered towns of England and the ruined cities of Germany is that the best way to win a war is to prevent it from occurring. That must be the ultimate end to which our best efforts are devoted. Prevention of war will not come from neglect of strength or lack of foresight or alertness on our part. Those who contemplate evil and aggression find encouragement in such neglect. Hitler relied heavily upon it.

—*US Strategic Bombing Survey, Summary Report (Europe)*, 30 Sept 1945

If I see a troop walking across tent city and ask . . . what he or she is thinking about, I expect to hear an alert answer about security and force protection. Every Airman is a sensor.

—Gen John P. Jumper, 2003; chief of staff, US Air Force, 2001–5

We cannot become confused about the fundamental purpose of our armed forces. That purpose is their readiness to fight and win our nation's wars. As we reshape and train our forces, it must be for this purpose above all others.

—Gen Ronald R. Fogleman, chief of staff, US Air Force, 1994–97; first Air Force Academy graduate selected as chief of staff

The United States command and control system has provided a high degree of control through the history of the United States nuclear weapons program. Perhaps one of the biggest dangers faced from new nuclear powers is a lack of a sophisticated system to control their nuclear weapons.

—Richard A. Paulsen, *The Role of US Nuclear Weapons in the Post-Cold War Era*

We can't be the best at building airplanes and submarines and second or third best at protecting our men and women.

—GEN John Shalikashvili, chairman of the Joint Chiefs of Staff, Nov 1996



Planning

Have a Plan for Everything



Have a plan for everything. A plan for practice, a plan for the game. A plan for being ahead, and a plan for being behind 20–0 at the half, with your quarterback hurt and the phones dead, with it raining cats and dogs and no rain gear because the equipment man left it at home.

—Coach Paul “Bear” Bryant (1913–83), head football coach, University of Alabama (1958–82); led Alabama to six national championships

Take time to deliberate, but when the time for action arrives, stop thinking and go on.

—MAJ GEN Andrew Jackson (1767–1845), seventh US president; defeated numerically superior British forces at the Battle of New Orleans, 8 Jan 1815

Vision without action is a daydream. Action without vision is a nightmare.

—Japanese proverb

Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction, and skillful execution; it represents the wise choice of many alternatives.

—Willa A. Foster, American philosopher

The main thing is to have a plan; if it is not the best plan, it is at least better than no plan at all.

—Lt Gen Sir John Monash, commander of all Australian forces in WWI; knighted on the battlefield by King George V (1918), the first to be so honored in 200 years

Our intent is not just to paint a picture of the future—interesting though such a picture might be—but to lay out the paths toward the most promising capabilities, and to then build this long-range planning focus into the staff on a permanent basis.

—Dr. Sheila E. Widnall, secretary of the Air Force, 1993–97; first woman to lead an entire branch of the US military in the DOD

A good plan executed now is better than a perfect plan next week.

—GEN George S. Patton “Old Blood and Guts” (1885–1945), flamboyant commander of the Third Army in WWII



A Few Great Captains



—Maj Gen J. F. C. Fuller (1878–1966), British military historian and interwar (1918–39) advocate of mechanized warfare; ironically, his ideas formed the basis for the German concept of blitzkrieg

—GEN George S. Patton “Old Blood and Guts” (1885–1945), flamboyant commander of the Third Army in WWII

Remember this: the truly great leader overcomes all difficulties, and campaigns and battles are nothing but a long series of difficulties to be overcome. The lack of equipment, the lack of food, the lack of this or that are only excuses; the real leader displays his quality in his triumphs over adversity, however great it may be.

—General of the Army George C. Marshall (1880–1959); architect of the Marshall Plan for the reconstruction of Europe; Nobel Peace Prize, 1953

I must have assistants who will solve their own problems and tell me later what they have done.

—General of the Army George C. Marshall (1880–1959); architect of the Marshall Plan for the reconstruction of Europe; Nobel Peace Prize, 1953

There are no “battle management” magic bullets that will substitute for the ability of on-scene commanders, soldiers, and airmen to make appropriate decisions based on the ebb and flow of events.

—Dr. Richard P. Hallion, 1998; chief AF historian

The staff is simply the servant of the general force; it exists but to further the welfare of the fighting establishment. Those within it are remiss if they fail to keep this rule uppermost.

—S. L. A. Marshall (1900–1977),
US Army WWII historian and author

Leadership means being good at what you do, and much more. It means building teams, nurturing and setting the example for others to follow.

—Dr. Sheila E. Widnall, secretary of the Air Force, 1993–97; first woman to lead an entire branch of the US military in the DOD

Leadership is the capacity to translate vision into reality.

—Warren Bennis, American scholar and organizational consultant; pioneer in leadership studies

Leadership is the art and science of influencing and directing people to accomplish the assigned mission.

—AFDD 1-1

People are the assets that determine our success or failure. If you are to be a good leader, you have to cultivate your skills in the arena of personal relations.

—Gen Ronald R. Fogleman, chief of staff, US Air Force, 1994–97; first Air Force Academy graduate selected as chief of staff

True genius resides in the capacity for the evaluation of uncertain, hazardous, and conflicting information.

—Winston Churchill (1874–1965),
WWII British prime minister

The final test of a leader is that he leaves behind him in other men the conviction and will to carry on.

—Walter Lippmann, American writer and political commentator; helped President Wilson draft his “14 Points” after WWI



Character and Leadership Traits

Do Your Duty in All Things



Duty is the sublimest word in our language. Do your duty in all things. You cannot do more. You should never do less.

—GEN Robert E. Lee (1807–70), commander of the Army of Northern Virginia during the Civil War, 1861–65

Congress can make a general but only communications can make him a commanding general.

—GEN Omar N. Bradley (1893–1981), General of the US Army; first chairman, Joint Chiefs of Staff, 1949

Integrity is the fundamental premise for military service in a free society. Without integrity, the moral pillars of our military strength, public trust, and self-respect are lost.

—Gen Charles A. Gabriel (1928–2003),
chief of staff of the Air Force, 1982–86

Core values make the military what it is; without them, we cannot succeed.

—Dr. Sheila E. Widnall, secretary of the Air Force,
1993–97; first woman to lead an entire branch of
the US military in the DOD

Few orders are best, but they should be followed up with care.

—Marshall Maurice de Saxe (1696–1750),
Marshal of France, later Marshal General of
France; *Mes Reveries*, 1757

The power of excellence is overwhelming. It is always in demand and nobody cares about its color.

—Gen Daniel “Chappie” James Jr., commander in
chief, North American Aerospace Defense
Command/Aerospace Defense Command, 1975–
77; first African-American AF four-star general

The most important thing I learned is that soldiers watch what their leaders do. You can give them classes and lecture them forever, but it is your personal example they will follow.

—GEN Colin J. Powell, chairman, Joint Chiefs of
Staff, 1989–93; secretary of state, 2001–5

Be an example to your men, in your duty and in private life. Never spare yourself and let your troops see that you don't in your endurance of fatigue and privation. Always be tactful and well-mannered. Avoid excessive sharpness or harshness of voice, which usually indicates the man who has shortcomings of his own to hide.

—Gen Erwin Rommel, Germany's leading panzer commander, WWII

There is no limit to the good you can do if you don't care who gets the credit.

—General of the Army George C. Marshall (1880–1959); architect of the Marshall Plan for the reconstruction of Europe; Nobel Peace Prize, 1953

If I can't go back with my self-respect, I won't go back at all.

—Capt Theodore Harris, US Air Force, after 14 months in solitary confinement as a POW, Korea

Rank does not confer privilege or give power. It imposes responsibility.

—Peter Drucker, Austrian-born American writer on management and management theory

It's important that people know what you stand for. It's equally important that they know what you won't stand for.

—Mary H. Waldrip, American writer

A desk is a dangerous place from which to watch the world.

—John LeCarre, English writer of espionage novels; *The Spy Who Came in from the Cold*, 1963

A man too busy to take care of his health is like a mechanic too busy to take care of his tools.

—Spanish proverb

Say what you mean, mean what you say, but don't say it mean.

—Anonymous

Talent is a gift, but character is a choice.

—Gen Sir John C. Maxwell, British WWI general who brutally put down the 1916 “Easter Rising” in Ireland

One commander's thoughts on relevance: “Don't build me a watch, just tell me what time it is.”

—Anonymous (AFDD 2-5.2)

Power matters. But there can be no absence of moral content in American foreign policy, and furthermore, the American people wouldn't accept such an absence.

—Condoleezza Rice, 66th secretary of state, 2005–; national security advisor (first woman appointed), 2001–5



Technology

Our Technical Skill



Air power alone does not guarantee America's security, but I believe it best exploits the nation's greatest asset—our technical skill.

—Gen Hoyt S. Vandenberg (1899–1954), second chief of staff, US Air Force, 1948–53

A recipient of a PGM [precision-guided munition] does not know or care if the weapon came from near or far, or from what kind of platform, or from what kind of base.

—Lt Gen David A. Deptula, 2001, principal air planner, Operation Desert Storm, 1991

Victory smiles upon those who anticipate the changes in the character of war, not upon those who wait to adapt themselves after the changes occur.

—Giulio Douhet (1869–1930), Italian airpower theorist and contemporary of Billy Mitchell; advocated the theory of strategic bombing in *Command of the Air*, 1921

Above all, PGMs [precision-guided munitions] connect political objectives to military execution with much greater reliability than ever before. . . . This is not just a change in air power or even in military power; it is a fundamental change in warfare.

—Gen Charles G. Boyd, 1991;
commander, Air University, 1990–92

Until recently, platforms were militarily crucial: the newest ship, plane, or tank. Now what the platform carries—sensors, munitions, and electronics—matters more than the platform itself.

—Mortimer B. Zuckerman, 1997;
editor in chief, *US News and World Report*

One machine can do the work of 50 ordinary men. No machine can do the work of one extraordinary man.

—Elbert Hubbard (1856–1915), American essayist of “A Message to Garcia”; died when the British liner *Lusitania* was sunk by the German U-boat U-20, 7 May 1915

As weapons increase in lethality, precision, and standoff, intercepting any hostile platform early in its flight is increasingly important.

—Gen Ronald R. Fogleman, chief of staff,
US Air Force, 1994–97; first Air Force Academy
graduate selected as chief of staff



Logistics

Logistics Controls All Campaigns



Logistics controls all campaigns and limits many.

—GEN Dwight D. Eisenhower (1890–1969);
Supreme Commander, Allied Forces in Europe,
WWII; 34th US president

Order or disorder depends on organization.

—Sun Tzu, *The Art of War*, ca. 500 BC

We move on time lines that simply will not work if we
have to wait for support for our expeditionary forces.

—Gen Ronald R. Fogleman, chief of staff,
US Air Force, 1994–97; first Air Force Academy
graduate selected as chief of staff

The essence of flexibility is in the mind of the com-
mander; the substance of flexibility is in logistics.

—RADM Henry E. Eccles, US Navy, WWII;
writer on naval logistics

The aim of a military organization is not to make do with the smallest number of supporting troops but to produce the greatest possible fighting power. If, for any given campaign, this aim can only be achieved by having a hundred men pump fuel, drive trucks, and construct railways behind each combatant, then 100:1 is the optimum ratio.

—Martin van Creveld, Israeli military historian

It requires more aircraft to transport a light infantry division than to move the total number of PGMs delivered during the Gulf War. . . . What moves into a theater—and when—should be determined by its ability to effectively influence an adversary.

—Lt Gen David A. Deptula, 2001; principal air planner, Operation Desert Storm, 1991

My logisticians are a humorless lot. . . . They know if my campaign fails, they are the first ones I will slay.

—Alexander the Great (356–323 BC),
king of Macedonia and conqueror of most of
the known world; tutored by Aristotle

Logistics is the bridge between the economy of the nation and the tactical operations of its combat forces.

—RADM Henry E. Eccles, US Navy, WWII;
writer on naval logistics

In my opinion, there is no one single piece of foresightedness that helped our war effort more than the policy that kept our depots intact and operating on an efficient basis.

—Maj Gen Oliver P. Echols, chief materiel officer of the Army Air Force in WWII

Modern warfare is a war for air bases; the bulldozer must accompany the plane. . . . One of the elements of victory in North Africa was the speed with which our aviation engineers constructed airfields behind the front lines and pressed the attack.

—Gen H. H. “Hap” Arnold (1886–1950), taught to fly by the Wright brothers, 1911; first five-star General of the Air Force

Agile combat support creates, sustains, and protects all air and space capabilities to accomplish mission objectives across the spectrum of military operations.

—Lt Gen William P. Hallin, US Air Force, retired; commander, Warner Robins Air Logistics Center, 1992–95



Intelligence, Surveillance, and Reconnaissance

What Is on the Other Side of the Hill?



The whole art of war consists in getting at what is on the other side of the hill, or, in other words, in learning what we do not know from what we do.

—Andrew Wellesley, 1st Duke of Wellington (1769–1852); British army commander who defeated Napoléon at Waterloo, 1815

Precision weapons, in short, are only as good as the intelligence that governs and guides their use.

—Dr. Richard P. Hallion, 1998; chief AF historian

They knew everything about us. There wasn't anything they didn't know. If we lit a cigarette they could see it. God knows what they were dropping on us, all sorts of bombs. We didn't expect that intensity.

—“Milos,” a Yugoslavian soldier, quoted by Rory Carroll, *The Guardian*, 1999

The tremendous military value of weapons that can be employed with very high confidence in their outcome creates a demand for corresponding insight in the fields of intelligence preparation and operational planning.

—Gen Ronald R. Fogleman, chief of staff,
US Air Force, 1994–97; first Air Force Academy
graduate selected as chief of staff

Determine his [enemy] dispositions and so ascertain the field of battle. Probe him and learn where his strength is abundant and where deficient.

—Sun Tzu, *The Art of War*, ca. 500 BC

What enables the wise sovereign and the good general to strike and conquer, and achieve things beyond the reach of ordinary men, is foreknowledge.

—Sun Tzu, *The Art of War*, ca. 500 BC

We need to do a better job of human intelligence. There are some things that you are just not going to see from space. Overhead imagery is very important, but we should not over-emphasize it. They [potential adversaries] know how to conceal the imagery, and that won't give us the complete picture.

—Dr. Stephen Younger, director, Defense Threat
Reduction Agency; comments concerning
intelligence support for precision strike
capabilities, 2004

How can one man say what he should do himself, if he is ignorant of what his adversary is about?

—Lt Gen Antoine-Henri, Baron de Jomini, 1838

If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither yourself nor your enemy, you will succumb in every battle.

—Sun Tzu, *The Art of War*, ca. 500 BC

Think about where you live at home and then think of a place 125 miles from that location. If you were to move out of your driveway and we were orbiting 125 miles away, we would see you move.

—Maj Thomas Grabowski, crewmember, 2006,
Joint Surveillance Target Attack Radar System



Unmanned Aerial Vehicles



UAVs [unmanned aerial vehicles] enjoy the enormous advantage over space-based optical sensors of being able to operate under cloud cover. Given their special capabilities, UAV sensors can identify an object, when sensors on a satellite can only spot it.

—Martin C. Libicki, 1996, Senior Fellow,
Institute of National Strategic Studies,
National Defense University



Information and Communications

Warfare of the Information Age



In an era where, increasingly, military planners speak of conducting “information warfare” against an opponent, the connection between intelligence, sensor suitability, targeting, and combat operations is obvious.

—Dr. Richard P. Hallion, 1998; chief AF historian

Information warfare will be the most complex type of warfare in the 21st century, and it will decide who will win and who will lose the war.

—Chang Mengxiong, systems engineer, People’s Republic of China; “Weapons of the 21st Century,” 1998

Remember, gentlemen, an order that can be misunderstood will be misunderstood.

—Field Marshal Helmuth von Moltke the Elder,
chief of staff, Prussian army, 1857–87

Hackers routinely attempt to get into US military systems. During the Gulf War, hackers from Denmark, Moscow, and Iraq tried to penetrate these systems. Our awareness of these attempts does not necessarily prove there were no successes of which we are unaware.

—Col James W. McLendon, “Information Warfare:
Impacts and Concerns,” *Battlefield of the Future*,
1995

Our sights must not be fixed on the firepower warfare of the industrial age, rather they must be trained on the information warfare of the information age.

—Maj Gen Wang Pufeng, People’s Liberation Army;
“The Challenge of Information Warfare,” 1995;
former director, Strategy Department, Academy
of Military Science, Beijing

Public sentiment is everything. With public sentiment, nothing can fail; without it, nothing can succeed.

—Abraham Lincoln, 16th US president

Public affairs operations are a force multiplier by analyzing and influencing the information environment’s effect on military operations.

—AFDD 2-5.3

Public affairs contribute to global influence and deterrence by making foreign leaders and audiences aware of US capabilities and resolve.

—AFDD 2-5.3

I will tell you that a commander without the proper C2 assets commands nothing except a desk. You must have the ability to communicate with the forces under your command. You must have the ability to exchange information with them freely, frequently, and on a global basis.

—Gen Ronald R. Fogleman, chief of staff,
US Air Force, 1994–97; first Air Force Academy
graduate selected as chief of staff



Joint Perspectives

War Is Waged in Three Elements



War is waged in three elements but there is no separate land, air, or naval war. Unless all assets in all elements are efficiently combined and coordinated against a . . . common objective, their maximum potential power cannot be realized.

—GEN Dwight D. Eisenhower (1890–1969),
Supreme Commander, Allied Forces in Europe,
WWII; 34th US president

The argument has been advanced that the Air Force should be concerned with land objectives, and the Navy with objectives on and over the water. That distinction is to deny the peculiar quality of the air medium, the third dimension. The air is indivisible; it covers land and sea.

—Gen Carl A. “Tooey” Spaatz (1891–1974), first
chief of staff, US Air Force, Sept 1947–Apr 1948

There is not one component that is dominant over the others. There is a set of components that have different tools that a combatant commander uses, and out of all of this we should have the closest of relationships because we've all walked through fire together.

—Gen T. Michael Moseley, chief of staff,
US Air Force, 2005—

I do not want General McKiernan to have to stop anywhere between Kuwait and Baghdad unless it is at a local 7-11 for a chili-cheese dog and a cherry limeade.

—Lt Gen T. Michael Moseley to the combined air
operations center staff three days prior to
Operation Iraqi Freedom

Nothing could be more fatal to successful results than to dissipate the air resources into small packets placed under command of land formation commanders, with each packet working on its own plan. The soldier must not expect or wish to exercise direct command over air striking forces.

—Field Marshal Bernard Law Montgomery

Of all the lessons we learned about tactical air operations, perhaps the most important is that the air commander, his group and squadron commanders must have a sincere desire to become part of the ground team. The Army must, of course, have the same dedication to reciprocate. This close liaison can come only from close day-to-day contact—especially at command levels.

—Lt Gen Elwood R. “Pete” Quesada (1904–93),
first commander of Tactical Air Command;
led IX Fighter Command at D-day, 6 June 1944

Mutual support is the fundamental basis upon which the air-surface relationship is founded.

—Air Force Manual 1-3, *Theater Air Operations*, 1953

It was not appreciated, and has scarcely been appreciated today, that the fighting power of an army is the product and not the sum of the arms composing it.

—Maj Gen J. F. C. Fuller (1878–1966), British military historian and interwar (1918–39) advocate of mechanized warfare; ironically, his ideas formed the basis for the German concept of blitzkrieg

The use of military, naval and aerial forces in war should be directed toward a single end, to win. To attain maximum effectiveness these forces must be coordinated and in harmony with one another. The three forces should function as ingredients—or factors—of a single product in which the best results can be obtained only by a proper apportioning of the ingredients used.

—Giulio Douhet (1869–1930), Italian airpower theorist and contemporary of Billy Mitchell; advocated the theory of strategic bombing in *Command of the Air*, 1921

I want the American soldier to only have to worry about mud on his boots, not blood. At the end of the day, the American soldier's best friend is the American airman.

—Maj Gen Charles D. “Chuck” Link, commandant, Air Command and Staff College, 1989–90; commandant, Air War College and vice-commander, Air University, 1990–91

Coalition Operations



Both of these attributes of air power—relatively low force vulnerability and high precision—can also fortify coalition unity, which is itself susceptible to disruptions as friendly casualties and collateral damage mount.

—Dr. Daniel L. Byman and Matthew C. Waxman, RAND Corporation; “Kosovo and the Great Airpower Debate,” *International Security*, Spring 2000

The construct that produced airpower . . . for the Vietnam War came from a conscious decision, in pursuit of cost-effectiveness, to build a force with capabilities only incrementally better than the [adversary’s]. Consequently, the US Air Force alone lost 16 wings of aircraft in those eight years.

—Gen Larry D. Welch, 12th chief of staff, US Air Force (1986–90); president, Institute for Defense Analysis

Effective, efficient combat support is the key to sustaining expeditionary forces. The Air Force must continue to harness information technology, rapid transportation, and the strengths of both to ensure responsive, dependable, precise support.

—AFDD 2-8

It is astonishing how obstinate allies are, how parochially minded, how ridiculously sensitive to prestige and how wrapped up in obsolete political ideas. It is equally astonishing how they fail to see how broad-minded you are, how clear your picture is, how up to date you are and how co-operative and big-hearted you are. It is extraordinary.

—Field Marshal Sir William Slim (1891–1970),
British army officer in WWI and WWII



Airpower at War

Destructive One-Sided War



The Gulf War [Desert Storm] brought to the fore the technology, tactics, techniques, and operational methods on which the Air Force had been working since the Vietnam War. . . . That technology helped to win the fastest, lowest casualty, most devastatingly destructive one-sided war in recorded history. Air Force capabilities had come of age.

—Dr. James A. Mowbray, 1995; professor of doctrine, strategy and airpower, Air War College, Maxwell AFB, Alabama

[Precision-guided munitions] can offset the need for mass attacks to achieve a high probability of success—a reality evidenced with the dramatic increase of their use in the air war over Serbia.

—Lt Gen David A. Deptula, 2001; principal air planner, Operation Desert Storm, 1991

It is this beat, this precise rhythmical cadence, which determines the success of an airlift. This steady rhythm, constant as the jungle drums, became the trademark of the Berlin Airlift, or any airlift I have operated.

—LT GEN William H. Tunner (1906–83), commander, “Hump” Airlift, China-Burma-India Theater, WWII; commander, Berlin Airlift, 1948–49

One of the great things that people should have learned . . . is that there are times when air power—not backed up by ground troops—can make a difference.

—Amb. Richard Holbrooke, 1996; former US ambassador, United Nations

There are certain dates in the history of warfare that mark real turning points. Now there is a new turning point to fix on the calendar: June 3, 1999, when the capitulation of President Milosevic proved that a war can be won by air power alone. . . . This was a victory through air power.

—John Keegan, British military historian, “So the Bomber Got Through After All,” *London Daily Telegraph*, 4 June 1999

The [Republican Guard] divisions were essentially destroyed by airstrikes when they were still about 30 miles from their destination. . . . The Iraqi will to fight was broken outside Baghdad.

—Colonel Ghassan, Republican Guard,
Iraqi General Staff

The air war against Iraq turned out to be an enormous success. One of the reasons for this triumph was the integration of the various air forces into a solid fighting force.

—Miron Rezun, professor of political science,
University of New Brunswick; *Saddam Hussein's
Gulf Wars*, 1992

Out of 2,400 main battle tanks, 1,865 were destroyed by Coalition airpower. This does not include Iraqi tanks destroyed by US Army Aviation.

—Col Viktor Patzalyuk, former Soviet military
attaché to Baghdad

From 18–28 January 1991 [in support of Operation Desert Storm's famous "Left Hook"], nearly 14,000 troops and over 9,300 tons of cargo were moved. General Schwarzkopf said of this fast-paced demonstration of air mobility: "I can't recall any time in the annals of military history when this number of forces has moved over this distance to put themselves in a position to attack."

—Air Mobility Command historian

As the air commander for both OEF [Operation Enduring Freedom] and OIF [Operation Iraqi Freedom], I can tell you that the tankers [Air Refueling Aircraft] were the backbone for the joint and combined effort.

—Gen T. Michael Moseley, chief of staff,
US Air Force, 2005—, as combined forces
air component commander

It was the cumulative effect of NATO air power that most influenced [Serbian president Slobodan] Milosevic's eventual decision to come to terms. Air power made three crucial contributions: (1) the bombing created the political climate within Serbia conducive to concessions, (2) the bombing, as it intensified, stimulated a growing interest on the part of Milosevic and his associates to end the conflict, and (3) the perception that any future bombing would be unconstrained made settlement seem imperative.

—Stephen T. Hosmer, *The Conflict over Kosovo:
Why Milosevic Decided to Settle when He Did*



Irregular Warfare/ Counterinsurgency

Security No Longer Ends at the Base Perimeter



Security no longer ends at the base perimeter. We must assume responsibility for a much larger tactical perimeter that will keep the threat away from our people and equipment.

—Gen Ronald R. Fogleman, chief of staff,
US Air Force, 1994–97; first Air Force Academy
graduate selected as chief of staff

When there is an enemy to fight in open combat . . . many serve, all applaud, and the tide of patriotism runs high. But when there is a long slow struggle, with no immediate, visible foe, your choice will seem hard indeed.

—Pres. John F. Kennedy, address to the
graduating class, US Naval Academy, 7 June 1961

The air war in Afghanistan against a fleeting enemy operating in penny packets in extremely inhospitable terrain which made their detection very difficult demonstrated once again the tremendous flexibility and adaptability of air power to new and emerging situations.

—Air Commodore Tariq Mahmud Ashraf,
fighter pilot, Pakistan air force

[An] essentially untold story [in Operation Iraqi Freedom] is aeromedical evacuation [AE]. Without missing a beat for every patient in our care, we provided incredible medical capability on the ground up close to the battle, all the way through the AE system, to safe and secure hospitals for continued treatment.

—Gen John W. Handy, commander,
US Transportation Command and Air Mobility
Command, *Airlift Tanker Quarterly*, Fall 2003

Special operations forces succeed, in spite of their numerical inferiority, when they are able to gain relative superiority through the use of a simple plan, carefully concealed, repeatedly and realistically rehearsed, and executed with surprise, speed, and purpose.

—William H. McRaven, *Spec Ops: Case Studies in
Special Operations Warfare*

We need a greater ability to deal with guerilla forces, insurrection, and subversion. . . . We must be ready now to deal with any size force, including small externally supported bands of men; and we must help train local forces to be equally effective.

—Pres. John F. Kennedy, message to Congress,
1961

An insurgent movement is a war for the people. It stands to reason that government measures must be directed to restoring government authority and law and order throughout the country, so that control over the population can be regained and its support won.

—Sir Robert Thompson, architect of the British counterinsurgency victory in Malaya—Malayan Emergency, 1948–60



Vantage Points

Perspectives on Airpower
and the Profession of Arms

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