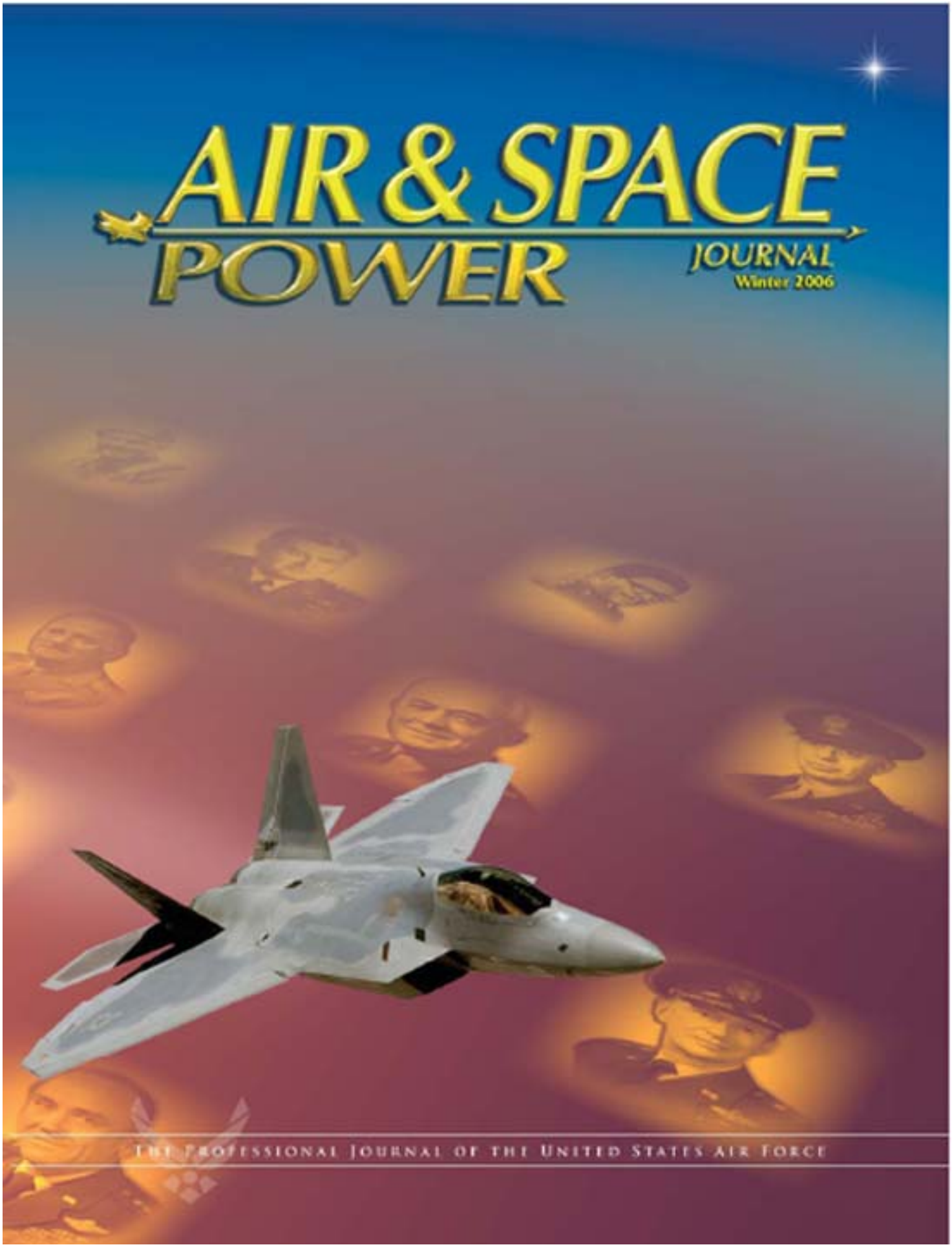
AIR & SPACE POWER JOURNAL

Winter 2006



The Professional Journal of the United States Air Force

Chief of Staff, US Air Force
Gen T. Michael Moseley

Commander, Air Education and Training Command
Gen William R. Looney III

Commander, Air University
Lt Gen Stephen R. Lorenz

Commandant, College of Aerospace Doctrine, Research and Education
Col Steven D. Carey

Chief, Professional Journals
Lt Col Paul D. Berg

Deputy Chief, Professional Journals
Maj James C. Ulman

Editor
Maj Roger Burdette

Professional Staff
Marvin W. Bassett, *Contributing Editor*
James S. Howard, *Contributing Editor*
Debbie Banker, *Editorial Assistant*
Sherry Terrell, *Editorial Assistant*
Steven C. Garst, *Director of Art and Production*
Daniel M. Armstrong, *Illustrator*
L. Susan Fair, *Illustrator*
Ann Bailey, *Prepress Production Manager*

***Air and Space Power Journal* Web Site**
Luetwinder T. Eaves, *Managing Editor*

The *Air and Space Power Journal* (ISSN 1554-2505), Air Force Recurring Publication 10-1, published quarterly, is the professional journal of the United States Air Force. It is designed to serve as an open forum for the presentation and stimulation of innovative thinking on military doctrine, strategy, force structure, readiness, and other matters of national defense. The views and opinions expressed or implied in the *Journal* are those of the authors and should not be construed as carrying the official sanction of the Department of Defense, Air Force, Air Education and Training Command, Air University, or other agencies or departments of the US government.

Articles in this edition may be reproduced in whole or in part without permission. If they are reproduced, the *Air and Space Power Journal* requests a courtesy line.

http://www.af.mil

http://www.aetc.randolph.af.mil

http://www.au.af.mil

http://www.cadre.maxwell.af.mil

Air and Space Power Journal
401 Chennault Circle
Maxwell AFB AL 36112-6428

e-mail: aspj@maxwell.af.mil

Visit *Air and Space Power Journal* online at http://www.airpower.maxwell.af.mil.

Foreword

Leadership: What's Next? 4
Brig Gen Randal D. Fullhart, USAF

Senior Leader Perspective

Air Force Materiel Command and Air Force Smart Operations for the Twenty-first Century 7
Gen Bruce Carlson, USAF

Focus Area

Leading the Twenty-first-Century Air Force 19
Lt Col Paul D. Berg, USAF, Chief, Professional Journals

Features

Improving Feedback to Improve Airmen 71
Melanie R. F. Law
Dr. Craig A. Foster
Col Gary A. Packard Jr., USAF

Reality Leadership 82
Prof. John Charles Kunich
Dr. Richard I. Lester

Military Ethics: Some Lessons Learned from Manuel Davenport 91
Dr. J. Carl Ficarrotta

A Critique of the Air Force's Core Values 99
Dr. Christopher Hugh Toner

Departments

Prelaunch Notes

Highlighting **Air and Space Power Journal***'s Latin American Outreach and Introducing the Latest* **Chronicles Online Journal** *Article* 13

Ricochets and Replies

. 14

The Merge

The Robust State of the US Aircraft Industrial Base 20
LTC Michael J. Hicks, PhD, USAR

Maj Gen William "Billy" Mitchell: A Pyrrhic Promotion 27
Lt Col William J. Ott, USAF

How the Air Force Embraced "Partial Quality" (and Avoiding Similar Mistakes in New Endeavors) 34
Lt Col Graham W. "Gray" Rinehart, USAF, Retired

PIREPs

Reflections on Command 44
Maj Steven Minkin, USAF

Command and Communities of Practice 52
Maj Christopher Daniels, USAF
Maj Don Grove, USAF
Maj Ed Mundt, USAF, Retired

Lines of Excellence: Executing a Balanced Organizational Vision 63
Maj Raymond M. Powell, USAF

NOTAMs

Revised USAF Doctrine Publication: Air Force Doctrine Document 2-6, **Air Mobility Operations** 70
Lt Col Alexander M. Wathen, USAF, Retired

New USAF Doctrine Publication: Air Force Doctrine Document 2-9.1, **Weather Operations** 109
Maj James C. Ulman, USAF

Book Reviews

Air Power against Terror: America's Conduct of Operation Enduring Freedom 111
Benjamin S. Lambeth
Reviewer: Maj Gen Charles J. Dunlap Jr., USAF

The Enemy at Trafalgar: Eye-Witness Narratives, Dispatches and Letters from the French and Spanish Fleets 112
Edward Fraser, ed.
Reviewer: Robert S. Bolia

The Last Sentry: The True Story That Inspired **The Hunt for Red October** 113
Gregory D. Young and Nate Braden
Reviewer: Capt Gilles Van Nederveen, USAF, Retired

Luftwaffe Victorious: An Alternate History 113
Mike Spick
Reviewer: Lt Col Robert Tate, USAFR

Hindenburg: Icon of German Militarism 114
Dennis E. Showalter and William J. Astore
Reviewer: Dr. Robert B. Kane

Strategic Management Methodology: Generally Accepted Principles for Practitioners 115
C. W. Roney
Reviewer: Capt Gilles Van Nederveen, USAF, Retired

Halcones de Malvinas 116
Comodoro Pablo Marcos Rafael Carballo
Reviewer: Lt Col Paul D. Berg, USAF

Warlords Rising: Confronting Violent Non-State Actors 117
Troy S. Thomas, Stephen D. Kiser, and William D. Casebeer
Reviewer: Maj Tara A. "Torch" Leweling, USAF

You're Stepping on My Cloak and Dagger 118
Roger Hall
Reviewer: Maj Joseph T. Benson, USAF

Shockwave: Countdown to Hiroshima 119
Stephen Walker
Reviewer: Capt Brian Laslie, USAF

No Prouder Place: Canadians and the Bomber Command Experience, 1939–1945 120
David L. Bashow
Reviewer: Col Gaylen L. "GT" Tovrea, USAF, Retired

In Hostile Skies: An American B-24 Pilot in World War II 121
James M. Davis, edited by David L. Snead
Reviewer: Dr. David R. Mets

Rockets and Missiles: The Life Story of a Technology 121
A. Bowdoin Van Riper
Reviewer: Capt Gilles Van Nederveen, USAF, Retired

The First Men In: U.S. Paratroopers and the Fight to Save D-Day 122
Ed Ruggero
Reviewer: Maj Paul Niesen, USAF

Interagency Fratricide: Policy Failures in the Persian Gulf and Bosnia 123
Maj Vicki J. Rast
Reviewer: Dr. Nicholas Evan Sarantakes

Hammer from Above: Marine Air Combat over Iraq 123
Jay A. Stout
Reviewer: Dr. Dan Mortensen

Offense, Defense, and War 124
Michael E. Brown, Owen R. Coté Jr., Sean M. Lynn-Jones, and Steven E. Miller, eds.
Reviewer: Capt Gilles Van Nederveen, USAF, Retired

Mission Debrief 125

Leadership

What's Next?

HASN'T EVERYTHING THAT could ever be written about leadership already been written? Yet, new books from new authors pop up on the shelves every day—and we keep buying them. We find a hunger for great leaders everywhere—in the private sector, the public sector, our government, and our military institutions. Leaders are like trees in that we must constantly plant seedlings and then grow and nurture them so that one day they will form a structure that can carry a heavy load, bend but not break in storms, and offer protective shade in which others may live, work, and contribute.

Development takes place in our daily lives, assignments, and—yes—formal education. Ultimately, everything done at Air University contributes to leadership development. I'm particularly proud to have been asked to provide a foreword to this special edition of *Air and Space Power Journal*.

Have you ever been in an organization that had all the people it needed? Facilities? Money? Each time I ask an audience these questions, no one ever raises his or her hand. But then I ask if anyone has ever been in an organization that has accomplished some extraordinary things. In almost every case, all hands go up.

What makes the difference? Leadership. In his book *American Generalship: Character Is Everything: The Art of Command*, Edgar F. Puryear Jr. attributes a quotation to Gen Bill Creech: "The primary job of a leader is to grow other

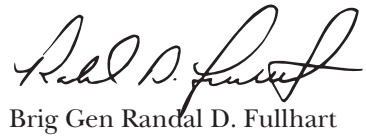
leaders." What a tremendously powerful statement! In the past, as a soon-to-be wing commander, I read that statement and suddenly realized what the mission of my organization (or any organization) needed to be—to grow leaders. In fact, I suggest that we could improve the mission statement of any organization as it currently exists—as well as improve a unit's performance—by inserting the following at the beginning of the statement: "We develop leaders to. . . ."

My own experience has shown that pouring effort into the development of leaders—using the organization as a giant leadership-development simulator—will produce phenomenal results. The subtle difference here is that the overt mission of the organization becomes the by-product of the leadership-development process—instead of the other way around. Why does this work? Focusing on the development of leaders at every level of the organization—from the youngest Airman to the most senior chief, from lieutenants to general officers, and every civilian in the organization—unleashes energy, creativity, and motivation whose whole is far greater than the sum of its parts.

Changing one's perspective of an organization as a leadership-development institution entails asking several questions: If my organization were a school, who are the freshmen, sophomores, juniors, and seniors? What initiatives do I have in place to develop each of these classes? Personal development? Professional development? Technical-skill development? Leadership development? Such change is definitely cultural, that is, focusing on leadership development, with other things—flying and fixing aircraft, creating a wonderful base, and ensuring a healthy workforce—becoming by-products. But in lean(er) times, we now must "ramp up" our leaders to make the difference.

Cultural change has many facets; a couple come to mind. First, shared common experiences—as occurred during the Great Depression and World War II—shaped the culture of generations of Americans. Our involvement as a service in our nation's conflicts is shaping our culture today. Second, development of our vocabulary shapes culture. A leader who develops other leaders shapes vocabulary by assigning common readings—for example, members of a group could read and discuss books on the chief of staff's reading list. I also encourage commanders to buy books for their subordinates. Simply sitting down and discussing a book on a designated day during the week, perhaps at lunch, will produce amazing results. By the way, those books on leadership can really come in handy during these sessions! Before the book order arrives, using this edition of *Air and Space Power Journal* would get the ball rolling.

Thanks to everyone who contributed to this effort and to Airmen everywhere for continuing their personal leadership-development journey.



Brig Gen Randal D. Fullhart
Deputy Chief, Central Security Service
National Security Agency
Fort George G. Meade, Maryland

Air and Space Power Journal Board of Reviewers

Prof. Tami Davis Biddle
US Army War College

Dr. Kendall K. Brown
NASA Marshall Space Flight Center

Brig Gen Phillip D. Caine, USAF, Retired
Monument, Colorado

Col Steven D. Carey
USAF College of Aerospace Doctrine, Research and Education

Dr. Clayton K. S. Chun
US Army War College

Dr. Mark Clodfelter
National War College

Dr. Conrad Crane
Director, US Army Military Studies Institute

Dr. Dik A. Daso
National Air and Space Museum
Smithsonian Institution

Col Michael D. Davis
USAF College of Aerospace Doctrine, Research and Education

Dr. William L. Dowdy
Alabama State University

Col Dennis M. Drew, USAF, Retired
USAF School of Advanced Air and Space Studies

Dr. Stephen Fought
USAF Air War College

Col Richard L. Fullerton
USAF Academy

Col Thomas E. Griffith Jr., USAF
National War College

Dr. John F. Guilmartin Jr.
Ohio State University

Dr. Grant T. Hammond
Center for Strategy and Technology
Air University

Dr. Thomas Hughes
USAF School of Advanced Air and Space Studies

Lt Col J. P. Hunerwadel, USAF, Retired
USAF Doctrine Center

Col Mark P. Jelonek, USAF
The Pentagon

Col John Jogerst, USAF
Commandant, Air Force Special Operations School

Mr. Charles Tustin Kamps
USAF Air Command and Staff College

Dr. Tom Keaney
School of Advanced International Studies
Johns Hopkins University

Col Merrick E. Krause
Director, National Defense University Press
Editor, *Joint Force Quarterly*

Col Chris J. Krisinger, USAF
The Pentagon

Dr. Charles Krupnick
US Army War College

Dr. Benjamin S. Lambeth
RAND

Lt Col David MacIsaac, USAF, Retired
Montgomery, Alabama

Dr. Karl P. Magyar
Montgomery, Alabama

Col Edward Mann, USAF, Retired
Colorado Springs, Colorado

Mr. Brent Marley
USAF Air War College

Dr. Jerome V. Martin
Command Historian
Headquarters US Strategic Command

Col Phillip Meilinger, USAF, Retired
Chicago, Illinois

Dr. Daniel Mortensen
USAF College of Aerospace Doctrine, Research and Education

Dr. Richard R. Muller
USAF School of Advanced Air and Space Studies

Col Robert Owen, USAF, Retired
Embry-Riddle Aeronautical University

Col Bob Potter, USAF, Retired
Montgomery, Alabama

Lt Col Thomas R. Searle
Headquarters US Special Operations Command

Col Michael A. Stanley
USAF Air War College

Col Richard Szafranski, USAF, Retired
Toffler Associates

Lt Col Edward B. Tomme, USAF, Retired, PhD
Sci-Ops Consulting

Dr. Christopher H. Toner
USAF Air Command and Staff College

Col Mark Wells, USAF
USAF Academy

Dr. Kenneth P. Werrell
Christiansburg, Virginia

Dr. Harold R. Winton
USAF School of Advanced Air and Space Studies

Air Force Materiel Command and Air Force Smart Operations for the Twenty-first Century

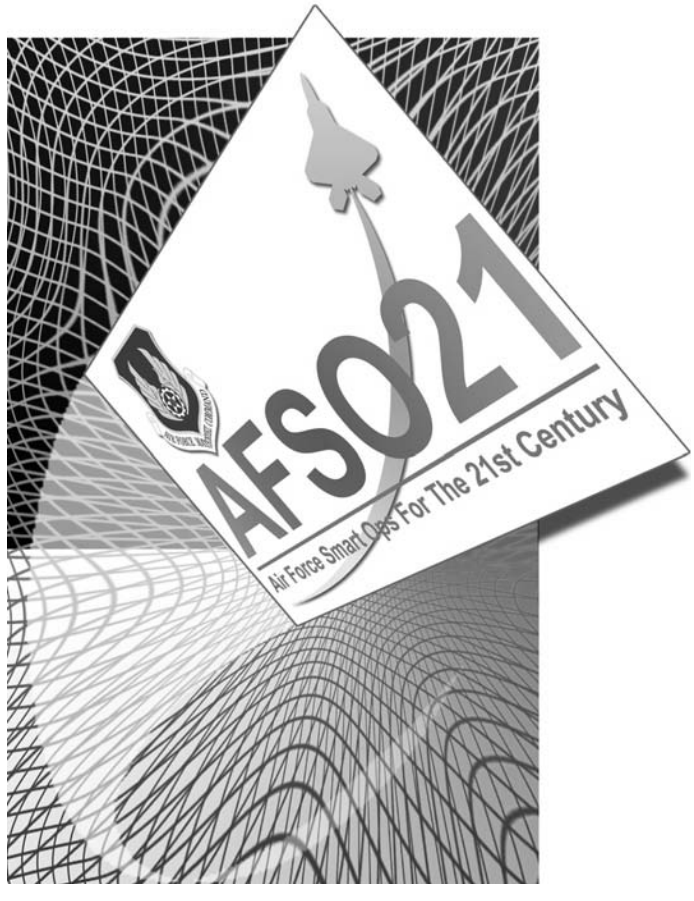
Gen Bruce Carlson, USAF

I HAVE PROUDLY SERVED in the United States Air Force for over 35 years, and today's Air Force possesses the strongest, most technologically advanced, capable, and lethal combat power I have ever seen. Whether we talk of total air dominance or unmatched close air support of ground troops, our modern Air Force—and the men and women who comprise it—remains unmatched in its ability to execute the mission: to fight and win America's wars.

Air Force Challenges

However, if there is one constant in life, it is change. Threats to our national security have evolved from those posed by a traditional foe to those from an irrational, unpredictable enemy. Yesterday's technological advances are dwarfed by today's capabilities, which will become obsolete sooner than ever before. More pointedly, our military's weapons systems will age and become inferior. Unless we do something to counter this trend, the United States' military advantage over potential enemies will rapidly deteriorate.

For instance, when I came into the Air Force, the average age of the fleet was about nine years. Shortly thereafter, I began to fly the F-4D. Every person I met who knew this aircraft, from maintenance troops to pilots, described it as the oldest in the Air Force, falling apart, difficult to maintain, and destined not to last. At the time, the F-4D was 10 to 12 years old! An examination of the Air Force fleet over the past 25 years and of expectations for the next five years shows that we have fewer aircraft than ever before and that they are old (fig. 1).



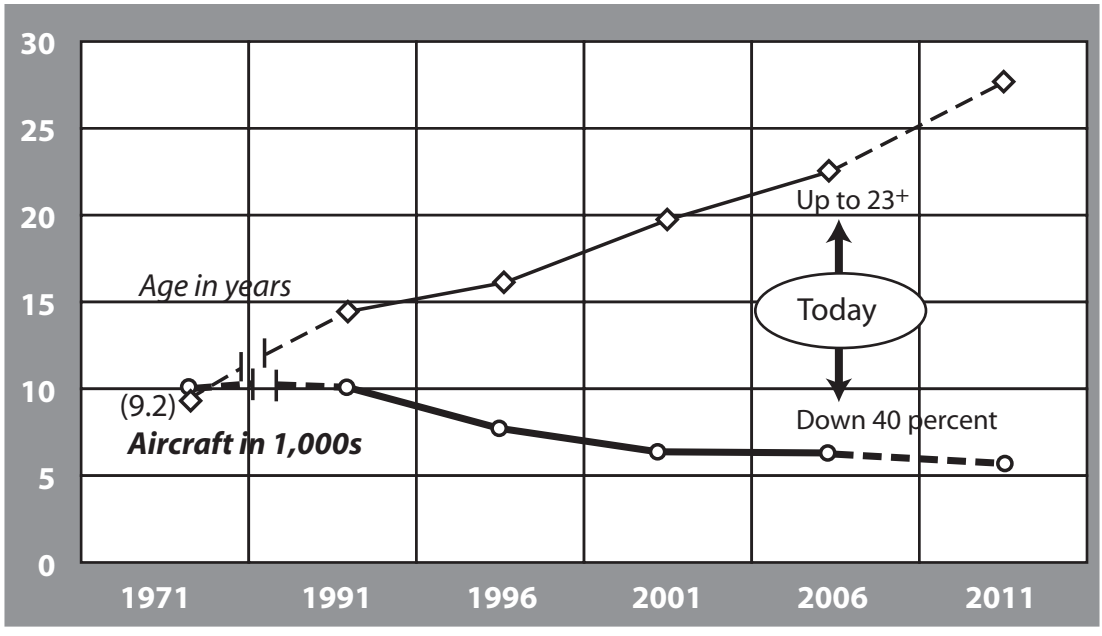


Figure 1. Number and age of Air Force aircraft. Between 1971 and today, the overall Air Force fleet has declined in number from more than 10,000 aircraft to approximately 7,000, yet the average age of these aircraft has increased to almost 24 years—more than double the age of the fleet in 1971. (Data from *USAF Summary*, January 1976 [fiscal year (FY) 1967–FY 1975]; *United States Air Force Statistical Digest*, 1991 [FY 1976–FY 1987]; and AF/XPPE, Personnel Database System [FY 1988–FY 2005].)

Moreover, the personnel drawdown that has occurred since the early 1990s serves to compound this problem. After determining the number of active duty military and civilian personnel from 1989 until now, we see that the end strength of our total force has experienced a steady decline. In 1989 the Air Force numbered over 827,000 military and civilians; today, that number has fallen to 520,000—a reduction of approximately 37 percent.[1]

In addition, our nation continues to financially support the men and women of all military services in their efforts to fight the global war on terrorism—but for how long and at what overall cost? When the Air Force begins to recapitalize its aging fleet, we will see tremendous costs associated with that effort—as well as varying degrees of personnel, equipment, and alterations in infrastructure required to make it happen. Radical changes loom on the horizon for our Air Force, and implementing them will challenge us.

In a letter to all members of the Air Force, Gen T. Michael Moseley, the chief of staff, identifies what lies ahead for the service:

> Today, we have three major challenges facing our Air Force. First and foremost is accomplishing the combatant tasks the President and Secretary of Defense assign. The tasks will be ones we've done before and ones we've never undertaken. Second, we must preserve that which makes us the most feared air force in the world—our people. Our culture of excellence must continue to develop Airmen . . . Airmen who are the most adaptable, most skilled, most professional, and most lethal the world has ever known. Third, we face the difficult task of operating the oldest inventory in the history of the United States Air Force. My senior leadership will work to break this vicious cycle. I need you, our Airmen on the line, to continue making the mission happen.[2]

Recently, General Moseley and Secretary of the Air Force Michael Wynne urged the entire Air Force to bring its thinking in line with Air Force Smart Operations for the Twenty-first Century (AFSO21), an initiative intended to focus all Airmen's efforts on eliminating waste from their work as well as making processes reliable, repeatable, and efficient. Recognizing the necessity of this charge, Air Force Materiel Command (AFMC) is aggressively implementing AFSO21's initiatives for continuous process improvement.

The Air Force Recognizes the Need for Change

Pursuit of the Air Force core value "excellence in all we do" must never end. We will always face higher mountains to climb and tougher obstacles to overcome. Likewise, we will never run out of ways to improve the things we do every day. The uncertainties of a world facing a long battle against terrorism will exacerbate these challenges. During this trying time, the Air Force must recognize that, as a whole, it must continue to strive for excellence across all mission areas. Failing to do so could result in our service's facing an enemy without its usual technological and materiel advantages.

During the post–Cold War military environment of the 1990s, the services sought to maintain the technological and materiel advantage of its weapons-system acquisition programs through lowering costs, reducing time-to-field, and improving quality. Acquisition and sustainment efforts emphasized the rapid production of affordable, deliverable, and required combat capabilities. During this time, senior Air Force leaders quickly became intrigued by a concept called "lean" and a book by James Womack, Daniel Jones, and Daniel Roos titled *The Machine That Changed the World: The Story of Lean Production*, which highlighted Japanese auto makers' innovative revolution of their processes—from mass production to lean production. Air Force leaders pondered whether they could apply this kind of process revolution to the production and sustainment of military aircraft.

Air Force Materiel Command Finds Success in Application of AFSO21 Initiatives

The search for processes to streamline and continuously improve the Air Force's manufacturing and sustainment of aircraft has led to great successes within AFMC, which conducts research, development, test, and evaluation, and provides acquisition-management services as well as logistics support necessary to keep the service's weapons systems ready for war. For example, for almost two decades, AFMC's air logistics centers (ALC) have been using the lean concept and other proven techniques to refocus work efforts and improve aircraft output—measured in terms of both cost and time. The results speak for themselves. For example, AFMC's aircraft on-time delivery rate in FY 1999 was 81 percent. Over the next three FYs, aircraft on-time rates held steady or dropped. At best, the war fighter dealt with having one in five planes come out late from programmed depot maintenance. However, in the 2001–2 time frame, the application of lean initiatives to daily ALC efforts led to unprecedented improvements in aircraft on-time delivery.

During this time, ALCs began to implement tenets of the lean concept and Six Sigma (an approach to problem solving), holding "lean events" to analyze and discuss possible ways of streamlining processes and eliminating extra work and wasted man-hours. By FY 2004, the on-time rate for AFMC was 92 percent. In FY 2005, AFMC reached a delivery rate of 99 percent, with one of the command's ALCs achieving 100 percent for the entire year (fig. 2).

We cannot continue to succeed just by patting ourselves on the back—we must now take on-time delivery to the next level. I'm very happy that we are delivering 98 percent of our depot aircraft on time; however, we must now focus on the 2 percent of the aircraft that are late—not for the purpose of pointing fingers or assessing blame but to figure out what's preventing us from achieving perfect on-time delivery. We can think of AFSO21 as a never-

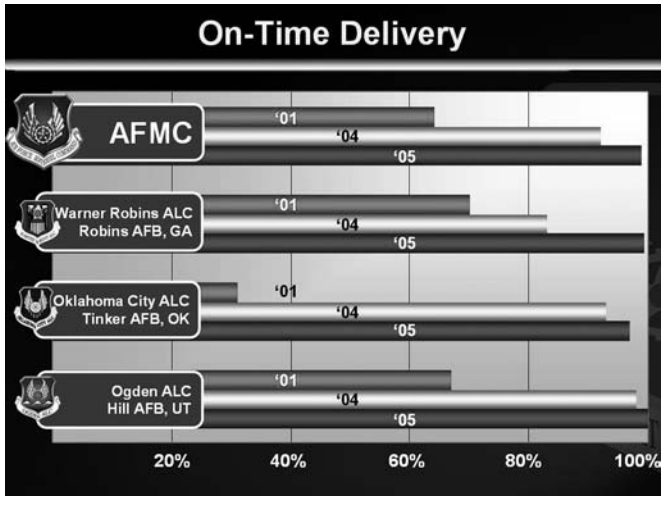


Figure 2. Significant improvements in aircraft delivery due to air logistics centers' lean processes

ending journey toward perfection, a mind-set, a change in behavior, a new culture—and a way of life.

There are other examples of AFMC's ability to utilize AFSO21 initiatives and improve team performance by an order of magnitude. As an A-10 pilot, I'm particularly impressed with what the 309th Aircraft Maintenance Group's A-10 Production Branch has done to improve the way aircraft flow in and out of programmed depot maintenance at the Ogden ALC, Hill AFB, Utah. Objectives called for possessing fewer depot aircraft, shortening A-10 programmed depot-maintenance turnaround time, and providing the war fighter greater predictability of due dates.

Instead of just looking for ways to cut out work or simply work faster, the people in the branch focused on changing the processes by which they worked on airplane parts during programmed depot maintenance. Specifically, they began to perform tasks in parallel rather than consecutively. For example, the wire-harness inspection now occurs simultaneously with installation of the fuel-cell floor. In essence, the A-10 Production Branch focused not on altering its overall workload or level of requirements, but on the way the work flowed—changing and improving the processes they used to do the work.

Clearly, process improvements have paid off. Originally, the branch had a baseline of 120 days to complete its programmed depot-maintenance work, but after using AFSO21 processes to streamline the work flow, the shop can now finish in 51 days—a reduction of almost 60 percent. The entire A-10 programmed depot-maintenance line has improved its performance in ways never before seen: increased on-time delivery rates and reduced time-on-station for aircraft, including a new record of 106 days, a decrease in customer-reported defects, and fewer A-10s at the ALC—all of which translates to more aircraft available at operational units (fig. 3).

Process-improvement measures are taking hold at other places as well. At Headquarters AFMC, my staff identified several processes as prime candidates for a "quick win"—processes that we could immediately improve by utilizing and applying AFSO21 tools. We've worked to lean out the certification and accreditation process for information-technology systems, vehicle registration, and the way we create, modify, wear-test, and deliver our service-uniform items to Air Force personnel.

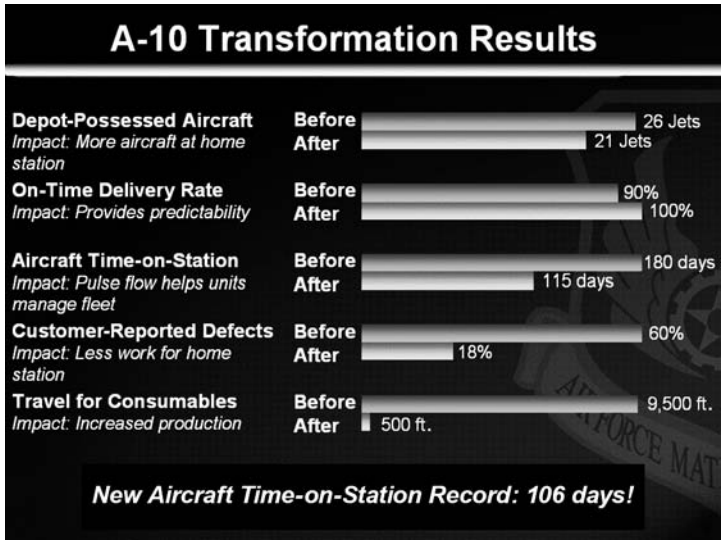


Figure 3. Dramatic improvement of programmed depot maintenance of A-10s after application of AFSO21's lean initiatives

More specifically, our staff reinvigorated the means by which we task action items from Headquarters AFMC down to the command's centers, wings, and other mission-level organizations. A commandwide team of subject-matter experts along with experienced lean facilitators conducted a "tasking-process lean event" that emphasized standardizing and streamlining these processes. Consequently, the team reduced the number of steps by 25 percent and the flow time by 40 percent, developed a standard tasking template and an AFMC instruction to formalize the new process, and revamped the "Action Officer Guide" to ensure continuity and continuous improvement.

The Future of Air Force Smart Operations for the Twenty-first Century

Two points strike me about the examples I have described. First, "normal" folks—not people with doctorates or other advanced degrees—made it happen! Second, those people were the "regulars"—the ones who worked in the shop a long time, understood the processes better than anyone else, and knew how to make things better. More importantly, the people in the A-10 shop knew that they still had room for improvement even after achieving monumental gains in productivity. They considered their new aircraft-time-on-station record of 106 days a way station—an achievement that they could continue to improve upon. This shop reflects what I consider a passion for continuous improvement—a spirit and mind-set that we can always get better. We need this same passion, spirit, and mind-set across the entire command and throughout the Air Force.

On-time aircraft-delivery rates and the success of the A-10 Production Branch serve as only a couple of examples of AFSO21 initiatives put into action within AFMC. It would be easy to highlight numerous other instances of continuous process improvement that have yielded similar results. But the challenge within AFMC now lies in taking our efforts to an enterprisewide level—across not only our ALCs but

also the Air Force Research Laboratory and out to our product centers, test centers, and specialized centers. Right now, AFMC is experiencing success in isolated areas with isolated teams. Certainly, we have leaned out and improved processes—as well as performance—in certain areas, but we will gauge the true measure of AFSO21's worth only when continuous process improvement becomes standard across the entire organization. At that point, we will see the true power of AFSO21, which I believe will generate exponential increases in productivity while reducing overall effort.

Finally, we must understand that AFSO21 must be an enterprisewide system examination, conducted with a mind-set toward continuous process improvement. Not a cure-all, a final destination, or a new Air Force program, it is a continuing journey that builds upon the successes we have enjoyed in the past and that works toward improving again and again. Japan and its auto industry have been at it for more than 50 years, yet they still find ways to identify significant improvements. Although we find ourselves in the early stages of utilizing the tools highlighted by AFSO21, AFMC has now taken the first step on a long path that leads to continuous improvement and unprecedented successes for the Air Force. ❑

Notes

1. Manpower Data System (MDS) / Manpower Programming and Execution System (MPES), Headquarters US Air Force, Pentagon, Washington, DC.

2. Gen T. Michael Moseley, Air Force chief of staff, "Letter to Airmen: A Nation at War," 2 September 2005, http://www.af.mil/library/viewpoints/csaf.asp?id=186.

These are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of their country; but he that stands by it now, deserves the love and thanks of man and woman. Tyranny, like hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph. What we obtain too cheap, we esteem too lightly: it is dearness only that gives everything its value.

—Thomas Paine, 1776

Lt Col Paul D. Berg, USAF, Chief, Professional Journals

Highlighting *Air and Space Power Journal*'s Latin American Outreach and Introducing the Latest *Chronicles Online Journal* Article

THE *AIR AND Space Power Journal* (*ASPJ*) staff supports the professional-development needs of militaries around the world. In particular, the editors of the Spanish and Portuguese *ASPJ* editions travel widely to consult senior Latin American military officials about the topics they wish to see covered in *ASPJ*, solicit articles from regional authors, and promote international goodwill. During the past two years, the editors have visited Argentina, Brazil, Chile, Colombia, the Dominican Republic, Ecuador, Nicaragua, Paraguay, Peru, and Uruguay. They have also sponsored numerous Latin American officers attending Air Command and Staff College and Air War College at Maxwell AFB, Alabama. Delegations from many of those countries have also visited the *ASPJ* staff at Maxwell.

Our close contacts with Latin American militaries have revealed several trends. First, they are dedicated to professionally developing their personnel. Despite often facing serious resource shortages, they are inventive and eager to exchange professional-development ideas with the US military. The Spanish edition of *ASPJ* has devoted entire quarterly issues to two topics of regional interest: bolstering the professionalism of noncommissioned officers and integrating women into the military. Second, Latin American militaries perform a different mixture of functions than their US counterparts. The US military sees its primary roles as contributing to homeland defense and fighting foreign foes, but Latin American militaries rarely fight against other countries. Instead they focus on counterinsurgency and counterdrug operations, domestic economic development, disaster relief, environmental protection, peacekeeping, and safeguarding human rights. The US Air Force can profit from its regional partners' familiarity with these missions. For example, the Fuerza Aérea Colombiana (Colombian air force) has decades of experience in counterinsurgency airpower and has achieved impressive results on a shoestring budget. It enjoys even greater success in partnership with the United States. In turn, the US Air Force may be able to apply the Fuerza Aérea Colombiana's counterinsurgency concepts in the global war on terror. Finally, democracy has swept Latin America, and regional militaries support this healthy trend. Many anticipate the day when the Cuban people liberate themselves from Communist oppression and join the community of democratic nations. The Spanish edition of *ASPJ* stands ready to support force development of the new Cuban air force. To continue its outreach, *ASPJ* seeks articles about Latin American national-security topics. Authors may consult the guidelines for submitting articles as described below.

All *ASPJ* editions promote professional dialogue among Airmen worldwide so that we can harness the best ideas about airpower and space power. *Chronicles Online Journal* (*COJ*) complements the printed editions of *ASPJ* but appears only in electronic form. Not subject to any fixed publication schedule, *COJ* can publish timely articles anytime about a broad range of topics, including historical, political, or tech-

nical matters. It also includes articles too lengthy for inclusion in the printed journals.

Articles appearing in *COJ* are frequently republished elsewhere. The Spanish, Portuguese, Arabic, and French editions of *ASPJ*, for example, routinely translate and print them. Book editors from around the world select them as book chapters, and college professors use them in the classroom. We are pleased to present the following recent *COJ* article (available at http://www.airpower.maxwell.af.mil/airchronicles/cc.html):

- Dr. Michael H. Flinn, "Air Force BRAC Recommendations for Consolidating C-130s: A BRAC Commission Perspective" (http://www.airpower.maxwell.af.mil/airchronicles/cc/flinn.html)

The *ASPJ* editorial staff always seeks insightful articles and book reviews from anywhere in the world. We offer both hard-copy and electronic-publication opportunities in five languages, as noted above. To submit an article in any of our languages, please refer to the submission guidelines at http://www.airpower.maxwell.af.mil/airchronicles/howto1.html. To write a book review, please see the guidelines at http://www.airpower.maxwell.af.mil/airchronicles/bookrev/bkrevguide.html. ❑

Ricochets and Replies

We encourage you to send your comments to us, preferably via e-mail at aspj@maxwell.af.mil. You may also send letters to the Editor, Air and Space Power Journal, *401 Chennault Circle, Maxwell AFB AL 36112-6428. We reserve the right to edit the material for overall length.*

CLAUSEWITZ AND THE FALKLAND ISLANDS AIR WAR

As a professor of strategy at the Argentine Air Force Academy, I used Maj Rodolfo Pereyra's article "Clausewitz and the Falkland Islands Air War" (Fall 2006) as a reference because one of the strategy course's principal themes is the study of the Prussian general and his classic work *On War*. That study topic is of the utmost importance these days if we are to achieve the full grandeur of the profession of arms in the Americas.

Col Norberto Bergallo
Buenos Aires, Argentina

Major Pereyra's excellent article brings us closer to the truth of why Argentina was defeated in the Malvinas War. Therefore, for personal reference, I would like to find out if, based on this article, I can say that Argentina should have applied Mahan's theory (i.e., control the sea) and discarded the German land-warfare theory that Argentina's Gen Leopoldo Fortunato Galtieri used to fight the Malvinas War.

Prof. Carlos Raúl Gorgoño Gutiérrez
Buenos Aires, Argentina

Editor's Note: Colonel Bergallo and Professor Gorgoño read the Spanish version of Major Pereyra's article, available at http://www.airpower.maxwell.af.mil/apjinternational/apj-s/2005/1tri05/pereyra.html.

CLAUSEWITZ AND THE FALKLAND ISLANDS AIR WAR: THE AUTHOR RESPONDS

If Mahan's theory applied to anyone in the South Atlantic conflict, it certainly was not Argentina but Great Britain and its Royal Navy. For Great Britain, losing the Malvinas Islands meant losing a strategic point in the South Atlantic that affected three factors which sup-

ported national power: political, economic, and military. However, for Argentina, regaining the islands meant reestablishing its sovereignty; it did not reflect an expansionist desire for power.

However, if you are referring to the reasons why Argentina lost the war, I agree with you. Poor strategic planning to defend the islands was the reason. After the Argentines changed their political objective to "occupying to negotiate" and decided to face the Royal Navy's attack, they neither properly analyzed enemy capabilities nor developed and adopted an adequate course of action.

The Argentine navy's order of battle was not fit to confront the naval and aerial war that British admiral Sandy Woodward was preparing. However, the Argentine navy could have kept the lines of communications open between the continent and the islands in order to logistically support all the aerial units deployed to the islands. The naval staff should have taken the necessary measures to allow the largest possible numbers of air units to operate from the islands so that the air component could have kept the Royal Navy at arm's length from its target.

In order for Argentina to keep the lines of communications open, it needed to concentrate on locating and destroying British submarines. Multirole aircraft based on the continent and the islands could have screened the naval operation from aerial threats. Meanwhile, Argentine airpower based on the islands could have fended off any tactical and/or strategic bombing and assailed the British fleet, preventing it from approaching within its weapons' range, let alone conducting an amphibious landing.

A long campaign that produced casualties without achieving desired objectives would have been counterproductive to the political and economic interests of the British government, which might have avoided armed conflict and sought diplomatic solutions. In view of this situation, a British amphibious landing on the continent might have been an alternate course of action, but in view of the global context, maybe it would have had other implications that would have produced a new topic to analyze.

Maj Rodolfo Pereyra
Santa Bernardina Air Base, Uruguay

RED FLAG STILL MATTERS

As a charter member of the Red Flag staff (from 1976 to 1979), I appreciate Col Steven Carey's article "Red Flag Still Matters—After All These Years" (Fall 2006). There were and still are only two factors that keep Red Flag worthwhile: (1) the creativity of the ops planning staff and (2) the wholehearted support of senior leadership. The task for the ops planners is to develop scenarios that challenge mission-ready crews in a complex, multifaceted environment at the next level above what is available to them at their home base. Integrating as many of the players and systems as possible that support a given mission is critical to the realism and "aerial pressure cooker" to which Colonel Carey refers. The requirement of senior leadership is to allow Red Flag to use the assets necessary to implement the scenarios they develop. In the early days, Gen Robert Dixon was committed to making any resource in Tactical Air Command available for use at Red Flag. As soon as commanders of the other major commands and regional combatant commanders saw what the participants gained by participating in Red Flag, they were willing and eager to commit their resources and have their crews train as well. It didn't take long for our sister services to notice the advantage of training in that environment.

One clear result of Red Flag, in my mind, is composite wings, both permanent and provisional. They are simply Red Flag incorporated into deployment/employment doctrine. The synergism is effective and overwhelming.

Future Red Flags will be viable as long as they reflect today's fighting force. If Red Flag staff members get support from senior leadership, remain nimble, and learn from past lessons but not get tied to "the way it was," they will always be able to confront mission-ready crews from any command or service with a great learning laboratory. Two folks at Nellis

AFB, Nevada, during the same time I was on the Red Flag staff (Gen Richard B. Myers and Gen John P. Jumper) have played a part in shaping today's Air Force. They and their successors who have seen Red Flag firsthand are now in a position to make sure it stays viable.

Lt Col Rich Martindell, USAF, Retired
San Diego, California

COUNTERINSURGENCY AIRPOWER

As an interested civilian who follows the war on terror, I have some feedback on Col Howard Belote's article "Counterinsurgency Airpower: Air-Ground Integration for the Long War" (Fall 2006). I think the key to winning an insurgency is being able to digitize the terrorists and place them in our digital battlefield. How can we do this? By identifying everyone and tracking his or her movements in real time. That way we could track everyone except the terrorists, which would make them stand out. How can we do this in Iraq? Through the creation of a layered electronic-identification system that tracks vehicles and people through electronic radio-frequency identification (RFID) devices embedded in their identification papers and vehicle tags. All residents of Iraq would have RFID-embedded ID papers, driver's licenses, library cards, police IDs, security IDs, employee IDs, passports, visas, vehicle registrations, license plates, and so forth. By digitizing the population, we could identify anyone who doesn't belong somewhere. We could create unmanned, automated choke points throughout Baghdad, forcing vehicles and pedestrians to pass over or near sensors that could identify a particular vehicle or person. We could then transmit the resulting data in real time to central computers, which could process it using algorithms that pick out suspicious activity. We could track persons inside vehicles through triangulation of RFIDs using a three-antenna setup (perhaps embedded inside lampposts) at any intersection selected for observation. All vehicles traveling between towns would require RFID license tags, driver's licenses, and papers; thus, when they passed over sensors embedded in the ground, we could ascertain the validity of the vehicles as well as their occupants and investigate invalid or suspicious vehicles and persons.

Dr. Mitchel W. Eisenstein
Stony Brook, New York

THE VANISHING EDUCATION (RECORD) OF AN OFFICER

Col Chris Krisinger's well-written article "The Vanishing Education (Record) of an Officer" (Summer 2006) makes some impressive comments with which I am in complete agreement. His points on the disappearance of graduate education from the officer performance report are exactly what needed to be brought to the table. One need look no further than the biography of nearly any general or flag officer. What do you see? Most have the following pattern of positions: Legislative Affairs / Capitol Hill billets, aide-de-camp, military aide to a secretary / assistant secretary, military secretary, and the *famous graduate degree.* This means that on their own time, they read, wrote, and sat in class because they were dedicated to the profession of arms. Leaders understand the significance of education, which is the reason our forefathers designed the service academies, war colleges, National Defense University, Industrial College of the Armed Forces, and postgraduate institutions such as the Naval Postgraduate School and the Air Force Institute of Technology—all this in addition to other types of professional military education. When I served as a Marine Corps officer, completion of an advanced degree was certainly documented in personnel records.

Corporate America encourages people to earn degrees, and one can see in any *Business Week* article which highlights an industry leader that his or her education almost always includes an advanced degree. Students of history, organizational development, leadership, and psychology know that past performance usually predicts future performance. Hard-charging leaders wishing to climb the ranks in those featured companies just need to follow their mentors' footsteps. We all know that much more goes into being selected for these leadership positions, but we help ourselves

and our organization by earning a degree. The way to climb the ladder, as one example, is to have a graduate degree.

During a quick look at the "how to" titles in the leadership/management section of a bookstore, I found the book *How to Become CEO* by Jeffrey J. Fox. Serving as the leader of a commercial enterprise is different than serving as a military officer, but there are some close similarities. In the chapter "Do Something Hard and Lonely," Fox says that one should "do something that you know very few other people are willing to do. This will give you the feeling of toughness. . . . It will mentally prepare you for the battle of business." He also writes that one should "do something that is hard and lonely . . . like studying late at night for a graduate degree, while everyone else is asleep." These quotations correlate directly with Colonel Krisinger's statement that "the military profession is no different from traditional professions." Corporate America emphasizes the graduate degree, encourages it, pays for it, and acknowledges it on annual performance appraisals. So should we. Two additional years of studying during nights and weekends, sometimes during lengthy deployments and under indirect fire and austere climatic conditions, show an individual's true dedication to our profession.

Maj Larry Colby, USAFR
Niagara Falls Air Reserve Base, New York

MYTH OF THE TACTICAL SATELLITE

I wish to congratulate Lt Col Edward B. Tomme, USAF, retired, for his article "The Myth of the Tactical Satellite" (Summer 2006). I formerly served as director, Program C, National Reconnaissance Office, and based on my personal experience with the development, acquisition, and operation of tactically responsive space systems, his article is one of the few realistic assessments of the operationally responsive space (ORS) "bandwagon" that I have seen. The author might also consider that when one looks seriously at the requirements process, development and acquisition (including vehicle/payload storage and replenishment), ground infrastructure, training, and so forth that would be necessary to support some of the claims currently associated with ORS, then doubts about the concept's feasibility increase by several orders of magnitude. Once again, this is an excellent article!

Rear Adm Thomas Betterton, USN, Retired
Naval Postgraduate School
Monterey, California

THE AIR FORCE'S MISSING DOCTRINE

I would like to congratulate Maj Kenneth Beebe on his article "The Air Force's Missing Doctrine: How the US Air Force Ignores Counterinsurgency" (Spring 2006). The author hit on an issue that I have been asking about for the last few years regarding the service's disregard of counterinsurgency (COIN) at the strategic and operational levels. We are entering an age when COIN will become a larger part of Air Force operations (such as al-Qaeda's presence in Africa, the Fuerzas Armadas Revolucionarias de Colombia insurgents in Colombia, etc.). Even though the Air Force prides itself on forward thinking, I think we are far behind the power curve when it comes to COIN. The egregious part of this issue is that airpower has been used in COIN since the British were bombing Iraqi rebels immediately following World War I. This isn't a new issue, yet somehow we fail to address it.

I believe there is a crucial need for newer aircraft, similar in operational ability to the C-130, that can support the Air Force's role in COIN. The problem that I have found is that the service doesn't find it in its best interest to support this kind of financial investment; senior leaders would rather invest in larger projects that support major theater conventional war (Col John Boyd is rolling over in his grave).

I would like to note that Sir Robert Thompson led one of the most successful COIN operations ever, which included effective use of airpower, in the Burma campaign of World War II and again during the Malaysian Emergency of 1948–60. I thank the *ASPJ* staff for publishing Major Beebe's article. It is the first

time I have seen a point of view akin to mine in an Air Force publication.

2d Lt John Barrett, USAF
Grand Forks AFB, North Dakota

Editor's Note: Major Beebe was promoted to lieutenant colonel shortly after ASPJ *published his article.*

FIGHTER DIPLOMACY: A "PASSAGE TO INDIA"?

Manohar Thyagaraj's excellent article "Fighter Diplomacy: A 'Passage to India'?" (Spring 2006) is quite up to date with pertinent information regarding India's emergence as a twenty-first-century country equipped with the latest defensive armaments. I am currently halfway through a master's degree in defence administration at Cranfield University, United Kingdom, and am busily researching information for a paper on the defence industrial strategy of India. I find this subject absolutely fascinating on two fronts. Firstly, as a research subject, India's current defence programme appears almost astounding, given the ongoing levels of poverty and bureaucracy that still abound in that vast country. Secondly, as a British-born Sikh, I am totally absorbed by the evolving nature of defence investment, alongside the backdrop of industrial expansion across many areas of India. Indeed, upon retirement from the Royal Air Force, wherein I am an engineering officer, I may decide to go to India to try to offer expertise and knowledge in their expansion programme. I would welcome any guidance on new articles or breaking news regarding this subject.

Flt Lt Balvinder "Barry" Singh Jessel
RAF Northolt, United Kingdom

MY FATHER AND I AND SABURO SAKAI

I just finished inspiring my students here at the Western Hemisphere Institute for Security Cooperation with the article "My Father and I and Saburo Sakai" by Col Francis Stevens Jr. (*Chronicles Online Journal*, 2006). I was stressing the existence of military honor as a form of making the world more humane. A couple of guys were moved to tears. You probably know that "military honor" for Argentines and some others has often meant a license to do a military coup. My students are mostly US Army majors and Latin American lieutenant colonels from the army, marines, and national police—a wholesome mix.

Dr. Russ Ramsey
Fort Benning, Georgia

Editor's Note: Dr. Ramsey used the Spanish version of that article, available at http://www.airpower.maxwell.af.mil/apjinternational/apj-s/2006/1tri06/stevens.html.

LEADERSHIP FROM FLIGHT LEVEL 390

Gen Robert Foglesong's article "Leadership from Flight Level 390" (Fall 2004) impressed me. I found his thoughts about leadership so enriching that I felt inspired to review my own leadership philosophy. My father served for 40 years in the French and Tunisian armed forces, and I think that personal discipline can partially substitute for lack of know-how by enabling leaders to successfully manage adversity and achieve success based on fundamental factors that General Foglesong mentions, such as respect, integrity, and courage. Military members should internalize these traits if they are to serve their nation as well as innovate, guide, instruct, and maintain good channels of communication. My compliments to General Foglesong.

Ms. Tounsi Raja
Djerba Midoune, Tunisia

Editor's Note: Ms. Raja read the French version of General Foglesong's article, available at http://www.airpower.maxwell.af.mil/apjinternational/aspj-f/2006/ete/fogleson.html.

Lt Col Paul D. Berg, USAF, Chief, Professional Journals

Leading the Twenty-first-Century Air Force

LEADERSHIP IN TODAY'S US Air Force is intrinsically linked to our service's core values. According to Air Force Doctrine Document (AFDD) 1-1, *Leadership and Force Development*, 18 February 2004, "Leadership is the art and science of influencing and directing people to accomplish the assigned mission. . . . Effective leadership transforms human potential into effective performance in the present and prepares capable leaders for the future" (p. 1). We cannot uphold the high ethical standards established by the Air Force's core values of "integrity first," "service before self," and "excellence in all we do" without consistent leadership at all levels.

The fundamental concepts of leadership and core values derive from the Air Force's rich heritage, yet twenty-first-century Airmen operating at technology's leading edge require their own brand of leadership. Today's Airmen lie at the very heart of our service's combat capability because they voluntarily dedicate themselves to translating sophisticated technologies and ideas into desired battlespace effects. Better educated and more technically savvy than ever, they come from a constantly evolving society that does not always set its moral compass by our core values. Air Force icons like the gruff, cigar-chomping Gen Curtis LeMay served as role models for those values, but their leadership styles might seem quaint to today's Airmen. Leaders hoping to inculcate the core values in new generations of Airmen must continually refresh their styles without compromising basic principles.

Leading Airmen to fulfill our values in today's changing world demands adaptability. Integrity rarely poses a problem for Airmen, yet we cannot take it for granted because the mere suspicion of lapses can have serious consequences, as demonstrated by the Boeing tanker-lease scandal. The global war on terrorism (GWOT) places our people in new situations that may challenge their integrity in unexpected ways. Placing service before self is nothing new for us, but because expeditionary GWOT operations levy heavy professional demands, leaders must guide Airmen in balancing their professional and personal lives. We also have a long tradition of excellence in all we do, and Airmen need the freedom to nurture and develop their skills. Aircrews have always prided themselves on their individual initiative. Today, the GWOT challenges Airmen of all specialties to think creatively, yet new technologies complicate leadership. Airmen need to make rapid and correct tactical decisions in uncertain environments; however, advanced global-communication systems afford distant commanders unprecedented awareness of tactical situations. The tension between delegating authority to the Airman on the scene versus making decisions in a distant headquarters remains an ongoing leadership challenge. Twenty-first-century Airmen deserve leaders firmly rooted in enduring values yet willing to adjust to shifting conditions.

The statement in AFDD 1-1 that effective leadership "prepares capable leaders for the future" gives leaders a mandate not only to ensure that the Air Force educates and empowers every Airman to act flexibly, but also to cultivate our core values of integrity, service, and excellence. Without maintaining strong and ethical leadership, we can achieve little, and without intellectually engaging the threats we face, we cannot attain success. As the professional journal of the Air Force, *Air and Space Power Journal* dedicates this issue to advancing the professional dialogue about how best to lead Airmen in the twenty-first century. ❑

In air combat, "the merge" occurs when opposing aircraft meet and pass each other. Then they usually "mix it up." In a similar spirit, Air and Space Power Journal*'s "Merge" articles present contending ideas. Readers can draw their own conclusions or join the intellectual battlespace. Please send comments to aspj@maxwell.af.mil.*

Editor's Note: This article is a direct reply to "The American Aircraft Industrial Base: On the Brink" by Lt Col David R. King, PhD, Air and Space Power Journal*, Spring 2006.*

The Robust State of the US Aircraft Industrial Base

LTC Michael J. Hicks, PhD, USAR*

> *In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.*
>
> —Dwight David Eisenhower

RESEARCHERS OF ECONOMIC and national security issues have legitimate concerns about the ability of the US economy to securely provide for the manufacturing of key weapons systems and their components. Some of them call for thoughtful, informed, and analytically precise evaluations, both theoretical and empirical, of the defense industrial base. However, recommendations for active, interventionist policies toward domestic manufacturing industries exist only on the extreme fringes of the debate over international economic policy. Indeed, it is difficult to characterize the peripheral nature of the belief that considers directed demand-side intervention in industry an appropriate policy. As evidence of its marginal nature, only a few totalitarian and quasi-socialist states continue with overt demand-side support for domestic industry. Within this context, I was very surprised to read of a policy recommendation from a senior US Air Force program manager for direct policy intervention in the US aircraft industrial base ("The American Aircraft Industrial Base: On the Brink" by Lt Col David R. King, PhD, USAF, in the spring 2006 issue of this journal). The author bases this policy recommendation upon narrow and flawed analysis, a misreading of history, and unfortunate omissions of

*I would like to thank Dr. John Hicks; Maj Jeff Smith, PhD; Dr. Mark Burton; the editors of this journal; and an anonymous referee. Any errors remain mine.

The author is an associate professor of economics at the Air Force Institute of Technology, Wright-Patterson AFB, Ohio; research professor at Marshall University, Huntington, West Virginia; and adjunct scholar at the Mackinac Center for Public Policy, Midland, Michigan.

relevant data regarding the industry. Let me attempt to better explain the state of the US aircraft industrial base.

US Air and Space Power

Since the time preceding its formal establishment, the US Air Force has been the best in the world. As a counterfactual piece of alarmism, King notes the relative absence of leading-edge fighter technology at the outset of both world wars, arguing that the United States' reliance on European aircraft in World War I and the technological inferiority of its fighter aircraft at the outset of World War II have modern relevance. It seems curious to note these historical oddities in constructing an argument that supports demand-side intervention on the defense industrial base since in both instances that base is largely credited with providing war-winning technology and materiel.[1]

Further, little evidence exists that during the Cold War our Air Force chose substantially better aircraft-design characteristics than those of our leading enemy. In fact, the best available research suggests that avionics and aircrew training were likely the only substantive factors that differentiated the United States from its foes, from the Korean conflict to the present.[2] In the almost 40 years since the United States has lost a dogfight, we can attribute our victories to the pilots and supporting avionics—hardly evidence to justify intensive industrial policy for aircraft manufacturers. However, the key failures of King's analysis lie not in historical revisionism but in his examination of the causal impact of defense consolidation and the current state of the US aircraft industrial base.

Defense Consolidation

The recent consolidation of defense prime contractors represents the single starkest merger wave in US economic history. In retrospect the consolidation seems motivated largely by the urging of the Department of Defense (DOD) during the Clinton administration. During this period, the number of prime contractors dropped by more than 75 percent while revenues decreased no more than 15 percent in any given year—with no emergent trend in this decline—and the industry itself reported eight consecutive years of growth as of 2005. The apparent hope from the early 1990s was that these mergers would cut acquisition costs through increased efficiency, although I have yet to uncover an argument for these mergers based on economic analysis.[3] Importantly, the prime source of efficiency gains (and potential cost reductions) from these types of mergers would occur through achieving scale economies.

The DOD not only permitted but also promoted this merger wave despite clear and repeated violations of the Department of Justice's merger guidelines, established to protect competition (and, therefore, lower

prices)—the goal of the DOD-supported consolidation.[4] The seemingly incompatible goals of higher concentration and lower prices never materialized. Indeed, in 1998 the General Accounting Office (GAO) (now the Government Accountability Office) offered a highly cautionary analysis of the recent consolidation, in effect warning the DOD of the potential for market-power-related price increases in subsequent purchases.[5] These fears proved warranted, and recent analysis suggests that defense consolidation played at least a modest causal role in cost overruns of the 1990s.[6]

In the end, my criticism of King's analysis does not reside in the potential impact of defense-sector consolidation, about which we largely concur. Rather, we differ in assessment of the cause. I do not view industry consolidation so much as a result of the declining fortunes of the defense sector—although that was a catalyst—but as a result of the 1990s' poor policy choices that permitted uneconomic, ultimately ineffectual, mergers. King goes further in identifying potential problems of mergers by offering specific concerns regarding product diversity, innovation, and competition. Like the authors of the GAO report, I believe that the biggest problem is likely the escalation in price due to market power from these firms. Again, King and I probably find ourselves in some agreement here. However, he writes that the US aircraft industrial base is "on the brink," deriving his chief examples from employment data from 1990 through 2005.[7] I believe that only a profound misreading of these data could lead to such a conclusion.

An Industry on the Brink?

Like any manufacturing sector, aviation—both civil and defense related—experiences cycles, possibly taking the form of procyclical business variations in demand or following more secular adjustments to defense budgets and changes to travel patterns. King focuses on the perceived weakness of aircraft-manufacturing employment as evidence of an industry in decline—an erroneous conclusion for two reasons.

First, manufacturing-employment share in the United States has remained fairly static since the late 1950s for the very good reason that productivity growth has blossomed. US consumption of domestically produced goods has increased at a record pace during the same period. US aircraft sales are nearly at their Cold War level (in inflation-adjusted terms), with sales split evenly between civil and defense contracts. In manufacturing generally—and aircraft production specifically—the United States has seen a decline in employment. As was the case during at least the last 6,000 years of economic history, manufacturers find themselves doing more with less.

Interestingly, instead of this situation representing a national-defense scandal, the aircraft industrial base leads productivity growth. The raw data serve as a strong tonic to those who see a vibrant US defense industrial base. The aircraft industrial base has enjoyed considerably better growth in productivity than manufacturing as a whole. In contrast to King's argument,

this fact offers evidence of a strengthening—not weakening—industry, as illustrated by an index of productivity using the most common measure available (output per worker). Index numbers provide for a common comparison of data that differ in scale. In the case of manufacturing, the air and space sector already enjoys a much higher output per worker, so in order to compare growth between air and space and US manufacturing as a whole, I simply adjust their starting to an indexed value of 100 (see fig).

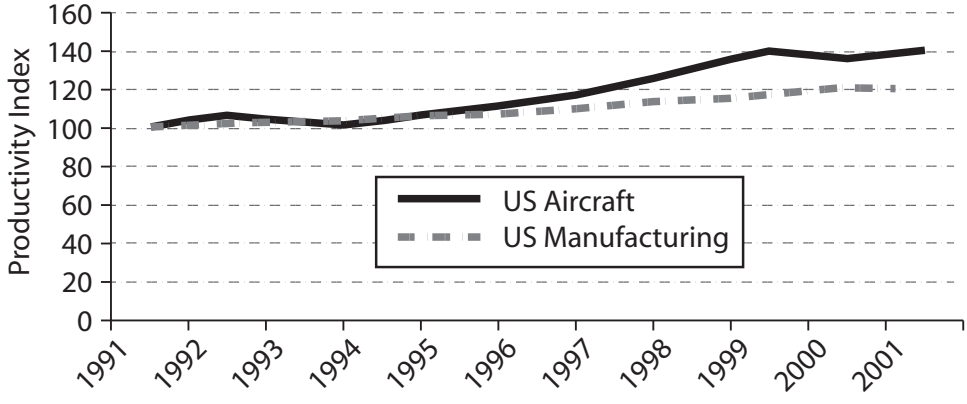


Figure. Productivity index, US manufacturing and aircraft industrial base. (From US Department of Commerce, Bureau of Economic Analysis; Regional Economic Information Systems database; and *Aircraft Industry Association Annual Report*, 2006. Index derived from the author's calculations.)

Further, the industry itself claims strong health. In its 2005 year-end report, the Aerospace Industries Association (AIA) reports that the industry enjoyed record profits ($11 billion), an increased profit rate, and increasing sales across the board, accompanied by the eight consecutive years of increased DOD sales.[8] None of these is a sudden finding. AIA researchers recorded a similarly happy depiction of the industry for the preceding year. If followed, King's recommendations likely represent the first such instance in the highly checkered world of industrial policy of the government's attempting to rescue a growing, healthy industry.

Second, King's analysis errs simply by accepting the conclusions of occupation and industry accounting. Part of the impact of consolidation stems from the outsourcing of business activities by individual firms, a well-known concern with the manufacturing data that the Congressional Budget Office noted in 2004, which it labels as a statistical artifact. Thus, many jobs once classified within the manufacturing industry (such as human-resource departments) have been outsourced and are now reported in other sectors (such as business services). This phenomenon plagues all the aggregate data, including those that report production

workers. Thus, the outsourcing of a human-resource department or an occupational-health worker leaves the occupation mix unchanged, while leading to reported losses in manufacturing employment (and some increases in the service sectors). This is hardly grist for worry. Indeed, Judy Davis provides compelling evidence that consolidation of prime defense contractors over the past 20 years has been accompanied by nearly concomitant growth in upstream contractors. Many defense contractors simply become smaller by outsourcing business activities. This is good for productivity, even if it requires analysts to do more research before lamenting the loss of manufacturing employment.[9]

King also makes the mistake of asserting that workforce experience is suffering, choosing to highlight experience in multiple programs as an indicator of experience (drawing selectively from a RAND report of 1998). The fact that I consider worker productivity a better indicator of worker skills than experience in multiple programs leads me to different conclusions than King's concerning the health of the US aircraft industry. Even if I did agree with him and accepted experience with multiple variations as a measure of worker quality, I am not sure what level of concern this would raise. For example, it is difficult to extend this concern to policy innovations. Should we produce more weapons-system variants in order to give the workforce more relevant experience? Surely firms constantly worry about the supply of skilled workers for the simple reason that the fewer of them who are available, the more they need to pay them; therefore, all things being equal, profits decline. This is why every industry in every region from Afghanistan to Connecticut bemoans the shortage of skilled workers.[10] These warnings have persisted for at least the last 25 years (most likely the last 250). Yet, somehow labor markets continue to provide workers to firms willing to compensate them for their efforts.

The use of employment levels is a poor measure of an industry's health. A reader need think only of the domestic automobile market to understand that profits are a better measure of firm health than aggregate employment. In the end, I am not merely unconvinced that the US aircraft industry is on the brink but that the opposite is true: that industry is enjoying a remarkably happy period and is performing well in almost every important measure. Further, the industry itself shares this opinion.

One can attribute the dominance of the US air and space industry to its exposure to a relatively nimble, unfettered economic climate. Only a handful of nations—for example, the People's Republic of China, Cuba, and North Korea—follows the type of broad industrial policy proposed by Colonel King. These are not states to emulate. Direct industrial policy, most especially for a vibrant industry, is poor public policy. However, as I noted at the outset of this article, concerns about the defense industrial base do in fact exist, so one can legitimately ask what research (focused on acquisition economics) should attempt to understand and what policies this research might inform.

Economic Analysis and Acquisition Policy

Aggressive demand-side interventionist policies for the industrial base of the type offered by King are profoundly anachronistic. However, one should pursue three research streams, all of which may spawn policy innovations that protect nascent and critical defense-industry activities: benefit analysis, empirics of cost, and transactions-based analysis of acquisition.

Rigorous benefit-cost analysis almost always precedes public investment in highways, flood control, or other critical infrastructure. This analysis values both market-based benefits and those that accrue beyond the reach of traditional markets. Such measures as valuations of human life, preservation of wetlands, species diversity, and other nonmarket goods have occupied the realm of analysis in many federal agencies for more than three decades. The arguably far more valuable contribution of national defense remains wholly unquantified. Although this research stream might strike many people as daunting, would not an understanding of the private-sector spillover benefits of the global positioning system alone serve as an important element in understanding the benefits of military-related research and development (R&D)?

Understanding some of the benefits of military-acquisition expenditures, in economic terms, is important for policy making. Without such understanding, King's assertion that increasing costs of aging weapons systems require immediate acquisition of new aircraft (presumably the F-22) is meaningless. In effect, it simply offers a single equation with two unknowns to policy makers—an unhelpful proposal (if welcomed by Lockheed Martin).

Next, understanding the impact of macroeconomic and budgetary policy on acquisition costs should be a preeminent concern. Acquisition officials and cost analysts have spent considerable effort constructing cost estimates, assuming away budget variability and macroeconomic fluctuations. Doing so has ill served the American taxpayer and may well have led to consistent underestimates of major program costs for more than a generation.

Finally, understanding the transaction costs of acquisitions is critical. Lest readers view my critique of King too harshly, he has offered some insight in this arena (along with coauthor John Driessnack in an earlier work). Clearly, one must comprehend the microeconomics and institutional dynamics of acquisition.[11]

Thus, the most fruitful policy innovations will likely emanate from a better understanding of these three areas: the benefits (direct and spillovers) of national defense (R&D and actual provision of the service), the role of budget variability on costs and quality, and the role played by transaction-cost economics in driving costs and quality. Policy recommendations derived from this research may include understanding which key parts of the defense sector may actually be on the brink. By identifying key benefits derived from specific goods and services, we can better evaluate how to estimate cost (and perhaps control budget fluctuations) and better explain the effect of unanticipated variation in budgets on overall cost growth. This

process can also improve policy makers' understanding of what key elements of our defense industrial base may be at risk from any variety of ills. Finally, understanding transaction costs of contracting and acquisition may yield insights into structuring the acquisition of national defense. However, at the end of the day, the DOD and the United States would be better off establishing no economic policies relating to air-and-space R&D and acquisition rather than opting for the inopportune demand-side intervention proposed by Colonel King. ❑

Wright-Patterson AFB, Ohio

Notes

1. It is indeed a fact that the US industrial base was the prime contributor to success in both world wars. I know of no historical evidence to suggest that that base was not a major contributor to the Allies' success in both wars or that the United States was able to counter the technological gains of the enemy.

2. Jenny Herald, "Paying for a Better Air Force: Revealed Preference in Aircraft Acquisitions, 1945–1995" (thesis, Air Force Institute of Technology, March 2006).

3. For an argument on the role of firm finances in the consolidation policy, see John Deutch, "Consolidation of the U.S. Defense Industrial Base," *Acquisition Review Quarterly*, Fall 2001, 137–50, http://www.dau.mil/pubs/arq/2001arq/Deutch.pdf. Clearly, by 1998 the economists had won the argument, and the DOD (most likely at the urging of the Department of Justice) had ceased its merger policies. Cost overruns continued for each service during these and subsequent years.

4. See *Horizontal Merger Guidelines* (Washington, DC: Department of Justice and the Federal Trade Commission, 1 April 1992, rev. 8 April 1997), http://www.usdoj.gov/atr/public/guidelines/hmg.pdf. In 1995 (with updates in 1996 and later) the DOD reiterated the importance of evaluating the antitrust perspectives of defense consolidation. See Deputy Secretary of Defense Memorandum, *Antitrust Aspects of Defense Industry Consolidation*, 10 May 1995 (replaced by Department of Defense Directive 5000.62, *Impact of Mergers or Acquisitions of Major DoD Supplies on DoD Programs*, 21 October 1996).

5. United States General Accounting Office, *Defense Industry: Consolidation and Options for Preserving Competition*, GAO/NSIAD-98-141 (Washington, DC: General Accounting Office, National Security and Internal Affairs Division, 1 April 1998), http://www.gao.gov/archive/1998/ns98141.pdf.

6. James P. Smirnoff, "The Impact of Economic Factors and Acquisition Reforms on the Cost of Defense Weapons Systems" (thesis, Air Force Institute of Technology, 2006).

7. Lt Col David R. King, PhD, USAF, "The American Aircraft Industrial Base: On the Brink," *Air and Space Power Journal* 20, no. 1 (Spring 2006): especially 40–42, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj06/spr06/spr06.pdf.

8. David H. Napier, "2005 Year End Review and 2006 Forecast—An Analysis" (Arlington, VA: Aerospace Industries Association, 2006), http://ncat.com/stats/yr_ender/yrendr2005_text.pdf. Similar studies are available for earlier years.

9. See Judy Davis, "Defense Consolidation and Structural Adjustment in the Defense Sector: 1972–2003" (thesis, Air Force Institute of Technology, March 2006). See David Brauer, "What Accounts for the Decline in Manufacturing Employment?" Congressional Budget Office, Economic and Budget Issue Brief, 18 February 2004. For information about the same phenomenon in the decline of employment in coal mining during the 1980s and 1990s, see Mark Burton, Michael Hicks, and Calvin Kent, *Coal Production Forecasts and Economic Impact Simulations in Southern West Virginia: A Special Report to the West Virginia Senate Finance Committee* (Huntington, WV: Center for Business and Economic Research, Lewis College of Business, Marshall University, June 2000), http://www.marshall.edu/cber/research/cproduction.

10. Researching the *shortage* of *skilled workers* is an interesting exercise. An Internet search of those three words yielded 3.84 million hits, the first several hundred from recent industry reports, media examinations, and lobby/industry group concerns (although critical examinations were available). A random selection of nations (Indonesia, Germany, Somalia, China, Afghanistan, the United States, and the United Kingdom) yielded similar results. Picking industries—from restaurants to information technology—also produced claims of skilled-worker shortages.

11. Lt Col John D. Driessnack and Maj David R. King, "An Initial Look at Technology and Institutions on Defense Industry Consolidation," *Defense Acquisition Review Journal*, January–April 2004, 63–77, http://www.dau.mil/pubs/arq/2004arq/Driessnack.pdf.

Maj Gen William "Billy" Mitchell

A Pyrrhic Promotion

Lt Col William J. Ott, USAF*

THE NAME *William "Billy" Mitchell* brings many images to mind—for example, that of the gallant Airman who forcefully advocated the independence of the Army Air Service from its mother service. Mitchell's polarizing behavior in this endeavor endeared his allies and alienated his opponents. Another image depicts the first American air theorist, whose ideas—taught and fostered in the curriculum of the Air Corps Tactical School—laid the foundation of American airpower's employment in World War II. Indeed, such contributions deserve high praise, which Congress bestowed posthumously in the form of a special medal of honor in 1957, more than 20 years after Mitchell's death.[1] Evidently, however, this was not enough. In 2004 the 108th Congress authorized the president to promote him to the rank of major general, citing that as the rank Mitchell would have achieved had he served as chief of the Air Service in 1925. The president has not exercised that option, nor should he do so—for two reasons: (1) many leaders of that time ensured that Mitchell never held this title for reasons other than the oft-cited ones of personal bias and resentment, and (2) posthumous promotion does not vindicate Mitchell from the more questionable acts he committed during his military service.[2] It is better to remember Billy Mitchell at his highest attained rank of brigadier general than to confer a new, pyrrhic rank of major general.

The promotion option was created at the behest of Senator Charles Bass (R-NH), whose father, Rep. Perkins Bass (R-NH), nephew of Billy Mitchell, had introduced a bill in 1957 nominating Mitchell for the same promotion. The elder Bass noted that Mitchell clearly deserved to be chief of the Air Service, a permanent major-general billet. According to Senator Bass, that effort failed because "[his father's] efforts were successfully blocked by some of Mitchell's military adversaries."[3] Of course these so-called adversaries did not impede Mitchell's reception of a medal of honor, but the initial efforts to promote Mitchell posthumously did come to a standstill.[4] Senator Bass explained his motivation for reintroducing the bill years later: "He [Mitchell] was the father of the modern Air Force. . . . This should be done."[5] The promotion option, which applied to rank only (it excluded additional money or benefits), drew muted support from the US Air Force—the service that calls Mitchell its patriarch.[6] Nevertheless, the promotion opportunity appears harmless enough and seemingly appropriate, so why not lobby the

*Lieutenant Colonel Ott is chief, Senior Leader Management, Langley AFB, Virginia.

president to use his legal authority to posthumously promote Billy Mitchell to major general?

To begin, the justification that motivated this presidential legal option is erroneous. One can rightly question Representative Bass's accusation of adversarial impropriety. The Army recognized Mitchell's hard work, rewarding him with promotions and added responsibility. But prior to and during the initial part of his Army service, he received many handouts from his father, a well-to-do senator who arranged for his son's attendance at a private school and later engineered a commission for him in the Army, where he began as a signals officer destined for the Spanish-American War. Unfortunately, it ended before Mitchell could participate. Frustrated, he used his father's leverage to obtain a reassignment to the occupation force in Cuba, arriving there in December 1898.[7] From that point on, however, Mitchell made his way through the Army based on his own merit, although financial aid from family members and friends became a lifelong crutch for him.[8]

Following Cuba, Mitchell served brief stints in the Philippines, China, Japan, India, and Europe. After his tour in Europe, Brig Gen Adolphus Greely, chief of the Signal Corps, ordered the 20-year-old officer to Alaska, where he would lay telegraph wire, allowing communication between Alaska's capital city and its major towns.[9] Mitchell proved more than capable, accomplishing this task in two years under harsh climatic conditions, and in 1912 he joined the 21-member Army General Staff as the lone Signal Corps representative—a position Mitchell earned legitimately.[10] As fate would have it, one of his staff responsibilities called for assessing the utility of a recent phenomenon—aviation.

Initially leery of aviation but intrigued by it, Mitchell authored a paper discussing its possibilities and shortly thereafter paid for his own flying training out of funds solicited from his mother. Perhaps because of this background, Mitchell was reassigned to Europe in 1916 as an aeronautical observer to glean lessons learned from World War I.[11] During this time, America entered the Great War in opposition to the Central Powers. Upon hearing this news, Mitchell immediately traveled to France and 14 days later began flying combat missions in French aircraft with French airmen.[12] During the war, Lieutenant Colonel Mitchell rose to the rank of brigadier general, finishing as chief of the Air Service, Army Group. As with most things involving him, this did not occur without controversy.

While US forces marshaled in Europe in 1917, General of the US Army John "Blackjack" Pershing appointed Brig Gen Benjamin Foulois Air Service commander over Mitchell, who did everything possible to inhibit Foulois' ability to lead the service.[13] Despite this friction, Foulois recognized his own limitations and requested that Mitchell lead the combat forces while Foulois handled the training and equipping aspect of aerial warfare. That arrangement made Mitchell and Foulois coequals, both working for Maj Gen Mason M. Patrick, commander of the Air Service's American Expeditionary Forces. Despite Mitchell's antics towards Foulois, the latter's unselfish act allowed Mitchell to lead the combat portion of the Air Service in World War I, thus

facilitating his promotion to the temporary rank of brigadier general (temporary because it related to Mitchell's wartime position).

To be fair, Mitchell distinguished himself as a leader deserving of this wartime rank. His bravery and flying acumen earned him the Distinguished Service Cross for valor in the air, and he demonstrated his combat mettle through his leadership of the air portion of the Saint-Mihiel and Meuse-Argonne offensives.[14] Historian Robert White concludes that "regardless of the official chain of command, it was Mitchell who made the vast majority of the operation decisions in the two major [American Expeditionary Forces] campaigns of St. Mihiel and Meuse-Argonne, and this is the way that Patrick, and especially Pershing, wanted it."[15] Finally, Mitchell's subordinates and peers held a deep respect for him.[16] Even after the war, Foulois said of his rival, "General Mitchell had few superiors in Europe, as regards the tactical use and actual operation of the Air Service in action."[17]

At the end of World War I, Mitchell did not receive the customary reduction in rank as the United States transitioned from wartime to peacetime, even though an officer such as General Patrick, Mitchell's wartime superior, returned to his peacetime rank of colonel in 1919 and rejoined the Corps of Engineers—the unit from which he had emerged.[18] Mitchell managed to retain his rank because Maj Gen Charles T. Menoher, the first chief of the Air Service, asked that Mitchell serve as assistant chief of the service. Although Mitchell retained his rank of brigadier general, it remained in a temporary capacity since this rank was associated with the job—not the person.[19]

Unsurprisingly, Mitchell also had disagreements with General Menoher. Historian Robert Futrell attributes much of this to a personality conflict stemming from Menoher's status as a nonflying officer.[20] Regardless, the fact remains that the Menoher-Mitchell combination proved tumultuous—so much so that Lt Col Oscar Westover, Menoher's executive officer, recommended that he obtain a statement of loyalty from Mitchell. Menoher never did so—but in retrospect he perhaps wished he had.[21]

Menoher's term as Air Service chief came to an abrupt end because of his inability to control Mitchell. After the sinking of the captured German battleship *Ostfriesland* in 1921 as part of an experiment to gauge the effectiveness of air attacks against ships, Mitchell authored a report claiming that "the problem of the destruction of seacraft by Air Forces had been solved and is finished."[22] Despite Menoher's order to Mitchell not to release this report until approved by higher authority, Secretary of War John W. Weeks read it in a printed article in the *New York Times*. Furious, Menoher demanded that Weeks either allow him to discipline Mitchell or accept his resignation. Unfortunately for Menoher, Weeks was reluctant to do so because of Mitchell's popularity and influence. Menoher resigned, and Mitchell, feeling insulated from repercussions because of his celebrity-like status, proceeded to utilize the political freedom that popularity brings.[23]

Following Menoher's untimely departure, the natural order of events seemed to forecast Mitchell's ascension to chief of the Air Service; however, Pershing, who respected Mitchell but understood his limitations, would not

hear of it. Robert White adds that "based on the 'team player' concept that characterized Pershing's way of doing business, Mitchell was never a serious contender for the top job in the Air Service."[24] Instead of Mitchell, Pershing selected Col Mason Patrick, his former commander of the American Expeditionary Forces in World War I. He did so, hoping that Patrick would lead the Air Service and, more importantly, corral Mitchell.[25] Patrick would prove successful at both.

To no one's surprise, this sequence of events did not please Mitchell. Still sitting as the assistant chief of the Air Service and believing Patrick malleable, Mitchell attempted to coerce him into subservience by threatening to resign if he did not allow Mitchell a disproportionately large say in running the Air Service. Much to Mitchell's surprise, Patrick did not acquiesce to these pressure tactics. Even more surprisingly, Patrick had the support of his superiors, an advantage Menoher did not seem to enjoy. Faced with this response, Mitchell's only option if he wished to maintain his position as assistant chief was to withdraw his resignation. He did so, and from this position Mitchell continued his quest for Air Service independence.[26]

History inaccurately portrays Mitchell in a heroic light as the sole proponent of airpower's independence. From 1919 to 1920, Congress introduced no fewer than eight bills concerning the creation of a separate military-aviation establishment.[27] Two of them, one from Senator Harry New (R-IN) and one from Rep. Charles Curry (R-CA), specifically sought to create an executive department of aeronautics.[28] Additionally, the Crowell Commission, an around-the-world investigatory effort headed by Assistant Secretary of War Benedict Crowell, further promoted the case for a separate Air Service. The *Crowell Report* recommended the establishment of a single department of the air coequal to the Departments of War, Navy, and Commerce.[29] Secretary of War Newton Baker, however, did not support this conclusion, maintaining that the commission served in an informative, not advisory, capacity; the conclusion remained on the record nevertheless.[30]

Even if the Crowell Commission's recommendations had been accepted, practical considerations would have hampered the creation of an independent Air Service. Fiscal restraints during a postwar military reduction in 1920 denied the General Staff the resources needed to increase the size of the service. Noted historian Bernard Nalty cogently surmises that "any expansion of the air arm—whether an increase in the number of enlisted men, admission of Regular officers to flight training, or the granting of Regular commissions to reservists—could come about only at the expense of the other arms of the Army which had demonstrated their importance during the recent war."[31] Gen Henry "Hap" Arnold agreed, noting that "economics and technology probably were the limiting factors and that Mitchell did not help the cause of airpower."[32]

Interestingly, Mitchell had personal fiscal restrictions to deal with despite his affluent background. Poor stewardship of his finances, coupled with his living well beyond his means, required him to seek other sources of income—for example, the writing of articles advocating airpower.[33] Despite

the debacle of the *Ostfriesland* final report, senior leadership still permitted Mitchell to write, albeit with conditions. After Secretary of War Weeks warned Mitchell about publishing for profit as a service member in uniform, he allowed him to write articles, contingent upon the promise that he publish no article prior to War Department review.[34] Mitchell failed to keep this promise and suffered the consequences.

The position of assistant chief of staff of the Air Service required periodic renomination and approval. When Mitchell's first tour as assistant chief ended in 1925, Chief of the Air Service Patrick, who liked Mitchell despite his shortcomings, recommended him for a second tour. Secretary Weeks, however, refused this recommendation because of Mitchell's broken promise. Lt Col Mark Clodfelter notes that "Mitchell had recently angered Secretary Weeks by publishing an explosive series of aviation articles, unreviewed by the War Department, in *The Saturday Evening Post*. . . . [This] caused Weeks to shun Mitchell's reappointment as assistant chief of the Air Service when it came up for renewal in March 1925."[35] Mitchell's biographer quotes Weeks as saying that Mitchell's "course had been so lawless, so contrary to the building up of an efficient organization, so lacking in teamwork, so indicative of a personal desire for publicity at the expense of everyone with whom he associated that his actions render him unfit for a high administrative post such as he now occupies."[36] No longer assistant chief of the Air Service, "Mitchell reverted to his permanent grade of colonel and was transferred to Fort Sam Houston in San Antonio, Texas, as aviation officer for the Army's VIII Corps Area."[37]

Soon after his arrival in Texas, the unfortunate crash of the airship *Shenandoah* occurred, killing the entire crew, including Mitchell's friend and the ship's captain, Lt Cdr Zachary Lansdowne. Mitchell immediately convened a press conference, during which he uttered the infamous words that motivated Pres. Calvin Coolidge to call for his court-martial: "These accidents are the result of the incompetency, the criminal negligence, and the almost treasonable negligence of our national defense by the Navy and War Departments."[38]

The court-martial may well have been the second event in Mitchell's life that he misjudged.[39] Compared to the previous ruckus he had created, the court-martial was almost muted, largely as a result of the Morrow Board, which President Coolidge had convened for two reasons: to resolve the dominant aviation issues and, more importantly, to prevent Mitchell's court-martial from having a significant impact on either aviation or politics. The president calculated correctly. Although the proceedings enjoyed a large following, its effect proved minimal.[40]

The court-martial found Mitchell guilty, but his lenient sentence denied him martyr status, ironically removing Mitchell from the limelight. The court sentenced him to five years' suspension from active duty without pay, which Coolidge amended to allow half pay. Regardless, the reduced income crippled Mitchell's already financially stressed lifestyle, and he resigned from the Army Air Service on 26 February 1926.[41] Afterward Mitchell

sought vindication, continuing to publish books and articles, but he would never regain his influence.[42] Noted airpower historian Phillip Meilinger asserts that "Mitchell was vain, petulant, racist, overbearing, and egotistical. Although his aggressive advocacy of airpower proved entertaining and won much publicity, his antics probably had little effect on swaying either public opinion or Congress."[43]

Objectively, one can understand the motivation to get Mitchell promoted to major general. But despite the best efforts of those dedicated historians who discover and analyze every bit of information, history is not objective. As more years pass between an event's occurrence and its study, different interpretations often emerge. It is better to preserve the memory of Billy Mitchell for what he was, a boisterous airpower advocate who endorsed contrarian techniques to make his points, than for what some people hoped he should have been—a heroic leader in peacetime as well as combat who did not falter in his quest for the independence of airpower, an impossible happenstance considering the subject at hand. No one can take away Mitchell's achievements, which the Army recognized and rewarded throughout his military career, but neither can anyone erase the questionable actions that proceeded from his passionate advocacy of airpower's independence. Mitchell's familial acolytes have gained him an opportunity that he would exploit—one for which he would be forever grateful. For his legacy, however, if the president approves this promotion, it would be only a pyrrhic victory. ❑

Langley AFB, Virginia

Notes

1. Roger G. Miller, *Billy Mitchell: "Stormy Petrel of the Air"* (Washington, DC: Office of Air Force History, 2004), 55.

2. Currently, the president has the legal authority, by and with the advice and consent of the Senate, to issue a posthumous commission to make Billy Mitchell a major general. To date, neither the White House nor the Office of the Secretary of Defense has utilized that authority, a fact verified in e-mail correspondence with SAF/LL on 7 September 2006. See also Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, Public Law 108-375, sec. 564, 108th Cong., 2d sess., 28 October 2004.

3. "House Votes to Posthumously Commission Billy Mitchell as Major General," *Charlie Bass' Capitol Link* 4, no. 28 (6 October 2003), http://www.house.gov/bass/cl_100603.html (accessed 11 May 2005).

4. The medal of honor presented to Mitchell was not the nation's highest military award for heroism in combat. Instead, it was a special medal that recognized his contributions to airpower. George Washington received this kind of recognition for his military successes against the British in 1776. The country has honored three other Airmen with this award: Col Charles Lindbergh, Gen Ira Eaker, and Brig Gen Chuck Yeager. See Miller, *Billy Mitchell: "Stormy Petrel,"* 55; and Douglas Waller, *A Question of Loyalty: Gen. Billy Mitchell and the Court Martial That Gripped the Nation* (New York: HarperCollins Publishers, 2004), 357.

5. John Bresnahan, "Bass Picks Up Family Fight to Honor Mitchell," 11 August 2003, http://www.55srwa.org/0308/08111210-03.html (accessed 11 May 2005).

6. Dissemination of information concerning Mitchell's promotion to major general through Air Force publications was minimal at best.

7. Miller, *Billy Mitchell: "Stormy Petrel,"* 3.

8. Waller, *Question of Loyalty*, 103.

9. Ibid., 80.

10. Miller, *Billy Mitchell: "Stormy Petrel,"* 3.

11. Lt Col Mark A. Clodfelter, "Molding Airpower Convictions: Development and Legacy of William Mitchell's Strategic Thought," in *The Paths of Heaven: The Evolution of Airpower Theory*, ed. Col Phillip S. Meilinger (Maxwell AFB, AL: Air University Press, 1997), 83.

12. Ibid.

13. Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1, *1907–1960* (1971; new imprint, Maxwell AFB, AL: Air University Press, 1989), 22.

14. James J. Cooke, *Billy Mitchell* (Boulder, CO: Lynne Rienner Publishers, 2002), 95–100.

15. Robert P. White, *Mason Patrick and the Fight for Air Service Independence* (Washington, DC: Smithsonian Institution Press, 2001), 23.

16. Ibid., 101.

17. Miller, *Billy Mitchell: "Stormy Petrel,"* 20.

18. Col Phillip S. Meilinger, *Airmen and Air Theory, A Review of the Sources* (Maxwell AFB, AL: Air University Press, 2001), 8. Clodfelter also notes that Foulois returned to the rank of major after World War I. "Molding Airpower Convictions," 91.

19. The National Defense Act of 1920 established the Air Service as a permanent branch, separate from the Signal Corps. The act also authorized that the service be led by an officer in the permanent rank of major general and a deputy in the temporary rank of brigadier general. See Miller, *Billy Mitchell: "Stormy Petrel,"* 22.

20. Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 28.

21. Ibid., 32. Dr. Roger Miller states that after four months on the job, Westover recommended that Mitchell be fired. See Miller, *Billy Mitchell: "Stormy Petrel,"* 22.

22. Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 37.

23. This account coincides with Dr. David Mets's assessment of Mitchell as a "showboater, one who was not at all averse to going outside channels. He used public relations extensively to try to advance his cause and published frequently in national media while on active duty." See David R. Mets, *The Air Campaign: John Warden and the Classical Airpower Theorists*, rev. ed. (Maxwell AFB, AL: Air University Press, 1999), 33.

24. White, *Mason Patrick*, 44.

25. Miller, *Billy Mitchell: "Stormy Petrel,"* 27.

26. White, *Mason Patrick*, 60.

27. Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 29.

28. Bernard C. Nalty, ed., *Winged Shield, Winged Sword: A History of the United States Air Force*, vol. 1, *1907–1950* (Washington, DC: Air Force History and Museums Program, 1997), 74. See also White, *Mason Patrick*, 45.

29. Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 30.

30. Nalty, *Winged Shield, Winged Sword*, vol. 1, 75.

31. Ibid., 79.

32. Mets, *Air Campaign*, 44.

33. Cooke, *Billy Mitchell*, 161.

34. Ibid., 162.

35. Clodfelter, "Molding Airpower Convictions," 102. See also Miller, *Billy Mitchell: "Stormy Petrel,"* 39; and White, *Mason Patrick*, 116.

36. Alfred F. Hurley, *Billy Mitchell: Crusader for Air Power* (New York: Franklin Watts, 1964), 98.

37. Clodfelter, "Molding Airpower Convictions," 102. See also Waller, *Question of Loyalty*, 314. Furthermore, the Army did not view this as a demotion since Mitchell was still responsible for the area stretching from Texas to the West Coast. Waller, *Question of Loyalty*, 2.

38. Miller, *Billy Mitchell: "Stormy Petrel,"* 42. See also White, *Mason Patrick*, 5.

39. The first event was becoming chief of the Air Service. The third was being nominated as Pres. Franklin Delano Roosevelt's secretary of war.

40. Miller, *Billy Mitchell: "Stormy Petrel,"* 42–43.

41. Ibid., 44.

42. Meilinger, *Airmen and Air Theory*, 11.

43. Ibid., 10.

How the Air Force Embraced "Partial Quality" (and Avoiding Similar Mistakes in New Endeavors)

Lt Col Graham W. "Gray" Rinehart, USAF, Retired*

We're also starting a whole new movement called "partial quality." We think it'll have a much larger following.

—David Langford
Fourth Annual National Governors' Conference
on Quality in Education, April 1995

SECRETARY OF THE Air Force Michael Wynne's first letter to the force set out several goals, two of which started the service on a new journey toward "Best in Class" excellence in business practices and "Lean Processes."[1] Expanding these topics in his second letter, he called for "constant examination of our processes in order to recognize better ways of accomplishing the mission," specifically by applying "LEAN concepts beyond the depots and maintenance operations into the flightline and the office."[2] In March 2006, the secretary released an expanded letter to Airmen with more details on this initiative, which had become known as Air Force Smart Operations 21 (AFSO21): "a dedicated effort to maximize value and minimize waste in our operations." In its emphasis on looking "at each process from beginning to end," not just "*how* we can do each task better, but . . . *why* [we are] doing it this way" (emphasis in original), and in its promise to "march unnecessary work out the door—forever," AFSO21 appeared reminiscent of other management revolutions many of us had been through before. The proclamation that "the continuous process improvements of AFSO 21 will be the new culture of our Air Force" could just as easily have been made for the era of Total Quality Management (TQM).[3]

Apparently an Air Force–specific packaging of industrial practice, similar to the Quality Air Force (QAF) program that repackaged TQM, AFSO21 even boasts its own Web site (http://www.afso21.hq.af.mil) and a dedicated Pentagon program office.[4] We might imagine that TQM (or QAF) would have had its own Air Force Web site had the Internet been as developed then as it is now. Because innovations such as Web-based applications and training are commonplace today and because TQM originated when desk-

*Lieutenant Colonel Rinehart retired from the Air Force after 20 years of service. His last assignment was speechwriter to the undersecretary of the Air Force in the Secretary and Chief of Staff of the Air Force Executive Action Group. Now living in North Carolina, he works as a writer and consultant.

top computers were rare, it is easy to think of TQM as the product of a bygone era. But not everyone has forgotten TQM. As one retiring chief master sergeant recently put it, "I've been zero defected, total quality managed, micromanaged, one-minute managed, synergized, had my paradigms shifted, had my paradigms broken, and been told to decrease my habits to seven."[5] During the 1980s and 1990s, the Air Force empowered, quality-circled, and off-sited its Airmen; opened quality-related offices and institutions; and poised itself for a great leap out of the McNamara-inspired past (i.e., away from the Management by Objectives program touted by Secretary of Defense Robert S. McNamara in the 1960s).

From the perspective of the large number of changes in management philosophy Airmen have weathered, AFSO21 seems like TQM or QAF redux, so it behooves us to recall the lessons of our last foray into this battle. Today the remnants of continuous improvement are not what Airmen hoped they would be. Advocates unreasonably applied reasonable ideas, to the point that they were eventually laughed out of professional military education courses (which themselves inexplicably became "developmental education," a phrase having more redundancy than precision). Airmen now snigger at anything that remotely resembles continuous improvement, rolling their eyes and declaring that it "sounds like another quality thing." Furthermore, "lean," "Six Sigma" (another concept borrowed from industry), and AFSO21 all sound very similar to what we heard in the days of TQM.[6]

We might think of the failure of TQM to permeate the Air Force as a battle lost or a battle won, depending on which side we took. The shame of the service's failure to adopt quality-improvement practices the first time around, however, is not that Airmen nurtured an unworkable or unworthy idea, but that they induced its birth prematurely and left it to die. If we're not careful, we may repeat our mistakes with new ideas—even if they are worthwhile.

Some Airmen already appear to be choosing sides for this latest round of initiatives. Therefore, we should examine how worthwhile ideas designed to improve Air Force operations and practices eventually, to quote President Reagan's famous remarks to the British House of Commons, wound up "on the ash heap of history."[7] Hopefully, we may learn how to avoid repeating the same mistakes with AFSO21.

The Cult of Mediocrity versus the Culture of Excellence

The US military adopted the ideas of continuous quality improvement from the commercial sector, which in the mid-1980s suffered by comparison with overseas competitors. To many observers and consumers, the most galling example of the industrial-quality shift was the increasing share of the automobile market held by Japanese manufacturers. Just under two generations after the United States nearly obliterated Japanese industry in World War II, Japan was somehow building better vehicles at competitive prices—and not because of cheap labor. When US industry learned that the Japanese

credited their success to several US practitioners who taught them the quality philosophy in the 1950s—among them Dr. W. Edwards Deming and Dr. Joseph M. Juran—our companies approached those experts, hat in hand. They begged forgiveness for ignoring their teaching for so long and finally listened to what they had to say.

The US military often cited the woes of industry as a rationale for adopting similar quality-improvement practices. According to the *Air Force Process Improvement Guide*, for example, "We in the Air Force face a challenge similar to the fierce competition in consumer electronics and automobiles."[8] By the early 1990s, the Air Force found itself at the forefront of the "reinventing government" initiative: the Air Force had subsumed TQM into QAF, established a Quality Council and a Quality Institute, and had begun holding an annual quality symposium.[9]

In contrast to US industry—which grasped at the quality lifeline because it was drowning in its own failures—by the time the military discovered the quality movement, the Air Force was on its way up and out of a decade of post-Vietnam funk. In the midst of the Reagan-era buildup that would eventually win the Cold War, service people did not always welcome the concepts introduced as *TQM* (a term actually coined in the mid-1980s in a US Navy depot and rarely used by leaders of the quality movement). Industry-trailing companies might flock to quality for fear of falling further behind their competitors, but the military simply did not share that fear. It shouldn't have been surprising that Airmen who saw the quality movement as a good thing—a way to extend our growing military edge and give taxpayers more value for their ever-inflating dollars—were outnumbered by those who saw it as just another square to fill.

Another factor militated against the services' easily adopting TQM and its ilk: the military ethos itself. Perhaps because of its all-volunteer nature, the US armed forces have come to view themselves as different from—and in some ways better than—the business world. Different most obviously in the kill-or-be-killed nature of military duty—the casualty of a corporate raid still goes home safe and sound at the end of the day. Different in the risk of injury or death willingly accepted on a daily basis—which fits the military closer to police and firefighters than to corporate executives. Different also in that the profit motive does not drive the military. As for better: career military members in particular view the services as better in the commitment to shared values and shared sacrifice—the dedication to unit success over personal gain. Thus, corporately derived and bottom-line-focused quality initiatives do not find a ready audience in many military professionals.

Airmen didn't know it at the time, but in the mid-1980s—the beginning of the TQM era—they had begun homing in on a great victory in Operation Desert Storm, which proved that our weapons, training, and personnel were second to none. The general euphoria following Desert Storm and the growing realization that the service had committed itself to a long-term "warm war" in the desert dropped a figurative laser-guided bomb into the corner office of the quality movement. By 2000, TQM and QAF had dropped out

of vogue, and *performance management* became the new watchword.[10] In the end, the Air Force did not get total quality: it got partial quality (PQ). Four main factors accounted for this.

The Four Pillars of Partial Quality

We often see Air Force briefings illustrated with pillars representing key concepts, the idea being that removing a pillar will cause the supported structure to collapse. In the mid-1990s, 10 years after he retired, Air Force general Wilbur "Bill" Creech even published a book titled *The Five Pillars of TQM: How to Make Total Quality Management Work for You*, choosing product, process, organization, leadership, and commitment as the pillars supporting TQM.[11] It seems an odd practice since these days pillars support only the portico of a building—not the whole building itself—but following these leads, we may describe four "pillars" of partial quality: missing the mission, overmanagement, understandardization, and operational success.

Lack of Mission Focus

Precious little of the Air Force's quality movement concerned itself with flying and fighting, let alone defending the United States. For example, of the Air Force Team Quality Awards earned in 1993, only one appeared directly related to war fighting: the one received by Kadena Air Base, Japan, for improving the reliability of LAU-114 missile launchers by 23 percent.[12] Moreover, only one of the papers presented at the first Quality Air Force Symposium clearly dealt with weapons-system issues. That study discussed the activity of an ICBM standardization-evaluation improvement team but did not detail the team's results or output.[13]

That lack of war-fighting focus doesn't mean the emphasis on quality completely lacked merit. In some of the more industrial or service-oriented sectors of the Air Force (e.g., depot maintenance or hospital services), Airmen made great improvements in processes and functions. They created more efficient processes, improved customer service, and reduced costs. These gains were not universal, however. Sometimes the emphasis on productivity and efficiency overshadowed effectiveness, leaving Airmen with the perception that customer-oriented functions like finance and personnel provided worse service than before. In general, we made great strides in many administrative and ancillary functions, but Airmen wondered (rightly) about the military point of it all.

To be blunt, the Air Force did not need the quality philosophy in order to continue its forward-looking, forward-thinking operational traditions. Our entire history is based on the innovation of powered flight, and, from theorizing at the Air Corps Tactical School to testing the latest weapons, Airmen never stopped trying to improve how they accomplish the military *mission*. This effort continues today, as we discuss and debate the best ways to gain and maintain the advantages of space and information.

Could ideas from the quality movement apply to mission areas? Certainly—but how many people tried? Instead of applying Ishikawa charts (also known as "fishbone" diagrams) and force-field analyses to problems in our tactics, techniques, and procedures (TTP), we studied where to put the copy machine or how to fill out forms better.

If new approaches to continuous improvement are to permeate the entire Air Force and not just isolated enclaves, they must orient themselves toward the Air Force's military functions. Improving logistical and service functions *will* benefit the service and even improve the chances for mission accomplishment, but they will not influence the overall military *culture*. Using a new analytical tool or process to improve the way Airmen accomplish the mission—how they gather intelligence or drop bombs or move troops and equipment—gives it a greater chance for acceptance as worthwhile.

Too Much Management, Not Enough Leadership

Airmen bristled at the "M" in TQM, another unsurprising result that turned TQ into PQ. They also quickly saw through the Total Quality Leadership (TQL) terminology as an attempt to hide the truth, and TQL soon faded from view. Airmen saw TQM as an abdication of leadership, especially when it combined with empowerment—another fine concept that became badly mangled and unrecognizable in the end.

We preached the virtues of empowerment without acknowledging that the US military—all branches—was already close to being the most empowered institution on the planet. It is easy to think of the M-16-wielding 18-year-old in that respect, if we don't mind the stereotype, but the real power belonged (and still belongs) to the career noncommissioned officers (NCO) who run our units. Our professional NCOs saw TQM as the newest incarnation of micromanagement: that outlook lingers with the continuing emphasis on useless metrics that measure trivial things, threatening to undermine future improvement efforts. Our NCOs and Airmen would much rather be led than managed, and they perform better when given a clear sense of the mission along with the resources to fulfill it.

The current lean and Six Sigma efforts will follow the same PQ path if they just rain new tools and terminology down on our Airmen. Like so many cases of military loss, the failure of TQM was a failure of leadership: many leaders abdicated as they delegated, ignored the techniques themselves, or simply paid lip service to the whole idea. Airmen have no compelling reason to expect different results this time unless Air Force leaders do what they are expected to do—*lead*.

Too Little Standardization

In perhaps their most serious miscalculation, Airmen took the positive idea of process improvement to mean that those processes need not be standardized. Air Force regulations appeared to fall victim to the TQM putsch (not the "push" to implement TQM but the "putsch"—the attempt to over-

throw traditional Air Force leadership and establish a new quality-oriented regime). It remains unclear whether the change was directly related to TQM. One should note that Air Force instructions do align the service with the Department of Defense, which also issues instructions as opposed to regulations. Nevertheless, it seemed that, overnight, regulations became instructions—and then were treated as if they were really only suggestions until something better came along. (The printed warning "Compliance . . . is mandatory" surfaced later, meaning that instructions eventually became regulations in all but name.)

In the early days of TQM, then, we were allowed to develop solutions for base X independently of those for bases Y and Z—often without much in the way of guidance from higher headquarters. With the loss of Air Force regulations, Airmen lost the rigor and regimen of thorough, centralized reviews of proposed changes. More importantly, they lost the benefit of disseminating new procedures throughout the force. Instead of a system in which regulations codified what worked, that is,

does it work? → *make it better* → *document and standardize*,

the practical (not intended) result was

does it work? → *make it better . . . maybe* → *suggest or keep secret*—essentially an antithesis of the quality philosophy.

In a related case, the Air Force misapplied the quality idea to inspections. Our flirtation with the ill-advised and ill-fated "Quality Air Force assessments" provides the clearest example of this problem, from which Airmen finally extricated themselves. The motivation for that move remains unclear, but it seems to have involved a misreading of Deming's "cease dependence on mass inspection" as meaning "cease inspection" altogether.[14] Deming's point was that inspection is a cost-added activity that takes away from the bottom line *if* one can build in the requisite quality in the first place; in other words, if things are going well, it may cost more to inspect than not to. While that's true in many repetitive processes and industrial cases, the Air Force applied the idea without scrutinizing Deming's own guidance for it. Had Airmen applied his "*kp*" rule, they would have found that in most *military* cases, given that the cost of failure may range from a loss of multimillion-dollar equipment to the losses of lives and liberty, not only inspection but also 100 percent inspection is required.[15] The inspector general was right after all.

To avoid repeating this mistake, the military should codify and disseminate any new procedure, technique, or practice that benefits a unit or an operation to like units—potentially, even to similar units. This procedure is nothing new: the military learned to pass along "what works"—what in the big picture we know as doctrine—long before the quality movement came along. Airmen have good mechanisms for sharing best practices already, whether developed in everyday operations or war games or actual battles—and whether the documentation is a manual, TTP, or technical order. But distributing new guidelines is not enough. We must ensure that people know that the Air Force expects them to live up to the resultant standards

and that the service inspects them on how well they do so. Airmen must maintain the rigor and discipline that make them unique as a military force.

Success of Operation Desert Storm

The bell began to toll for total quality in the Air Force during our unprecedented success in the Gulf War of 1991, but it did not ring loudly enough for us to hear. Organizational inertia carried us several years beyond the war before that result materialized. The quality emphasis of the prewar years *may* have led to improved processes, maintenance, and services that enabled the successful deployment of US troops and equipment in the Operation Desert Shield buildup; however, since the TQM initiative had progressed only a few years at that time, it may be overly generous to ascribe much of the success to quality tools and techniques.[16] But the devastating air war and resultant brief ground campaign did not appear to operate under any TQ mechanism. Furthermore, they reminded us most vividly of the nature of the military mission itself: to destroy our enemies when called upon to do so. Desert Storm and our success in it impressed upon us that the mission is paramount, that our greatest efforts should always support it, and that we need clear objectives and active leadership to accomplish it.

As mentioned before, however, that realization and its effect on TQM in the Air Force did not surface immediately. We continued to emphasize quality practices and assessments for many years after the war; indeed, into the late 1990s, parts of the Air Force still pursued the ideas of continuous improvement. Despite direction in 1995 from the chief of staff to "operationalize" TQM, Airmen generally missed the opportunity to shift their quality efforts to improving the ways they conducted the military mission.[17] For example, the interwar period of the 1990s saw many changes in the way the Air Force organized and deployed for forward action, and quality-improvement ideas and tools *could* have contributed to making those changes—if they had been used.

It appeared, for instance, that the air (now "and space") expeditionary force (AEF) concept was born only of necessity—to cope with the high tempo of Operations Northern Watch and Southern Watch—rather than, say, emerging as an output of a careful plan-do-study-act cycle.[18] The initial AEF was "an airpower package (usually between 30 to 40 aircraft) that . . . [could] deploy to defuse a developing crisis situation, to quickly increase a theater's airpower capability, or to maintain a constant theater airpower capability."[19] By the time the concept was applied Air Force–wide in 1998, it was billed as a way to "reshape [the Air Force] from a Cold War juggernaut to a more flexible force" and to produce "a less-stressful life for Airmen because they will be able to plan for known deployments in advance."[20] Its "fundamental objective," however, was "to enhance . . . operational capabilities . . . while sustaining a viable force that can also provide those capabilities in the future."[21] Its strengths, weaknesses, difficulties, and successes notwithstanding, if the AEF concept *were* somehow conceived using any

quality-movement methodology, our leaders were leery enough of tying those changes to quality that they didn't share that fact with us.

Today Airmen are fighting to secure the success of Operation Iraqi Freedom—another fantastically effective initial campaign—and to secure victory in the global war on terrorism, on our terms. The full campaign will be longer, more brutal, and more difficult—and those fighting in it need not be burdened with AFSO21 and the like unless it helps them better detect the enemy, his weapons, and his intentions. If lean processes and other initiatives cannot improve battlefield operations, then frontline commanders and troops have every right to question their overall usefulness. On the other hand, if these processes can help secure a more complete victory, commanders and Airmen may be willing to accept and implement them.

Excellence in All the Quality Force Does

The Air Force rank and file did not embrace the old quality movement; given a few years of retrospect, that is not surprising. It was not entirely surprising at the time either. A 1993 report on a survey conducted at Pope AFB, North Carolina, noted that "many individuals see problems with the way the Air Force is implementing TQM."[22] As is often the case, optimism sometimes trumped realism. In a paper titled "Is QAF Destined for Failure?" Capt Kenneth R. Theriot concluded that QAF would prevail: "When management commits its resources to all aspects of quality, and where a quality-friendly culture is established and nurtured, the TQ process will succeed."[23] Success is never guaranteed, however, so we should view AFSO21 with cautious optimism. Even Niccolò Machiavelli warned his prince that "nothing is harder to manage, more risky in the undertaking, or more doubtful of success than to set up as the introducer of a new order."[24]

To better state the case, "It is not those who are well who need a physician, but those who are sick."[25] It is hard to believe in ourselves as the most powerful military force in the world and still believe we have room for improvement. Recent experience shows that we are the strongest and most respected air (and space) force in the world and that our consistently high level of performance will make any new quality-improvement efforts difficult for many people to adopt. But Airmen know we're not the perfect air force—and if new initiatives will help us accomplish the mission better, we should be willing to give them a try.

Indeed, Airmen continue to improve the way we fly and fight without really thinking about it. Each of us would reject the idea of accepting PQ if presented in terms of shoddy work or service. This applies in our personal lives to consumer products, bank transactions, or restaurant meals, but it also holds true if the product is body armor, the transaction is an air tasking order, or the meal is in the chow hall. Privately or jokingly, we use phrases like "good enough for government work," but in our everyday lives we seek the highest quality we can afford because quality is not a bad thing.

That bears repeating: *quality is not a bad thing*. Leaving things better than we found them and doing a little more than expected are hallmarks of the fine professionals serving in every Air Force unit—every US military unit—everywhere in the world. Being the best and doing the best are part of our national identity, something that Airmen depend on now and will continue to depend on in the future.

Maybe—hopefully—we will reach the point where we can fulfill and exceed our third core value of "excellence in all we do" by pursuing continuous improvement without resorting to slogans and programs; without obsessing over metrics out of the blind desire to measure something, anything, even if it's the wrong thing; without attaching some negative stigma to studying a process closely enough to know how to improve it; and without compromising our first two core values of "integrity first" and "service before self." Maybe we can adopt practices that add value and effectiveness to our military (i.e., battlefield) operations and not just to enabling functions behind the scenes. Maybe, as we move forward with lean, Six Sigma, and AFSO21, we will remember and not repeat the mistakes of the TQM era.

But the fact remains that we are a fine fighting force, the standard against which others are judged, protecting the greatest country in the history of the world. We will continue to get better because it's the natural thing—the right thing—for us to do. ❑

Cary, North Carolina

Notes

1. Hon. Michael W. Wynne, secretary of the Air Force, "Letter to Airmen," 3 November 2005, http://www.af.mil/library/viewpoints/secaf.asp?id=191.

2. Hon. Michael W. Wynne, secretary of the Air Force, "Letter to Airmen: Persistent Situation Awareness in Resource Management," 6 December 2005, http://www.af.mil/library/viewpoints/secaf.asp?id=189.

Lean processes use resources effectively, with minimal waste. The term *lean* is descriptive, not an acronym, although it is sometimes capitalized.

3. Hon. Michael W. Wynne, secretary of the Air Force, "Letter to Airmen: Air Force Smart Operations 21," 8 March 2006, http://www.af.mil/library/viewpoints/secaf.asp?id=219.

4. SSgt C. Todd Lopez, "Smart Operations 21 Office Formed at Pentagon," Air Force Print News, 11 May 2006, http://www.af.mil/news/story.asp?id=123020236 (accessed 22 May 2006).

5. CMSgt Gerard "Jerry" Gething, superintendent of the Secretary and Chief of Staff of the Air Force Executive Action Group (retirement remarks, Andrews AFB, MD, 31 March 2006).

6. "Six Sigma" refers to a process-improvement approach aimed at reducing the rate of defective products. A process operating under statistical control at plus-or-minus three standard deviations (three sigma) from the mean (the arithmetic average) will have a predictable outcome, with only about three items per 1,000 produced outside those statistical limits. A process operating under control at Six Sigma (six standard deviations) will produce only about three items per *1,000,000* outside the limits—thus offering greater predictability and less wasted effort. For information about the link between lean, Six Sigma, and AFSO21, see SSgt C. Todd Lopez, "Air Force Improving Production with Smart Operations 21," Air Force Print News, 9 January 2006, http://www.af.mil/news/story.asp?storyID=123013978 (accessed 25 April 2006).

7. "'The Evil Empire,' President Reagan's Speech to the House of Commons, June 8, 1982," http://www.mtholyoke.edu/acad/intrel/evilemp.htm.

8. *Air Force Process Improvement Guide: Total Quality Tools for Teams and Individuals* (Maxwell AFB, AL: Air Force Quality Center, n.d. [1991]), iii.

9. These actions occurred in addition to developing a new vision and mission as well as codifying core values, basic principles, and operating styles. See, for example, Karen Bemowski, "The Air Force Quality Flight Plan," *Quality Progress* 27, no. 6 (June 1994): 25.

10. TSgt Michael Spaits, "Air Force Simplifies Quality Processes," Air Force Print News, 2 February 2000, http://govinfo.library.unt.edu/npr/newsroom/00146.html (accessed 1 May 2006).

11. See Bill Creech, *The Five Pillars of TQM: How to Make Total Quality Management Work for You* (New York: Penguin Books, 1995).

12. Bemowski, "Air Force Quality Flight Plan," 28 (sidebar).

13. Capt Michael S. Lamb Sr., "A Tale of Two Teams," in *Proceedings: Quality Air Force Symposium, 1993: The Quest for Quality* (Montgomery, AL: Air Force Quality Institute, 19–22 October 1993), 269.

14. This was the third of Deming's 14 points. See W. Edwards Deming, *Out of the Crisis* (Cambridge, MA: Massachusetts Institute of Technology, Center for Advanced Engineering Study, 1986), 28–31.

15. By the *kp* rule, the proportion of defective items (p) is compared to the ratio between the cost to inspect each item (k_1) and the cost of repairs, rework, and so forth, if a defective item fails (k_2). If p is greater than k_1/k_2, the rule calls for 100 percent inspection. If failure is taken as either a lost battle, Class A mishap, or "broken arrow," the cost of inspection (k_1) will almost always be much less than the cost of failure (k_2). Therefore, even a very small defect rate would call for 100 percent inspection. See Deming, *Out of the Crisis*, chap. 15.

16. References linking the first Gulf War to the quality movement are scarce. Lt Gen Vernon J. Kondra wrote a paper titled "Operation Desert Shield–Desert Storm: Focus on Quality," presented at the Juran Impro Conference in 1991 and included in the conference proceedings. See Bemowski, "Air Force Quality Flight Plan," 29.

17. "Air Force Manpower Agency," Air Force Fact Sheet, March 2006, http://www.af.mil/factsheets/factsheet.asp?fsID=3663 (accessed 25 April 2006).

18. The plan-do-study-act cycle, essentially the scientific method applied to practical problem solving, was one of the quality-improvement tools taught by Dr. Deming.

19. Brig Gen William R. Looney III, "The Air Expeditionary Force: Taking the Air Force into the Twenty-first Century," *Airpower Journal* 10, no. 4 (Winter 1996): 5–6, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj96/win96/looney.pdf. The AEF was "the brainchild of [then] Lt Gen John Jumper and his Central Command Air Forces . . . staff" (5).

20. Sandra I. Erwin, "Air Force Realignment Aimed at Boosting Retention, Morale," *National Defense* 83, issue 541 (October 1998): 22.

21. Lt Gen Donald G. Cook, Col Robert Allardice, and Col Raymond D. Michael Jr., "Strategic Implications of the Expeditionary Aerospace Force," *Aerospace Power Journal* 14, no. 4 (Winter 2000): 8, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj00/win00/cook.pdf.

22. The comment was part of the interpretation of results from the survey item "TQM could work in the Air Force if some modifications were made" as compared with the item "TQM works in the Air Force." Julia Palladini, "Total Quality Management: Perceptions and Attitudes of Military Personnel Assigned to Pope Air Force Base, North Carolina," in *Proceedings: Quality Air Force Symposium*, 82–83.

23. Capt Kenneth R. Theriot, "Is QAF Destined for Failure?" in *Proceedings: Quality Air Force Symposium*, 230.

24. Niccolò Machiavelli, *The Prince*, 2d ed., trans. and ed. Robert M. Adams (New York: W. W. Norton, 1992), 17. Machiavelli continues, "Such an innovator has as enemies all the people who were doing well under the old order, and only halfhearted defenders in those who hope to profit from the new." Ibid.

25. Jesus of Nazareth, quoted in Luke 5:31 (New American Standard Version).

Never tell people how to do things. Tell them what to do, and they will surprise you with their ingenuity.

—Gen George S. Patton

Editor's Note: PIREP *is aviation shorthand for* pilot report. *It's a means for one pilot to pass on current, potentially useful information to other pilots. In the same fashion, we use this department to let readers know about air and space power items of interest.*

Reflections on Command

Maj Steven Minkin, USAF*

THIS ARTICLE DRAWS on the author's experience gained from commanding three different comptroller squadrons in the Air Force—two in US Central Command Air Forces' area of responsibility and one in the continental United States. It describes the key events and activities a commander will face and need to prepare for during the first few months of leadership. By no means exhaustive, the suggestions address some of the more significant matters commanders will confront in their tours. By following this advice and thus laying a good foundation in the early months, leaders will dramatically improve their chances for success.

Month One: Taking Charge and Setting the Course (before the Change of Command)

As an incoming commander, you must have some overlap with your predecessor. Any outgoing commander who does not put together a transition plan does you and your future unit a disservice. You need to determine the appropriate amount of time to spend with the person you replace in order to grasp important issues, remembering that too little time will leave holes in your knowledge and that too much leads to awkwardness from having both of you in the office. As the new leader, you will be excited and ready to get started; nevertheless, you must wait until after the change of command before directing or tasking the squadron.

> Brig Gen Joseph Reheiser advises asking the departing commander three questions: What are you most proud of in the unit? What did you not do well that you could have improved upon? What things did you not get around to? These questions will offer insight into the unit's strengths, identify areas for quick improvement, and suggest new initiatives to take early in your command.

The Change-of-Command Ceremony

Your big day—the time when you take the reins of your new unit—is important because it introduces everyone to the person taking over. Additionally, the ceremony gives you an opportunity to make a good first impression on your squadron, fellow commanders, and senior leaders. The time you spend getting to know folks at the reception will prove more influential than your remarks from the podium,

*Major Minkin is an instructor at the Defense Financial Management and Comptroller School at Maxwell AFB, Alabama. The author wishes to thank the Air Force for giving him the opportunity to command its fine men and women.

which should be short and gracious—save your vision and plans for commander's call.

Your First Day in the Big Chair

Congratulations! You are now a commander. Almost every book on command rightly teaches that you should not make changes immediately after coming on board. You don't yet have enough knowledge of how your unit works to make changes to improve the efficiency of your team. It takes about a month to understand the link between your squadron and the wing.

The First Month's To-Do List

You'll need to tackle a number of items right away. Actually, you might consider addressing some of them before you take over. At the least, they will stimulate your thinking about what you need to do initially.

Review the Wing's Current Policy Letters. It is imperative to know your boss's position on key issues so you don't change something that lies beyond your authority.

Get on Your Boss's Schedule. Do so as soon as possible after the change of command. Think about what you want to ask beforehand (e.g., regarding his or her expectations, philosophy, and agenda for the wing/group and your squadron). Be bold enough to find out items in your unit that please your boss and those you can improve. Make sure you have this conversation before you change anything in order to stay in line with your boss's expectations.

Put Your Leadership Philosophy, Standards of Performance, and Expectations in Writing. Defining your leadership style after assuming command is too late. Although your approach and style will change over time as you learn and grow, you should have established a foundation before you take command. By writing down your leadership philosophy and expectations, you will consistently tell the same facts to new personnel as they arrive in your unit. I incorporated these matters into a slide show that I used at my first commander's call and with new arrivals throughout my command tenure. Doing so ensured that every person in the unit received the same rules of the road and understood my approach and vision for the squadron.

Learn about Mandatory Meetings. You may want to attend all meetings the first time to determine which ones require your presence as opposed to your representative's. Remember that you may not have the same interests as the previous commander and therefore may want to attend meetings your predecessor did not.

Learn Working Hours. Find out whether your people work shifts as well as their normal duty hours.

Know Where You Want to Take Your Unit. Before you started commanding, you probably had an idea of what you wanted to accomplish. Assemble your senior staff, and share your vision with them before presenting it to the entire squadron. This approach allows your senior team to offer feedback that can hone your vision. More importantly, they will begin to understand and accept your vision and serve as advocates to the rest of the squadron.

> When you tell your people you want to take them in a certain direction, let them know why. After all, human nature prefers the status quo. They have a right to know why your vision of the promised land is better than their current surroundings. Your troops need to understand that the temporary discomfort of leaving familiar environs will bring greater rewards. This principle applies to the military, the Boy Scouts, a religious organization, or even a nonprofit group. Use it wisely, and it will reap huge dividends.

Things to Learn

During your first month of command, you should become familiar with several areas. The following will bring you up to speed in no time.

Awards and Decorations Program. It is vital that you understand how the awards and decorations program works at your base. Learning the unwritten rules governing what deco-

rations correspond to the different levels of performance and rank will save you time and prevent your having to redo packages. In addition to medals, determine which awards are available for your personnel, both quarterly and monthly. Take time to write nomination packages for your folks who deserve recognition and awards for doing work that makes you look good. No commander is too busy to assemble award packages—that is part of the job! Furthermore, recipients should not have to write their own package, an uncomfortable task for modest people. Besides, it's your responsibility—not theirs. Take time to sit down with the president of the quarterly awards board to review winning packages from the past few quarters. Looking for elements such as writing style, action words, and so forth will give you valuable insight into preparing a successful package for your squadron.

> Establish a firm, recurring suspense date for monthly and quarterly awards packages, and clearly define the routing process. Tell your personnel not to wait until three days prior to this date to write the packages. Your supervisors can write a quarterly package with two and a half months of work completed. If anything spectacular happens during the last two weeks of the quarter, you can add a line easily enough. Write the nominations early so you can present the best product to the board.

Know Your Way around Base. If you don't know where you are going, how can you lead people to where they need to go? Your troops should not think that their commander is lost.

Quickly Grasp the Strengths and Weaknesses of Your Personnel. Leadership is an art. If you don't know which people in your squadron need hands-on leadership and which are self-motivated, you are doomed to fail. Applying the same approach to everyone can stifle both creativity and mission accomplishment. Many years ago, a dear friend of mine told me that "there are two types of people in this world: movers and shakers and people who are moved and shaken." Categorize your personnel, and lead them accordingly.

Learn the Organizational Climate. You can become familiar with the organizational climate by walking around, listening, and reading body language. Walking around lets your people know that the boss wants to visit personnel in the trenches, where they carry out the mission. Listening and observing also give you a good feel for organizational matters.

> If you have never learned how to read nonverbal communication, consult a book on the subject. You can learn more about your folks through their body language than from their words. Take time to discover resources available to help make your job easier. Numerous support agencies will help you, most of which will send representatives to your office to present their services.

You Survived the First Month

Congratulations on your first month as a new commander! During the second month, you will become more comfortable with procedures and begin the journey of implementing and fulfilling your vision.

Month Two: Implement the Vision (Moving Where You Want to Go)

Now that you have your feet planted firmly on the ground, focus on where you want to lead the squadron. At this point, you should begin implementing your vision. If you have done things correctly so far, you should have shared your vision with the squadron during the first staff meeting, commander's call, and every other opportunity you have had to share it with your troops. Don't underestimate the power of the people in the trenches for fulfilling your vision. All too often staff meetings

involve just senior leadership, and the folks doing the work hear the boss's vision only at formal events. All of us have sat through commander's calls and formal functions thinking, "When do I get out of here?" Is that the place to share your vision with your troops and expect them to retain it? Continually speak to your vision, and ensure that your senior staff does the same.

> Do not schedule a commander's call or staff meeting on a Friday afternoon if you plan to speak on topics you expect your folks to remember. When they return to work on Monday, they will have forgotten everything you said. Choose the day and time of your vision-sharing meetings wisely to make sure your troops will listen and retain what you say.

Block time in your schedule to share your vision with each section in your squadron. All members must understand the vision so they know where your plans will take them. Sharing your vision only with supervisors keeps the troops—the people who perform the mission—in the dark, prohibiting them from seeing the big picture.

During this month, you should know the squadron's leaders, both formally and informally—they are now your targets! You have the responsibility of training them and honing their leadership skills. All too often we fail to give our midlevel noncommissioned officers (NCO) adequate leadership training. When they become senior NCOs, we wonder why they still work as technicians. The answer is simple: we have not provided them adequate opportunities to lead. People develop leadership skills over time. As the squadron commander, you are the developer.

Activities to Make Leaders

As a new commander, you can develop the squadron's leaders in a number of ways.

> Without a vision, your squadron will fail. During a conversation I had with a captain who led a unit at a deployed location, I asked her how things were going and if the troops had a good handle on what to accomplish. The captain replied, "Not yet. I can't get my folks to think long term; they do stuff with a 90-day mind-set. They won't solve problems and fix processes." I asked her if she ever took time to figure out where she wanted the unit to be at the end of her tour. She said she didn't have time to do that because she stayed too busy running around. The organization went in circles because the leader lacked a vision. If the captain had taken time to establish one and tell her troops where they were heading, many of the problems would have disappeared. Without a vision, a squadron will stumble.

Develop a Leadership Plan. What do you want to teach your folks to help them grow? Make a list of those items, and turn each of them into a lesson plan. Topics should include goal setting, time management, verbal communication, effective bullet writing, and public speaking.

Give Your Students Homework. Reinforce the skills you teach, and create opportunities for the troops to practice these skills by assigning homework. Providing your students time to brief the squadron or to prepare award packages under your mentoring eye will help them build confidence in their new abilities.

Conduct Progress Reviews. Periodically evaluate projects with your developing leaders. Don't criticize them; rather, make sure they are going in the right direction. Remember that the intent of these projects is to help your developing leaders learn new skills, a process that entails making mistakes and missteps. Be patient, and always be supportive.

Schedule Time with Your Students. Set aside time to talk with your people about their progress. Discussing what they did right or wrong is a vital step in leadership development. It gives them lessons learned to add to their leadership tool kits.

Have a Leadership Breakfast Club. Meet with your developing leaders for breakfast at least once every three weeks. Discuss the leadership tools you want them to emphasize, and turn them loose to learn them. Limit this group to your rising leadership stars. Discuss the leadership topic from the last meeting, including the successes and pitfalls they uncovered, so everyone can learn from each other. I cannot overemphasize the importance of this meeting: the development of new leaders occurs here.

Teach Great Leadership Curricula. I relied heavily upon the writings of Dr. John Maxwell, especially his book *The 21 Irrefutable Laws of Leadership*—an incredible foundational work for developing leadership talent. We purchased the curriculum on video, and I personally facilitated the course over seven weeks to my senior leadership. I then offered the course to the rest of the squadron. Attendance was mandatory for senior leadership but voluntary for everyone else. I was amazed by the number of people who wanted to develop their leadership skills—over 90 percent of my Airmen participated.

After you complete the first course, let one of your up-and-coming leaders facilitate the course to the next group in your squadron. Doing so will provide an additional leadership-development opportunity for this person.

Why Do I Need a Bunch of Leaders?

Perhaps you've wondered, "Why do I need a bunch of leaders around me? I'm in charge!" Here's why: without leaders in your organization, no one else will understand or be able to implement your vision. Your leadership team serves as the fuel that runs the engine to fulfill your vision. People who lean on the cliché "It's lonely at the top" have done a miserable job of grooming fellow leaders in their units.

Personnel Issues

As a commander, you must make a favorable impression on new arrivals. Establish a process early on so that you don't have to worry about it in the future. Meet the new folks assigned to your unit. Their first impression will last a long time. You can do several other things to make them feel right at home.

Write Personal Welcome Letters. Place letters on the new arrivals' desks so they see them when they sit down to work on the first day. If they do not work directly for you, make sure their flight chief writes one.

Have Their Desks Ready. Furnish supplies, working computers, and any other items they need to do their jobs. They shouldn't have to go begging for supplies on their first day. A special welcome team took care of this for me.

Walk Them Around. Personally show the new people different sections of the squadron. It is well worth the time spent. If the new troops work in a flight, have the flight chief do the walk-around.

Month Three: Keep the Ship on Course (Staying on Track to Reach the Finish Line)

You should be in a groove by now and have a feel for what works well in your organization and what needs attention. Concentrate on developing a key leadership skill: good time management. Take time to plan and prepare the tasks and jobs you want to accomplish. Don't carry them around in your head; you won't remember them all, and you will do things out of priority. Remember the time constraints: usually you have two years to implement your vision. Completing low-priority jobs first wastes your most valuable resource—time.

At the beginning of this month, you will know what you want to accomplish on your tour. Make a list of everything you want to do—no matter how important or trivial—and

then prioritize the items. For example, assign each one a number, and rank each as A, B, or C priority, with "A" items the most important. Then numerically rank each task, ranking all the A's against each other, all the B's against each other, and so forth. Thus the most important task is A1, and the least important is C-18, for example. After prioritizing, assign each task a starting month, and don't skip priorities. For instance, work on the A projects in the next two months, B projects three to five months hence, and C projects six to eight months away. Integrate new items into the plan as they arise. This system may seem cumbersome, but I guarantee that you won't be able to sleep at night until you implement it. This level of organization keeps you focused and on track.

> If you have not taken a course in time management, do so. I recommend the Franklin Covey Day Planner. The planner itself is a great tool, but take the class on how to use it.

Thinking Outside the Box

As a commander you have the privilege of establishing new ideas and processes. Organizational inertia perpetuates the "always did it that way" mentality. Gather all the ideas on how to improve your unit, and implement them—after all, you lead the parade.

How do you facilitate the realization of these good ideas? I instituted a monthly meeting called "Redrawing the Box." I facilitated the meeting, attended by a representative from each section of the squadron. We discussed creative ways to solve a problem or improve a squadron process. Limiting attendance to those junior in rank, preferably Airmen, allowed them to speak candidly and share their ideas with me—an arrangement that provided great insight into areas needing improvement. These suggestions often just needed a push from me to get under way. The young troops never stopped amazing me with their incredible ideas.

I also encouraged the free flow of ideas by meeting with each group in my squadron—officers, civilians, NCOs, and Airmen—for lunch once a quarter. Prepare for the meeting. Don't show up without some thought-provoking questions to start conversation. Your people will give you some terrific ideas on how to improve your unit. This is also a wonderful time to continue sharing your vision and plans for the unit in a friendly environment.

Finally, I created an "Einstein Award" to encourage good ideas. Each month I sent squadron members a problem needing a solution (e.g., what we could use as our quarterly awards gift or how we could improve our reputation on base), and they dropped their suggestions in any of the Einstein boxes located around the squadron. I didn't have a specified format or answer sheet because I wanted to make it easy to respond and encourage participation. At the end of the month, I picked the best response, announced the winner at our weekly squadron meeting, and presented him or her a traveling trophy—a bobble-head Einstein doll on a platform that displayed the names of all past winners. It looked silly, but it worked. In fact, the winners took pride in decorating Einstein during the month they kept the trophy on their desks. Best of all, I not only received suggestions for the question I asked but also got solutions for other issues in the squadron.

Full Speed Ahead!

A good plan and a strategy to stay focused are critical to your success as a commander. Make sure you have both in place early to get the most out of your short tour.

Month Four: Keeping Morale Up (Be the Cheerleader)

Maintaining morale poses a big challenge to any commander. Oftentimes, issues involving morale depend upon the unit's location—deployed or stateside.

Deployed Issues

Deployed personnel go through several stages. Each may have an effect on morale.

Wonder. Newly arrived personnel are faced with figuring out what they need to do and how to do their jobs. Everyone can remember his or her first month in a new unit. Morale is not a problem at this point. Unit members arrive in the country ready to hit the ground running. Just ensure that they feel welcomed.

Gung Ho. The old team has left, and the folks now assigned to your unit know how to perform their jobs well. The troops are extremely motivated, ready to make their mark, and get the job done. Morale is easy to maintain. Don't become complacent, however. You can keep morale high by encouraging activities, get-togethers, sporting events, and so forth. Most importantly, take time to recognize your troops when they do things right!

In the Groove. You should have smooth sailing at the halfway point of the tour. At this time in the rotation, the team members' jobs have become old hat, so sustaining good morale is critical. Because the troops realize they still have some time to go before leaving the country, their morale can fall quickly. To prevent this from happening, you need to be fully engaged: keep your folks on target and in a positive frame of mind during this important phase of the tour.

Ready to Go. At this point, troops adopt the "I am out of here" mentality. Interestingly, during this phase morale has risen again since members know they will soon leave. If you did your job well during the previous stage, you will have it easy now. That is, if you have kept their morale up, your personnel will enter this stage fired up and still performing well. If you did not, then your troops have their minds on going home—not on doing the job at hand.

Knowing when you must press hard on morale issues will certainly help you prepare to head off any problems before they surface. Do not forget that during personnel changeovers, you will have part of your squadron in the "Wonder" phase and part in "Ready to Go." Lead accordingly!

Stateside Issues

Handling morale in a stateside squadron differs from doing so in a deployed unit. In stateside squadrons, personnel leave at the end of the day and start family time. You have little contact with them after they depart at the end of the day or leave the base for the weekend.

How do you keep morale high in this challenging environment? First, promote an active booster club for the squadron. Let your booster-club president know that he or she plays a vital role in sustaining morale by planning appealing events. If your president lacks good leadership skills, teach them quickly. The club's success or failure will affect the unit's morale.

Second, make sure that the booster club has a yearly plan. Require your president to create an annual calendar and review it. Look for gaps in the schedule, paying particular attention to scheduling an event shortly after busy times in your squadron's workload to provide members time to slow down and unwind.

Third, send an invitation to families for squadron events. Those that cater to children will attract more people. We invited families to commander's calls and awards ceremonies to enhance squadron morale and provided child care during those functions. Obviously, this is a great way to involve your troops' spouses.

Finally, the most effective technique I employed at my last squadron entailed holding events called "Celebrating Success" instead of the traditional commander's calls. We opened these events to families and hosted them during duty hours, late afternoon, or evening. By presenting awards and decorations earned over the past quarter during Celebrating Success, we provided time to reflect on the squadron's accomplishments. Because your troops will do incredible things, you need to recognize them in public so they hear how well they are performing. I tied the booster club into the event by having its members provide refreshments, thus creating a party environment and enticing troops to stick around after the awards to visit and relax. During this time, I also shared my vision with everyone in attendance and charted the course for next

quarter. By having the families hear this, they could support their spouses as they worked hard to fulfill the vision. If you share your vision only once in a while, you will not bring it to fruition. You must continually restate it and share it with your people.

> Using commander's call to recognize, reward, and celebrate achievements is far more beneficial than showing tons of briefing slides that no one remembers. We cover the mandatory items at other squadron functions.

Morale Sets the Speed

The morale of your unit not only determines how well it performs but also affects your ability to lead it in pursuit of the vision you established. Celebrate the success of your folks often and publicly; take swift and appropriate action on matters that impair morale. Applying these two principles will help make your command tour a successful one.

Conclusion

Commanding an Air Force squadron is one of the greatest jobs you will ever have. It is a challenging but rewarding experience. Remember that you establish the course your squadron will follow, you determine the atmosphere of the unit with your words and attitude, and you create the air of optimism that will motivate and drive your personnel to new levels of professional and personal achievement. Led correctly, your squadron will affect your group, wing, base, and possibly your command or the entire Air Force. By investing time in developing your people, you can mold the Air Force's leaders of tomorrow.

There is no magic formula or model that will teach you everything you need to know to be a successful leader. Don't worry; the Air Force has chosen you to command for a reason. I hope that the information in this article will prove beneficial to you during your command experience. Take your squadron to new heights. Keep learning, and keep leading. ❑

Command and Communities of Practice

Maj Christopher Daniels, USAF
Maj Don Grove, USAF
Maj Ed Mundt, USAF, Retired*

IN PROFESSIONAL MILITARY education classes across the Air Force, the debate rages: "Are leaders born or made?" From the perspective of those being led, the answer might be more often than not, "Who cares?" The pertinent issue for these people is not whether nature or nurture produces leadership but how the organization ensures that those entering positions of authority are prepared to assume their leadership responsibilities. For newly assigned leaders, on-the-job training may be the least preferred course of study. Unfortunately, this is the norm in both the public and private sectors today. Civilian managers, whether promoted from within or hired from outside the organization, have to pass through learning periods in their new positions. This inevitably results in some level of trial and error, which can be difficult both for the managers and their subordinates. Despite excellent training courses, new Air Force commanders will experience a similar learning curve upon assuming command of their units. Regardless of the previous experience or training one has received, unanticipated personnel, financial, and operational war-fighting issues await every newly assigned commander.

Across industry and the military, leaders are turning to a new, unconventional approach to inquiry, innovation, and problem solving. They are creating or joining ongoing professional forums, which are groups of leaders connected through a social network and empowered to "ponder common issues, explore ideas, and act as sounding boards."[1] Through group interaction, the members can quickly assimilate information and create a knowledge base from which to practice the art of leadership. The group benefits by gathering and processing greater quantities of information more quickly than any single member could alone; the individual members benefit by being able to share in the collected wisdom of the group. This article discusses this new tool for professionals, called a community of practice (COP). It will address the theory behind the concept and then look at ways that the concept is being put to work to aid military leaders today. Specifically, the article will examine the Army's effort to leverage its community of company commanders to accelerate combat effectiveness, address the Air Force's new initiative designed to advance the art and practice of squadron command, and conclude by offering a vision for the future of military leadership in a global community of leadership expertise.

Knowledge and Communities of Practice

Organizations have resources. They have people, plant, and capital—resources that can be quantified and inventoried in an organization's books. Another asset—one that is far more difficult to quantify and inventory—is knowledge. Yet without knowledge, all of an organization's other assets are practically worth-

*Maj Christopher T. Daniels is an Air Force Secretariat contracting staff officer for the deputy assistant secretary for contracting, Office of the Assistant Secretary of the Air Force for Acquisition, Headquarters US Air Force. Maj Donald B. Grove is the search and rescue representative for Current Operations Division, Kenney Headquarters, Pacific Air Forces. Maj Edwin L. Mundt is retired and lives in San Antonio, Texas.

less. The question to consider then is how can leaders accumulate, harness, and expand this all-important resource for their personal growth and the growth of their organizations? To answer that, one must first understand the nature of knowledge within an organization.

Knowledge resides in every organization, both explicitly and implicitly. An organization's explicit knowledge is readily available to its leaders and members. This knowledge includes published and catalogued organizational information, such as operating instructions, technical manuals, and other governing directives. It can also include personnel information, logistics data, mission-performance reports, and other historical data. One can think of an organization's explicit knowledge as the accumulated knowledge one could amass about an organization from the documentation alone. But there is much more to consider.

Much of an organization's knowledge is undocumented. It resides within the minds of its leaders and members, both past and present. This implicit knowledge combines with an organization's explicit knowledge to achieve mission results. For example, two military units, both with similar personnel and equipment and identical missions, are facing operational readiness inspections. Both have the same technical orders and the same governing regulations. Both have access to the same manuals, logistics pipelines, training, and educational opportunities. Yet one unit soars through its inspection with outstanding results, while the other experiences major problems. The explicit knowledge was the same, but arguably there were major differences in the level of implicit knowledge between the organizations. One might argue that the failing unit was simply a victim of poor leadership, but the counter argument is simply that the failing unit's leader did not possess the knowledge needed to be a good leader. Ultimately, the argument still revolves around knowledge.

One challenge for the aspiring leader is tapping into the implicit knowledge that already exists within his/her organization and expanding that knowledge for the benefit of all. Brian Lehaney, head of knowledge and information management at Coventry University, recommends creating "a bond between the social and professional links of practitioners in particular areas that enable them to share experience and understanding."[2] Within an organization, creating such a bond is relatively easy. The members typically enjoy physical proximity, share common interests and experiences, and are focused on similar organizational objectives. For the leader, however, the challenge is somewhat more complicated. The leadership resources he/she needs may not exist within the organization. On the contrary, the organizational members are very likely to turn to the leader for wisdom, knowledge, and guidance. To whom does this leader turn? The leader needs to reach out to a broader community, to tap into the wealth of knowledge that exists implicitly beyond the confines of his/her organization. How is this possible?

The answer may lie in the COP learning model. In their excellent work on the topic, *Cultivating Communities of Practice*, Etienne Wenger, Richard McDermott, and William Snyder offer this definition of COPs: "Communities of Practice are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and experience in this area by interacting on an ongoing basis."[3]

Through COPs, members with similar interests, responsibilities, and concerns can readily communicate and exchange information for their mutual benefit even if they do not belong to the same organization or serve in the same geographical area. Members share a passion for excellence and a genuine, altruistic desire to nurture the profession and help colleagues succeed. Over time, the community will develop a "body of common knowledge, practices, and approaches."[4]

The COP aims to minimize redundant research efforts, enhance collaboration and exchange of ideas, and help leaders make timely and accurate decisions. The "virtual porch" provides a mechanism for individuals to keep each other current in the developments of a shared discipline; it also assists with better top-down communication by providing multiple and more-direct methods of disseminating information and ideas. Rather than being a det-

riment to individuality, this continuously updating baseline, once readily accessible, allows leaders to "focus their creative energies on the more advanced issues."[5] The key is the "socialization" of information dissemination; it's the manifestation of a long-accepted truism: "The perception of and the management of social networks is intrinsic to the leadership role."[6] Managed efficiently, those social networks can lead to tangible organizational improvements.

Business leaders have taken advantage of this group dynamic for years, under such labels as *distributed communities* and *knowledge management groups*. Examples of enduring COPs reside in many organizations and are called "learning communities" at Hewlett-Packard Company, "family groups" at Xerox Corporation, "thematic groups" at the World Bank, "peer groups" at British Petroleum, and "tech clubs" at Chrysler. In industry, the stated objectives for these joined communities are to "enable colleagues to learn from one another through the sharing of issues, ideas, lessons learned, problems and their solutions, research findings and other relevant aspects of their mutual interest; and to generate tangible, measurable, value-added benefits to the business."[7] As depicted in figure 1, this common context is the basis for relationships with like-minded leaders, resulting in social capital that can be leveraged to accelerate the learning curve, prevent rework, and enhance organizational performance.

IBM Global Services began experimenting with COPs in 1995 by establishing a knowledge-management program. The company's experience resulted in vibrant, global COPs that made intellectual capital accessible to practitioners who were connected to the domain, creating relationships and tangible business results (table 1). These managers discovered practical advantages to facilitating social networks to disseminate knowledge throughout a worldwide organization.

IBM and other companies discovered a new tool to advance knowledge management for leaders and practitioners. They found that these self-sustaining groups were "held together by common interest in a body of knowledge and are driven by a desire and need to share problems, experiences, insights, templates, tools, and best practices."[8] The question re-

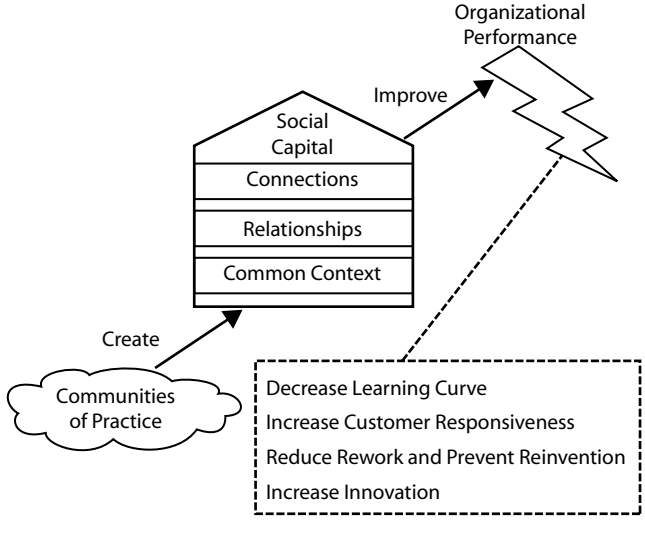


Figure 1. COPs links to organizational performance through social capital. (Adapted from E. L. Lesser and J. Storck, "Communities of Practice and Organizational Performance," *IBM Systems Journal* 40, no. 4 [2001]: 833.)

Table 1. COP advantages

Advantage	*Connections*	*Relationships*	*Common Context*
Decrease learning curve	Find experts	Mentor and coach new employees	Understand rules of the firm
Reduce rework and prevent reinvention	Find commonalities and the individuals who developed them	Establish positive reputation	Understand situational nature of knowledge
Increase innovation	Leverage weak ties that provide exposure to new ideas	Build safe environment for brainstorming and testing new ideas	Understand which problems are of common interest

Adapted from E. L. Lesser and J. Storck, "Communities of Practice and Organizational Performance," *IBM Systems Journal* 40, no. 4 (2001): 839.

mained as to whether this type of virtual community had implications within the military.

US Army's Premier Community: *CompanyCommand*

US Army majors Nate Allen and Tony Burgess became friends as cadets at West Point and later found themselves commanding companies at the same time. Commanding is often described as the best job anyone will ever have. Nevertheless, the daily challenges a commander can face during peacetime and wartime are overwhelming—both Allen and Burgess felt the pressure. As captains, they lived next door to each other and spent many nights sitting on Allen's front porch exchanging lessons learned. They quickly realized that their conversations were having a positive impact on their units and felt that this wisdom would be helpful to others. Therefore, the duo wrote a book in 1999 about command, *Taking the Guidon*, which was widely circulated on the Internet.

The book was a big success and spawned much energetic dialogue amongst other company commanders. This unanticipated reaction provided the motivation to create a venue where others could add to the conversation. As a result, in the spring of 2000, Allen and Burgess, with the assistance of West Point classmates, financed and established C*ompanyCommand.com*, which over a period of two remarkable years evolved into *CompanyCommand.army.mil* (*CompanyCommand*). They were confident that a site designed for fellow company commanders would provide the cyberspace platform needed for uninterrupted, professional straight talk in a rapidly changing environment through nonattributive collaboration.

What started as informal conversations between Allen and Burgess on a literal front porch has turned into an invaluable tool, a virtual front porch, for Army company commanders. The site has taken those informal conversations that commanders were already having in an effort to learn and improve their leadership experience and transformed them into elaborately organized threads of discussion. *CompanyCommand* now has more than 10,000 registered users. Their collective expertise weaves through obstacles to provide solutions for a myriad of military issues. Beginning as a chat room prior to Operation Iraqi Freedom, *CompanyCommand*'s popularity grew, so the Army decided to officially endorse the project and create a place for it within its formal training arena.

In 2002 West Point added *CompanyCommand* to its servers and began paying the activity costs. The Army also sent the founders to postgraduate school, and they have become professors at West Point where they operate the site as part of their jobs. *CompanyCommand* is building leadership skills and passing along nuggets of knowledge to maintain a strong

Army at the operational level and defeat the adversary who wants to harm it. Gen Gordon Sullivan, 32nd chief of staff, US Army, credits *CompanyCommand* with "collectively raising the bar" in transforming the Army.[9]

How did this come to be? There may be a generational reason. Today's junior officers, born in the late sixties and early seventies, are noticeably self-reliant and very confident in their abilities. Additionally, they grew up and have participated in peacekeeping missions in the post–Cold War era such as Kosovo, Bosnia, Somalia, and Haiti, where the impact of their tactical-level decisions often had strategic-level effects. The Army has capitalized on this combination of factors, and *CompanyCommand* has been vital in junior officers' development to accept and consider the enormous responsibilities current times have placed on them. This has worked out very well for the Army. Decentralized-execution taskings, such as directing close air support during Operations Enduring Freedom and Iraqi Freedom, demonstrated that company commanders had to possess the ability to make strategic-level decisions at the operational level with the same certainty and timeliness as ever.

Junior officers also grew up using the Internet, having optimized the sharing of information via the electronic medium. Because the community is Web-based, commanders with Internet connections have access from the most remote locations in the world and can talk to other commanders in real time on a daily basis. In the war on terrorism, these officers are teaching each other how to adapt to this type of fight, and the Army is encouraging them to do so. This is one example of how the Army has transformed to deal with a new kind of enemy—one that is agile, innovative, and constantly adapting.

To meet those challenges, commanders are hungry for lessons learned by others and real-time assistance from peers. The old mold is no longer sufficient. For instance, one of the US Army's first post–Cold War experiences with peacekeeping operations occurred in 1993 during Operation Restore Hope in Somalia. After the first rotation, nearly 18 months passed before the white paper on peacekeeping operations was published and disseminated. Had *CompanyCommand* been established then, it would have provided the opportunity for those at the tip of the spear to immediately share with others what they were learning. Thankfully senior Army leaders recognize this need and are encouraging their young commanders to participate in the company commander's community.

CompanyCommand access is strictly limited to authorized commanders to protect trust and promote free sharing of information. The site is divided into 12 areas:

- leadership
- war fighting
- training
- fitness
- force protection
- maintenance
- supply
- soldiers and families
- professional reading
- rally points
- commander's log
- unit of action

Each of those is broken into discussion threads on everything from mortar attacks to discipline problems, and from coping with fear to motivating and counseling soldiers. Commanders advise each other on how to kick in doors and how to protect their companies. Discussions are open and honest. The power of the relationship and trust factor cannot be taken for granted—this inspires participation.

CompanyCommand offers connection to peers who are trying to take the same daunting hill with combat-ready units. Their stories prepare others mentally for what they will face when it is their turn. A prime example of the benefits of this preparation is the story of a company commander who routinely visited a classified sister site to research insurgent tactics in Iraq. He read a discussion thread expounding on how insurgents were wiring propagandist posters on walls to detonate improvised explosive devices (IED). The thread explained that as

US soldiers marched into an area, they would rip down these posters. Insurgents knew this and took it as an opportunity to maim and kill the soldiers by wiring posters with IEDs. When this company commander's unit was on patrol, one of his soldiers approached a poster to tear it down, only to be stopped by the company commander. Upon closer examination, the commander's educated hunch was correct—the poster was wired. Fortunately, he was armed with knowledge that saved a young soldier's life.[10] This story and many others demonstrate that facilitating real-time information exchanges through a cadre of passionate *CompanyCommand* forum leaders and sharing from common experience can make a difference—even save lives! Company commanders have discovered that the incredible happens when dedicated leaders in a profession connect, share what they are learning, and encourage one another to improve.

CompanyCommand, which began as a grassroots effort, is now considered an appropriate model for the way professional-development needs of operational commanders are met throughout the entire US military—a new, critical, and immediate forum to get lessons learned to those who need them most, as demonstrated in figure 2. Learning is driven by experience, and the most recent component to adopt this strategy is the United States Air Force.

Communities of Practice in the US Air Force

The former commandant of the Air Force's Air Command and Staff College (ACSC), Brig Gen Randal D. Fullhart, initiated an effort to establish a COP for Air Force squadron commanders in September 2005. He chartered a team of 15 ACSC students to design, implement, and manage *Commanders Connection* (https://sqcc.maxwell.af.mil) as a COP to promote the sharing of squadron commanders' capabilities, vulnerabilities, lessons learned, and best practices throughout the US Air Force. All 15 members of the development team had previous command experience and represented a wide array of specialties, including operations, contracting, acquisitions, personnel, and maintenance. They completed the project in just eight months, bringing their COP live to the Air Force in May 2006. The successful *CompanyCommand.com* became the benchmark for the Air Force because of its emphasis on military command. The group

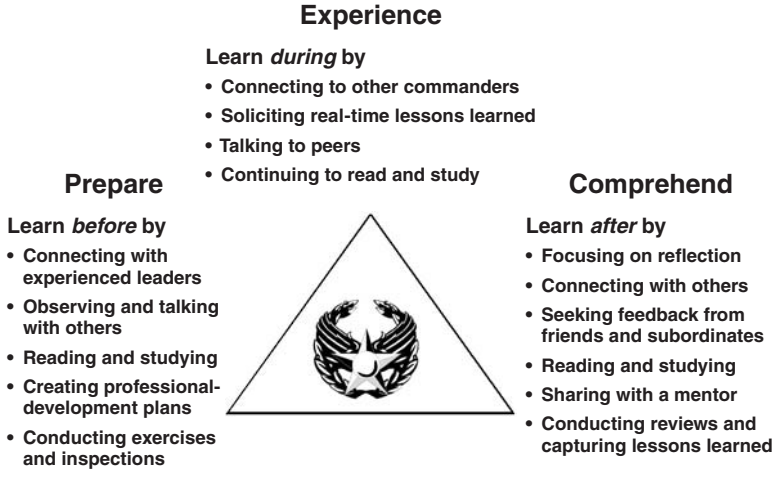


Figure 2. Learning process within a community. (Adapted from Nate Allen and Tony Burgess, *Company Command: Unleashing the Power of the Army Profession* [West Point, NY: Center for the Advancement of Leader Development and Organizational Learning, 2005], 16.)

examined many other COPs as well in an effort to learn from others' successes and shortcomings. From this benchmarking, the development team put together a COP designed for success.

The published vision of *Commanders Connection* is to advance the *practice of command* by linking Air Force squadron commanders with a *community of effective practitioners* developing an environment responsible for the promotion and sharing of knowledge and *lifelong learning*. In short, the purpose is to facilitate collaboration throughout the Air Force squadron-commander community in order to hasten the learning curve and solve everyday challenges. In doing so, the COP develops and stewards the tools, insights, and approaches needed by members; provides a forum conducive to resolving issues through highly innovative solutions and ideas; and assists members with the stresses and challenges unique to squadron command in an academic, nonattributive manner. Membership is focused on former, current, and named squadron commanders, though exceptions exist for commanders of select detachments and flights.

Additionally, the COP provides an avenue for sharing best practices and policies for command. As a repository of information, this helps minimize redundant research endeavors, engaging all job specialties through collaboration and exchange of ideas. The squadron-commander COP also provides a mechanism for individuals to keep each other current in the developments of a shared discipline, providing multiple and more-direct methods of disseminating information and ideas. The combination of static and dynamic information can help commanders save time and make timely, accurate decisions.

Consistent with COP theory, the Air Force's *Commanders Connection* has a well-defined domain, community, and practice. The *domain* includes current, selected, and former squadron commanders or tactical unit-level equivalents. The *Commanders Connection community* is founded on a Web-based knowledge-management system developed by Tomoye, a COP industry leader in enterprise-collaboration software solutions (www.tomoye.com). The *practice*, or knowledge taxonomy, consists of seven broad content categories or forums:

- Airmen and families
- inspections
- mission
- resources
- tips for command
- education and training
- other programs

The seven forums are further broken down into specific topics consisting of static information shared with others and dynamic discussions between members, or a mix of both.

A key to the success of *Commanders Connection* is strong leadership and support at all levels. At the senior level, the ACSC commandant serves as the *champion* of the program, providing the "guidance, funds, visibility, [and] legitimacy."[11] The community *manager*, the distance-learning division of ACSC, holds responsibility for the overall operation of the community, to include budget, program oversight, and liaison with the community champion. A select group of former commanders attending ACSC includes *community leaders* who provide day-to-day leadership for community discussion, content, membership, marketing, and Web-site management. They also form the core group from which *forum leaders* are selected and are responsible for management of the seven individual forums. Community members arise from the community at large to lead specific topics under those forums. The *topic leaders* either volunteer or are asked by forum leaders to lead, based on demonstrated topic knowledge and involvement. Community leadership is not mandatory for membership and participation.[12]

Commanders Connection is not a COP pioneer in the Air Force. Today, one can find a COP for just about any topic imaginable. The Air Force's repository of COPs is on the *Air Force Portal* (www.my.af.mil), where there are some 3,000 COPs in existence. The COPs are categorized into 20 overarching topics, spanning from operations to foreign military sales, and from test and evaluation to security. Key

metrics from the Air Force Portal indicate that 25 percent of those are thriving. Based on all 3,000 communities, the COP's visitation rates (fig. 3) increased some 44 percent in calendar year 2005 to about 2.3 million per month, while e-mails exchanged among participants (fig. 4) rose approximately 35 percent to an average of 220,000 each month. Meanwhile, the number of documents uploaded for others to use (fig. 5) climbed 80 percent to 48,000 per month, and the number of documents viewed by COP members (fig. 6) nearly doubled to a

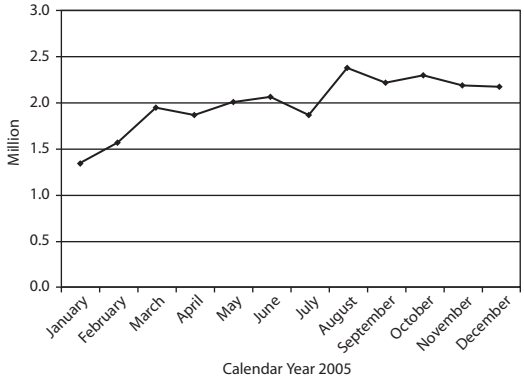


Figure 3. Number of COP viewers. (Compiled from US Air Force, *Knowledge Now* "Metric Entry" Web page, https://wwwd.my.af.mil/afknprod/ASPs/Metrics/Entry.asp?Filter=OO [accessed 16 January 2006].)

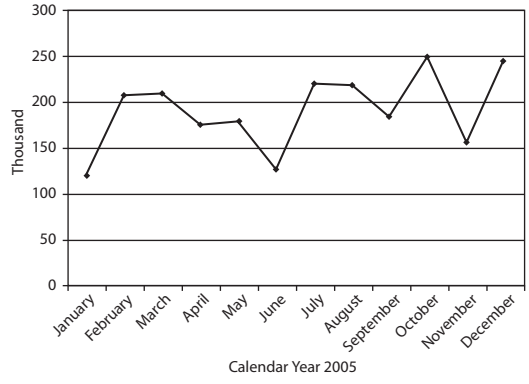


Figure 4. Number of e-mails sent among COP participants. (Compiled from US Air Force, *Knowledge Now* "Metric Entry" Web page, https://wwwd.my.af.mil/afknprod/ASPs/Metrics/Entry.asp?Filter=OO [accessed 16 January 2006].)

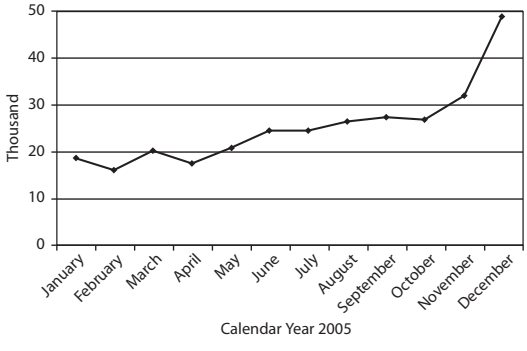


Figure 5. Number of documents uploaded. (Compiled from US Air Force, *Knowledge Now* "Metric Entry" Web page, https://wwwd.my.af.mil/afknprod/ASPs/Metrics/Entry.asp?Filter=OO [accessed 16 January 2006].)

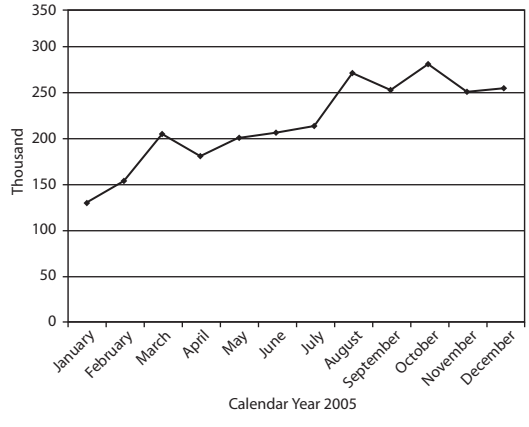


Figure 6. Number of documents viewed. (Compiled from US Air Force, *Knowledge Now* "Metric Entry" Web page, https://wwwd.my.af.mil/afknprod/ASPs/Metrics/Entry.asp?Filter=OO [accessed 16 January 2006].)

maximum of 281,000 in one month. Though this is but a snapshot, it is clear from the positive trends in those metrics that participation in COPs is steadily growing. So what about the 75 percent of COPs that are not prospering?[13]

There appear to be some key principles that determine how well a community will do, and designing the community around those principles from inception is vital. According to Wenger, McDermott, and Snyder, seven principles will create "aliveness" and opportunity for growth:

1. *Design for Evolution.* Design for evolution is rather self-evident. While it is important to have guiding goals to begin a community, the end state depends on where the members take it, and the design of the community must allow for this inevitable evolutionary process.

2. *Allow an Outsider's Perspective.* Another ingredient is allowing an outsider's perspective to generate growth. This includes community members evaluating other COPs to glean from them, as well as allowing others to offer input into their own COP.

3. *Invite Different Levels of Participation.* It is also imperative to invite different levels of participation. Individual interests in the COP will vary as much as the individuals, from actively helping others through message and document posts, to simply connecting with others and to just being a bystander watching the activity. The COP must accept and accommodate this variety.

4. *Develop Both Public and Private Community Activity.* Developing both public and private community activity is based on relationships. As Wenger, McDermott, and Snyder point out, "the key to designing community spaces is to orchestrate activities in both public and private spaces that use the strength of individual relationships to enrich [public] events and use events to strengthen individual relationships."[14] In a mass gathering, it is important to encourage relationship building, which will enhance effectiveness at both the communal and private levels.

5. *Focus on Value.* The importance of focus on value stems from the voluntary nature of community participation. Members will continue to participate only if they realize personal gains. While it is normally quite challenging to trace benefits of a COP, a simple method is to open up discussion between members and seek examples of how the COP has helped members. This will help current and potential members see the true impact of the community.

6. *Combine Familiarity and Excitement.* It is also important to combine familiarity and excitement in a community. As a community settles into routine events and topics, it builds relationships, trust, and comfort that promote candid discussion. The danger of this, though, is creating a stagnant or closed community. To avoid those pitfalls, leaders should introduce excitement through such avenues as inviting a controversial speaker, holding meetings between members that wouldn't normally meet, and introducing new and innovative ideas or products from an outside source to spark creativity and diverse thinking and conversation. While familiarity is important to community health, so is occasional, well-thought-out excitement; balance between the two is the key.

7. *Create a Rhythm for the Community.* Balance is also important for a healthy COP. Creating a rhythm for the community includes regular activities such as meetings, conferences, Web-site activities, luncheons, and so forth. It also includes special projects and events. Too many or too few regular activities as well as too much change or too little variety are the challenges to finding this balance.[15]

The developers of *Commanders Connection*, determined to produce a thriving community, addressed these characteristics in their design. Still, several challenges face the infant group,

and the first and biggest is convincing very busy squadron commanders that involvement is valuable and will save them time and energy in the long run. Focusing more attention on dynamic discussions rather than posting static information will help create a true community instead of just another Web site. At the same time, community leaders recognize that both static and dynamic content must remain relevant and that commanders need to regularly contribute both types. For this vibrant activity to occur, the large population of observers initially expected must quickly be turned into participants. Finally, since the community managers are ACSC faculty and not current commanders, it will be vital for the day-to-day leadership to remain a grassroots effort, that is, the former commanders of the current year's student body. Those community leaders, in turn, must keep a focus on bettering *Commanders Connection*, not simply on their ACSC grade.

To this end, they will need to focus attention on evaluating *Commanders Connection* for viability. Their evaluation must first look for signs of self-sustaining, that is, evidence that the community is not staying alive solely on the efforts of the community leaders but on community participants at large. They must then develop metrics that measure the community's "health" and identify areas requiring change. They should also look for signs that the community is ready to branch off into other communities, such as specific functional areas like maintenance, munitions, contracting, and operations. Encouraging relationships beyond the Web site will also be vital, as will maintaining the correct balance of familiarity and excitement. This level of effort will ensure that *Commanders Connection* builds upon the solid foundation established in its infancy and grows into a mature community advancing the practice of command.

These examples of knowledge management and the use of COPs demonstrate that mentorship and collaboration have become an enduring aspect of effective business and military leadership. Today's fast-paced lifestyles make communities relevant, and technology makes them possible.

So Where Do We Go from Here?

As stated above, due to the unique, challenging nature of their mission, Air Force commanders can benefit from both mentorship and peer-to-peer collaboration. It is up to the commanders to support the COP, both from advocacy and contribution. In addition, many other groups have unique and demanding specialties that could benefit from a vibrant, engaged community in which all members frequently contribute to the body of knowledge and access information relevant to their daily needs. Professional centers of excellence (professional military education courses, technical schools, Air Force Institute of Technology, etc.) should assess the value of COPs for their populations. Further, as the Air Force expands its expeditionary role, the Army model, focused squarely on war fighting and combat practices, takes on greater significance and relevance.

The US Air Force continues to distinguish itself as a world-class organization in many ways. An important element in maintaining organizational excellence is mentorship, both formal and informal, which passes on tradition and technique from one generation of leaders to the next. Throughout their careers, Airmen learn from others and incorporate ideas and practices into their own distinct leadership styles. Until now, social learning groups have been limited in number and size due to technological and practical constraints. However, online communities can now instantly link every member of a large group and provide real-time access to the collective repository of information, knowledge, and experience. By expanding the pool of "peer mentors," Air Force commanders can access every member of the community, seek out specialized skills or experiences, and submit questions or solicit opinions in a collaborative environment.

The ultimate goal for leaders at every level, especially participating members of vibrant COPs, is to nurture "a set of common approaches and shared standards that create a basis for action, communication, problem-

solving, performance, and accountability" while maximizing teamwork, collaboration, mentorship, and synergy.[16] Through social contacts using online collaboration, the Air Force has a good start with *Commanders Connection*. It is up to other communities to follow suit. ❑

Notes

1. W. M. Snyder, "Communities of Practice: Combining Organizational Learning and Strategy Insights to Create a Bridge to the 21st Century" (paper presented at the Academy of Management Conference, Boston, MA, August 1997).
2. Brian Lehaney et al., eds., *Beyond Knowledge Management* (London: Idea Group Publishing, 2004), 46.
3. Etienne Wenger, Richard McDermott, and William Snyder, *Cultivating Communities of Practice* (Boston: Harvard Business School Press, 2002), 4.
4. Ibid., 5.
5. Ibid., 11.
6. Prasad Balkundi and Martin Kilduff, "The Ties That Bind: A Social Network Approach to Leadership," *Leadership Quarterly* 16, no. 6 (December 2005): 941–61.
7. Wenger, McDermott, and Snyder, *Cultivating Communities of Practice*, 1.
8. Lehaney et al., *Beyond Knowledge Management*, 47.
9. Nate Allen and Tony Burgess, *Company Command: Unleashing the Power of the Army Profession* (West Point, NY: Center for the Advancement of Leader Development and Organizational Learning, 2005), 200.
10. Ibid., 189.
11. Wenger, McDermott, and Snyder, *Cultivating Communities of Practice*, 214.
12. Becoming a member of *Commanders Connection* is straightforward for current and selected commanders. Simply visit the Web site (www.maxwell.af.mil/sqcc) and select "Send us an email" to request an account, or visit https://wwwmil.maxwell.af.mil/sqcc and select "Request an Account." Once you submit the short application, someone will respond within 24–48 hours. If you do not readily fit the mold for membership but wish to join, simply provide your rationale. Each situation is considered on a case-by-case basis.
13. US Air Force, *Knowledge Now* "Metric Entry" Web page, https://wwwd.my.af.mil/afknprod/ASPs/Metrics/Entry.asp?Filter=OO (accessed 16 January 2006).
14. Wenger, McDermott, and Snyder, *Cultivating Communities of Practice*, 59.
15. Ibid., 57–62.
16. Ibid., 38.

The best leader is the one who has sense enough to pick good men to do what he wants done and self-restraint enough to keep from meddling with them while they do it.

—Pres. Theodore Roosevelt

Lines of Excellence

Executing a Balanced Organizational Vision

Maj Raymond M. Powell, USAF*

CONGRATULATIONS! You've been selected to lead 1st Widget Maintenance, the unit command for which you've waited your whole career. You polish off your favorite leadership ideas—a grab bag of techniques you've assembled over the years of leading, following, and observing. You've learned that you're supposed to supply your troops with a philosophy, so you've filled your change-of-command ceremony with lofty proverbs and visionary axioms. You hit the ground running, emphasizing "mission first, people always" and eagerly pushing four or five of your favorite tools of the trade, refined over 15 years' experience in the widget business. You will be involved but not overbearing, comprehensive yet focused, inspirational but not cheesy. Most of all, you will emphasize your core belief—that the business of 1st Widget Maintenance is to support the war fighter!

That was then; this is two hours later—after your secretary has assigned you your first stack of paperwork to review and sign. Halfway through the pile, the first sergeant arrives to report that one of your junior troops has been detained following a domestic dispute. As he's recounting the sordid details, the phone rings. The installation commander just drove by one of your buildings whose yard doesn't meet the standards of his "Combat Cleanup" program. Naturally, you drop everything to restore his inner harmony. Support the war fighter—but first rake the leaves.

You spend the rest of the day and half the evening fighting fires and getting yourself caught up on paperwork. By week's end, you've spent a surprising amount of precious time and energy managing the aftershock of back-to-back security violations and meeting with opinionated spouses, while your loyal subjects have already begun poking holes in the pet projects you introduced on day one. By month's end, you've got the whole unit working 12-hour days to prepare for a visit from the Widget Inspection Agency, and a legion of objections and naysayers have wrestled most of your magnificent plans to earth. Grand Vision, meet Stark Reality.

Ground Rules and Pitfalls

Fortunately, reality need not be so bleak, and you need not find your leadership agenda engulfed by the tyranny of the urgent. You can still cultivate a high-performing unit if you accept a few basic ground rules:

- If you've never studied the art and science of organizational management, start immediately. Successful leaders attain results through competent management of people, processes, money, time, information, and other resources in pursuit of organizational goals. Although it may be fashionable to say, "I'm a leader, not a manager," in truth you cannot lead at the organizational level without exercising sound management skills.
- Your capacity to introduce your own breakthrough improvements and dazzling new ideas is insignificant compared to the potential locked up in your people. Rather than serve as the wellspring of all bril-

*Major Powell is commander of Detachment 1, 82d Communications Support Squadron, Al Udeid Air Base, Qatar.

liance, set the conditions for success by encouraging and channeling a culture of excellence.

- Your troops must thoroughly understand both *how* and *why* your unit does what it does. Technical or managerial incompetence is an obvious dereliction, but failure to grasp the unit's fundamental purpose leads to self-absorption and preoccupation with procedural detail.
- A host of mundane nonnegotiables will compete vigorously for your most precious commodity—time. You'll find it easy to neglect crucial responsibilities such as combat readiness and long-range planning when late paperwork is the crisis of the day, the sewer backs up, or the commanding general's e-mail doesn't work. Effective management can reduce but not eliminate the extent to which these events intrude upon your schedule.

A clear unit vision exerts its power during conflict between urgent and important matters by enabling your people to execute your priorities while you're tied up in meetings and attending to crises. In fact, when Gen James Jones, former commandant of the Marine Corps, set out his "Ten Principles for Marine Leaders," vision led the list: "Have a vision—Develop a strong sense of where you want to go. . . . Invest time in articulating the vision."[1] Unfortunately, most young leaders prove unable to follow through on this basic principle, frankly because it's harder than it looks.

Part of the problem is that our doctrine and training deceptively represent the envisioning process as simple, intuitive, and discrete. You yourself may have been led to believe that inspired vision will naturally spring from your fertile mind and that once you develop and broadcast it, you can move on to more substantive matters while your newly enlightened troops dutifully move out. This is pure fantasy. Executing an organizational vision requires a long-term commitment to get it right and then see it through.

Your first temptation along that path will involve simply *neglecting* the development or execution of a vision, allowing the tyranny of the urgent to crowd it off your plate. Perhaps even more insidious, however, you might allow *divergence* to set in by repeatedly broadcasting a particular vision despite your obvious preoccupation with other, incongruent, priorities. The former says, "I don't have time for vision," while the latter simply screams, "Hypocrite!" A third common culprit, *diffusion*, intrudes when your vision becomes either too vague or disjointed to be functional. It may look good on PowerPoint, but it doesn't translate easily into a guide to action. Finally, myopia sets in when leaders become so preoccupied with their overly narrow, rigid vision that they can't recognize external realities, threats, or opportunities.

So what characterizes a vision that actually survives first contact with reality to become an organization's guiding force? To begin with the obvious, a well-constructed vision should center on fulfilling your unit's mission and should clearly reflect your boss's priorities. It should instill a forward-looking mind-set that positions your unit to move confidently and aggressively toward bold objectives. Above all, it must be *executable* along four balanced imperatives or *lines of excellence*: modernize, operationalize, professionalize, and standardize (MOPS).

Lines of Excellence: Basis for a Balanced and Executable Vision

Before I develop the MOPS model, let me first explain what I mean by *lines of excellence* and how this framework is foundational to executing your unit's vision successfully. In recent years, it has become fashionable for senior military commanders to frame objectives within the "logical lines of operation" construct, by which they synchronize myriad disparate tasks to achieve a desired end state.[2] By capturing the complexity of large-scale operations, logical lines of operation compel subordinates to recognize the full spectrum of activities required to realize comprehensive mission success. They provide staffs a flexible

framework from which to tailor plans to meet these objectives. Simply put, *logical lines impose balance* when fixation on urgent, obvious, or familiar problems is most tempting.

In Iraq, for example, Task Force Baghdad developed five lines of operation for its stability and support efforts: combat operations, training and employment of security forces, essential services, promotion of government, and economic pluralism. This approach recognizes that killing bad guys, extending sewer lines, and building government institutions all play an indispensable role in forging a secure and democratic nation. According to the task force's Maj Gen Peter Chiarelli and Maj Patrick Michaelis, to neglect one in favor of another would have represented a dangerously "lopsided approach."[3]

You face essentially the same challenge, and by adapting this model into a steady-state, unit-level guiding force, you can harness its balanced and practical approach to infuse a *culture of excellence* throughout a *skilled, motivated, and aggressive* workforce. This is less a matter of uttering flowery prose than of consistently expressing unit values and objectives in terms that the troops can get behind. The four meaningful, memorable, and forward-leaning lines of excellence represented by MOPS are designed to serve as the executable arm of your organizational vision (see fig.).

Modernize: Improve, Upgrade, Expand, Innovate

During his presentation of the Navy's budget for 2006 to Congress, Secretary of the Navy Gordon England stressed his department's commitment to a culture of "continuous *improvement* in both our effectiveness and our efficiency" (emphasis added).[4] The modernize track represents this imperative to get every member of your unit dialed into "making it better" every day. Great ideas are far more

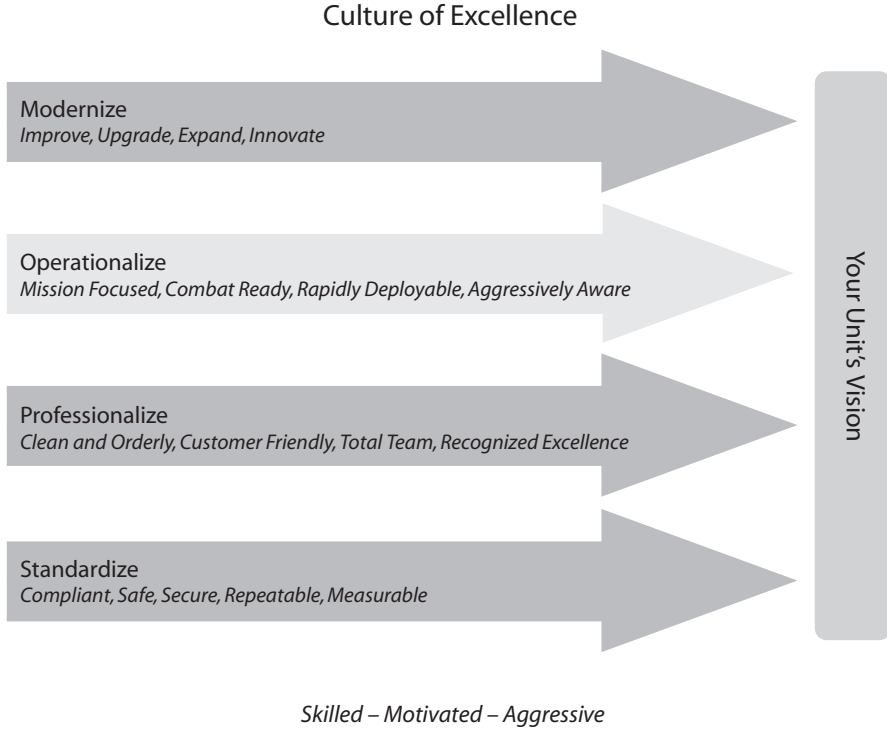


Figure. The MOPS framework provides a balanced approach for achieving organizational vision.

likely to bubble up from below than they are to emit from the inspired head shed, but moving those ideas from concept to action can prove extremely challenging, particularly in hierarchical organizations. Junior personnel frequently believe, with some justification, that no one takes their ideas seriously. It's up to you to break this inertia and cynicism by seeking, promoting, and celebrating progressive thinking. Up and down the chain of command, you want your folks chomping at the bit to effect improvements in combat capability, mission effectiveness, responsiveness, efficiency, and service.

One of the most productive techniques for generating improvements in operational military practice—the after-action review—entails "a professional discussion of an event, focused on performance standards, that enables soldiers to discover for themselves what happened, why it happened, and how to sustain strengths and improve on weaknesses."[5] Aviators recognize this concept as the postflight debrief—a critical deconstruction of each mission to capture and leverage lessons learned. By following up major operations, exercises, and other significant events with focused after-action reviews, you send your people a clear message that you demand honest, constructive criticism and that you don't tolerate comfortable inertia.

Further evidence of achieving a modernizing culture occurs when your requirements begin to grow far beyond your budget because your people always bombard you with ways they want to *upgrade* or *expand* current capabilities. Of course, I'm not advocating mindless spending. In fact, although it may seem counterintuitive, waste will more likely result when you're ineffective at identifying opportunities and requirements. After all, if you can afford everything on your list, you have no need to prioritize. Moreover, as Air Force colonel James Kolling points out, " 'Unfunding' something that's always been seen as a must-pay . . . in order to invest in a new idea or initiative is a powerful indicator of priority and willingness to support innovation."[6]

This is an important point because developing an *innovative* military culture seems to run contrary to the military predisposition toward standardization. Indeed, a natural tension exists between the two—standards are imperative but not immutable. Much conventional wisdom just begs to be rewritten by an aggressively modernizing organization. Push that envelope by encouraging your troops to break the mold of how it's always been done. Challenge the wise elders to actively elicit creative new solutions from their younger troops. When their ideas seem infeasible, tell them, "I'm not sure we can get there from here, but I like the way you're thinking. What do you propose?"

Operationalize: Mission Focused, Combat Ready, Rapidly Deployable, Aggressively Aware

It may seem obvious to say that your people need to be *mission focused*—that is, to know the overarching purpose of your unit and comprehend the cost of mission failure. But such an understanding can prove strikingly elusive due to another natural tension: procedural integrity versus flexibility. You clearly need your checklists and rule sets lest every routine action become an improvisation, but dull allegiance to these tools can easily undermine your operational edge. If you deny your customers the use of critical capabilities for the sake of obsolete or overly rigid regulations, you have done the enemy's job for him.

Because formal rules and procedures generally lag a step behind the state of the art, they are constantly challenged by mission changes and technological advances. The United States has recently seen this dynamic play out on the evening news, as our lawmakers have struggled over whether mechanisms established to generate intelligence and protect civil liberties need to adapt to new twenty-first-century threats. Since both the security environment and technology have changed drastically in recent years, procedures that once seemed reasonable now strike many people as archaic. In the same way, your troops need to know that there is a time to go by the book and a time to reinterpret, edit, or even rewrite the book.

Military leaders must address still another tension point, one involving the balance be-

tween those mundane nonnegotiables and the need to stay *combat ready* and *rapidly deployable* in support of exercises and real-world operations. This is not an either/or equation—you must be able to perform both daily and contingency missions with equal proficiency. Unfortunately, the nature of business at the home station dictates that your people will naturally become fixated upon relentless peacetime requirements while unit readiness ebbs away. Your most basic leadership responsibilities include honing the operational sword by keeping checklists current, servicing deployable equipment, rehearsing and reviewing contingency procedures, and readying troops to move out on minimal notice.

Such readiness implies that your troops routinely demonstrate *aggressive awareness*, one of the most difficult operational mind-sets to enforce in a garrison. Gen John Jumper, former Air Force chief of staff, publicly lamented a pervasive "help-desk mentality," under which many staffers waited to be called rather than proactively identifying and resolving the war fighter's most important issues.[7] Such passivity is the enemy of operational effectiveness. Infuse your troops with the aggressiveness to get out from behind the desk and discover looming problems before they blossom into crises.

Professionalize: Clean and Orderly, Customer Friendly, Total Team, Recognized Excellence

The professionalized track begins with a simple motto: "disorder spells disaster." You might be tempted to take the attitude that a messy work area reflects "real work," but it's generally more symptomatic of a cancerous carelessness. Foster a squared-away ethic in your organization by enforcing *clean and orderly* equipment and facilities. Gen Bill Creech, legendary commander of Tactical Air Command from 1978 to 1984, launched his "Look" campaigns at a time when he believed that pride in the command's units, people, and work ethic had waned. Though many personnel chafed at the time, by insisting on high standards of professional appearance, Creech eventually earned wide admiration as a key architect of today's world-class combat Air Force.[8]

Of course true professionalism lies far deeper than external appearances. Your troops need to be *customer friendly*—routinely accessible, courteous, helpful, and knowledgeable. All members should also recognize the importance of the unit's *total team*, whether they serve as suppliers, partners, or community and family members. Such a unitwide commitment not only remains vital to mission accomplishment but also prevents ordinary problems from festering into calamities that eat up your personal time and energy. If you find yourself constantly dragged into your subordinates' food fights or mediating unexpected disturbances, it may indicate that your people haven't internalized this mind-set.

As your unit begins to achieve its goals, sustain the momentum through a policy of *recognized excellence*. Seize every opportunity to further educate and train your people. Reward and celebrate success, and provide incentives to your achievers through encouragement as well as enhanced opportunities for advancement. Build a robust recognition program to send the message that your people represent the elite, not because they were selected as such but because they have chosen to be. Furthermore, when you faithfully reward your high performers, you clearly communicate the message that they don't need to be careerists. They can focus on their mission and troops because they believe that you're committed to taking care of them.

Standardize: Compliant, Safe, Secure, Repeatable, Measurable

From the day we entered military service, we learned to consider some things as basic: *comply* with rules governing critical procedures, assure that the *safety* of troops remains of paramount importance, and *secure* valuable materials as well as classified information against loss or compromise. Indeed, you'll earn a fast trip to the leaders' graveyard by failing to take care of "musts" such as administration, meticulous accountability of financial resources and equipment, technical and operational training, and dozens of others specific to your specialty or unit.

Unfortunately, these habits fall into disrepair as time erodes memories of what can happen when procedural discipline crumbles. Each of these basic functions has the potential to become the elephant in your unit's living room, as you find that yesterday's top priority gets overshadowed today when your unit has a major safety infraction, a repeat security violation, or chronically late paperwork. Only by systematically knowing, monitoring, and enforcing basic compliance issues will you keep them in perspective.

Chronic problems reflect bad underlying processes, so assure the *repeatability* and *measurability* of your unit's recurring procedures. Your commitment to responsiveness, flexibility, and innovation doesn't set aside your unit's need to gain efficiencies, address deficiencies, reduce common errors, and simplify task training. You'll find that Management 101 offers a careful system of automating, checklisting, and evaluating repeatable processes against realistic standards—an indispensable guard against the kind of chaos that can unravel the most well-intentioned leader.

Note that young leaders make one of the most elementary management errors by treating multiple, related errors as individual problems rather than a systemic weakness. Identify these defects by encouraging each work center to lay down accurate, meaningful metrics and then conduct trend and deficiency analyses of their most critical processes. Select the most important of these, making them part of your own balanced scorecard of unit performance.[9] Don't lull yourself to sleep with misleading metrics that consistently show outstanding performance. Instead, constantly refine your scorecard to assure its accuracy and its ability to get to the heart of your priorities.

Modernize, Operationalize, Professionalize, and Standardize in Action

Whereas the logical lines of an operation model generally don't seem very useful below brigade level, the lines-of-excellence framework described above appears especially practical for company- to field-grade-equivalent levels of leadership.[10] It offers a convenient starting place for new leaders who need an off-the-shelf means of focusing unit efforts. The MOPS tracks themselves are fairly generic and tailorable to a variety of unit and mission types. Perhaps most importantly, their simplicity allows young leaders to grasp and apply them easily.

An especially powerful template for setting goals, MOPS induces subordinates to define their objectives via a balanced and forward-looking model. Having participated in goal-setting exercises throughout my career, I've observed a vast qualitative and quantitative difference in the product people generate when they have a clear outline of what the leader expects as opposed to a vague edict to "send me your goals." Give your folks your vision, and tell them you want to see how they plan to modernize, operationalize, professionalize, and standardize over the next 18 months. (Including the subtitles for each track will generate a complete range of ideas.) You'll be amazed at what they come up with!

After establishing your initial goals, however, you must actively monitor and encourage your people's progress lest their good intentions pave the road to mediocrity. Require them to set target-completion dates and intermediate milestones for each objective. Don't settle for distant targets that invite procrastination, but be generous when renegotiating milestones so as not to discourage aggressive goal setting. Keep a living list of these goals, reviewing and updating it consistently to maintain its integrity.

Whatever you do, make sure you celebrate every success. Hard-working people become cynical about suggestion-box improvements, believing that a defensive or preoccupied leadership will smother or discount their ideas. Under the MOPS construct, however, ideas are not optional—they're fundamental because it assumes that, regardless of past or current success, a culture of excellence doesn't stand still. Conscientiously implemented and dependably encouraged, MOPS can expand a trickle of ideas into a torrent.

While leading the 1st Fighter Wing, Air Force colonel Steve Goldfein expressed a commander's raison d'être this way: "In the end, commanders do only two things—provide the vision and set the environment."[11] These are not simple, discrete tasks. They represent enduring charges that require your utmost devotion and careful implementation. Constructing the vision is up to you, but by providing a balanced and executable vision framework, the MOPS lines of excellence can help you set the environment for a culture of excellence—skilled, motivated, and aggressive. ❑

Notes

1. Gen James L. Jones, "Ten Principles for Marine Leaders," *Marines: The Few. The Proud*, http://www.usmc.mil/marinelink/mcn2000.nsf/10principles.

2. Army Field Manual (FM) 22-100, *Army Leadership*, June 2001, par. 5-37.

3. Maj Gen Peter W. Chiarelli and Maj Patrick R. Michaelis, "Winning the Peace: The Requirement for Full-Spectrum Operations," *Military Review*, July–August 2005, 15–17, https://calldbp.leavenworth.army.mil/eng_mr/2006050113510487/03chiarelli.pdf#xml=/scripts/cqcgi.exe/@ss_prod.env?CQ_SESSION_KEY=WNVWNTUQGZUP&CQ_QH=125612&CQDC=5&CQ_PDF_HIGHLIGHT=YES&CQ_CUR_DOCUMENT=4.

4. House, *Statement of Honorable Gordon R. England, Secretary of the Navy, before the House Armed Services Committee*, 109th Cong., 1st sess., 17 February 2005.

5. Army Training Circular 25-20, *A Leader's Guide to After-Action Reviews*, 30 September 1993, 1.

6. Col James G. Kolling, USAF, e-mail interview by the author, 13 February 2006.

7. Nicole Gaudiano, "Old Warrior, New Ideas: For Outgoing Chief of Staff, Transformation Blends Tradition with Innovation," *Air Force Times*, 30 May 2005, http://esc.hanscom.af.mil/esc-pa/the%20integrator/2005/May/05262005/05262005-12.htm.

8. See Lt Col James C. Slife, *Creech Blue: Gen Bill Creech and the Reformation of the Tactical Air Forces, 1978–1984* (Maxwell AFB, AL: Air University Press, October 2004), http://www.maxwell.af.mil/au/aul/aupress/Books/Creech/Creech.pdf.

9. For a more complete discussion on the general concept behind the balanced-scorecard method of using metrics, see Robert S. Kaplan and David P. Norton, "The Balanced Scorecard: Measures That Drive Performance," *Harvard Business Review*, January–February 1992, 70–79, http://web2.tmu.edu.tw/library/news/%5BHarvard%20Business%20Review%20-%20January-February%201992%5D%20-%20Kaplan%20&%20Norton%20-%20The%20Balanced%20Scorecard%20-%20Measures%20That%20Drive%20Pe.pdf.

10. Army FM-Interim 5-0.1 "The Operations Process," final draft, September 2005, par. B-42.

11. Col David L. Goldfein, *Sharing Success—Owning Failure: Preparing to Command in the Twenty-first Century Air Force* (Maxwell AFB, AL: Air University Press, October 2001), 23, http://www.maxwell.af.mil/au/aul/aupress/Books/Goldfein/Goldfein.pdf. The author quotes his brother.

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, USAF Chief of Staff, 1982–86

Revised USAF Doctrine Publication

Air Force Doctrine Document 2-6, *Air Mobility Operations*

Lt Col Alexander M. Wathen, USAF, Retired

One who recognizes how to employ large and small numbers will be victorious.
—Sun Tzu

All airmen should have an understanding of mobility operations. This singular form of power—the ability to position and sustain forces rapidly at places and times of our choosing—enables the United States to maintain its position as the preeminent military power in the world. Decisive mobility allows us to keep the preponderance of our war-fighting capability here at home and project it when and where we choose. Air Force Doctrine Document (AFDD) 2-6, *Air Mobility Operations*, 1 March 2006, spells out the fundamentals of such operations, providing a basic understanding of them and the command relationships that apply.

The new document's "Summary of Revisions" identifies a number of changes. Specifically, the publication consolidates the former version of AFDD 2-6, 25 June 1999; AFDD 2-6.1, *Airlift Operations*, 13 November 1999; AFDD 2-6.2 *Air Refueling*, 19 July 1999; and AFDD 2-6.3, *Air Mobility Support*, 10 November 1999 (all of which it supersedes). It also contains significant alterations, now including "lessons learned from the many operations that have been conducted since this document was initially developed." In step with the construct of the air and space expeditionary force and the evolution of air-mobility operations groups into the new contingency response groups, updates to chapter 2 reflect appropriate changes to command and control and force presentation. AFDD 2-6 offers a key and long-awaited clarification regarding

> command relationships of the director of mobility forces [DIRMOBFOR] and the air mobility division. The aeromedical evacuation segment has been completely revised and a new chapter has been added reflecting changes to current practice. The discussion of global air mobility support has been greatly expanded to address lessons learned since publishing the previous version, and a new chapter has been added to address common planning practices. Finally, there have been a number of terminology changes; most significantly, the DIRMOBFOR has been changed to DIRMOBFOR-AIR, and the legacy term "TALCE" [tanker airlift control element] has been redefined as a Contingency Response Element (CRE) to clarify its status as an element of a Contingency Response Group (CRG). (p. [i])

In terms of shortcomings, the sections "Air Mobility and the Principles of War" and "Air Mobility and Tenets of Air and Space Power" seem slightly disjointed and offer no real value. Furthermore, the section on "Deployment and Sustainment in Nonlinear Operations" begins with a discussion of nonlinear operations and ends with the statement that they "place a premium on air mobility" (p. 33). However, it fails to address how nonlinear distributed operations tax mobility operations and strain their efficiency and effectiveness. Nevertheless, because the educational value of this document clearly overcomes such flaws, aspiring Air Force leaders would do well to review the new AFDD 2-6. ❑

Improving Feedback to Improve Airmen

Melanie R. F. Law
Dr. Craig A. Foster
Col Gary A. Packard Jr., USAF*

Editorial Abstract: This article contends that force development in the US Air Force is undermined by lackluster feedback at the tactical level. The authors outline the current use of feedback in the service, review factors related to creating effective developmental feedback at the tactical level, and comment on current initiatives designed to improve feedback and force development within the Air Force.

UNITED STATES AIR Force (USAF) leaders have recently highlighted the importance of deliberate individual development and overall force development.[1] Unfortunately, force development is currently undermined by the lackluster practice of feedback at the tactical level. Indeed, "deliberate development" requires that Airmen receive beneficial feedback as they progress through their Air Force

*Correspondence concerning this article may be addressed to Dr. Craig A. Foster, HQ USAFA/DFBL, 2354 Fairchild Drive, US Air Force Academy, CO 80840-6228. Correspondence may also be sent via electronic mail to craig.foster@usafa.af.mil.

This research was supported financially by a United States Air Force Research Laboratory grant awarded to the Department of Behaviorial Sciences and Leadership at the United States Air Force Academy. The authors thank Jennifer Clarke and Rylan Charlton for their valuable inputs.

careers.[2] Yet, we believe that feedback is often underutilized in the USAF. To ensure long-term success, the USAF needs to integrate feedback more effectively into a career-long process of development. This article outlines the current use of feedback in the USAF, reviews factors related to creating effective developmental feedback at the tactical level, and provides comments on current USAF initiatives designed to improve feedback and force development.

Current Feedback System

Airmen receive performance feedback in many forms, such as check rides, inspections, and promotion tests. However, for many Airmen, the first thing that comes to mind when they hear the term *feedback* is the Air Force's performance feedback worksheet (PFW). Feedback in the USAF actually takes on three basic forms: *informal feedback*, *formal feedback* (e.g., Air Force [AF] Forms 724A, 724B, 931, and 932), and *official performance measures* (e.g., check rides, quality assurance evaluator inspections, and performance reports).

Informal Feedback

Informal feedback consists of the information that Airmen provide to one another during their regular workplace communications. It can be as simple as a supervisor or coworker commenting on a uniform flaw or an incorrectly completed procedure. Airmen often dispense positive informal feedback by writing letters of appreciation, praising others publicly, or telling coworkers when they did something well. Some career fields tend to be more conducive to this type of feedback than others. For example, aircrews routinely debrief sorties to discuss strengths and weaknesses, and security-force teams regularly conduct "hotwashes" of exercises. Through daily interactions and informal feedback, leaders establish the key interpersonal-relationship connections that can make formal feedback processes more effective.

Formal Feedback

Formal feedback is generated through structured, organized procedures. In the USAF, formal performance feedback is usually conducted using the grade-specific PFW. According to Air Force Instruction (AFI) 36-2406, *Officer and Enlisted Evaluation Systems*, "Performance feedback is a private, formal communication a rater uses to tell a ratee what is expected regarding duty performance and how well the ratee is meeting those expectations."[3] Formal feedback is required for all enlisted personnel and all officers through the rank of colonel. Initial feedback occurs within 60 days of the Airman's assignment to the rater, and midterm feedback occurs 180 days after initial feedback. The form is handwritten or typed by the rater and does not become a permanent part of the ratee's record. The rater may keep a copy of the PFW, but there are restrictions on who can access this copy. If done correctly, the PFW gives Airmen specific competencies to develop that can lead to improved performance and behavior change.

Official Performance Measures

Official performance measures exist in many forms such as check rides, promotion tests, and, at least annually, training reports, officer performance reports (OPR), or enlisted performance reports (EPR). Again, referring to AFI 36-2406, the officer and enlisted evaluation systems exist not only to provide meaningful feedback and advice for improvement, but also to "provide a reliable, long-term, cumulative record of performance and potential based on that performance . . . [and] to provide officer central selection boards, senior Non-Commissioned Officer evaluation boards, the Weighted Airman Promotion System and other personnel managers sound information to assist in identifying the best qualified officers and enlisted personnel."[4] OPRs and EPRs, along with promotion recommendation forms (PRF), therefore, have two interconnected purposes: performance documentation and selection.

Each type of feedback contributes something essential to the development and ad-

vancement of Airmen (see fig.). Unfortunately, Airmen often receive hurried official appraisals, rushed formal feedback, and limited informal feedback. Also, Airmen frequently view OPRs, EPRs, PRFs, and training reports simply as a means for selection or administrative action but overlook their developmental value. Many feedback sessions go something like this: the supervisor is behind on several tasks and receives notification that feedback is due; the feedback is squeezed in between other duties; and both the supervisor and the subordinate are left feeling that not much was accomplished. This type of situation undermines the effectiveness of feedback in the USAF culture, despite USAF policy that deliberate development is critical to healthy, long-term force development.

The largest impediment to successful feedback is probably a lack of time. Finding time to give or receive effective feedback is understandably difficult. In stressful operational environments, actual opportunities for formal feedback may be few. However, this ought not to be the case in garrison operations or training situations. While a shortened performance feedback session (in accordance with AFI 36-2406) is occasionally necessary in the field, feedback meetings need to be a priority when Airmen return to their home station or are assigned to a training unit. Still, even when Airmen agree that feedback is a top priority, many will resist the feedback process, particularly when it involves giving or receiving negative feedback. Discomfort with feedback can result in maladaptive behaviors such as procrastination, denial, brooding, and self-sabotage.[5]

The USAF clearly lacks immunity from the consequences associated with ineffective feedback. Feedback failures have led to dreadful outcomes such as the B-52 crash at Fairchild AFB, Washington.[6] The USAF should strive, therefore, to integrate the effective use of feedback into USAF culture and force development. Feedback could serve well as an advantageous and strategic practice: leaders could benefit from a more effective team, followers could benefit through continued professional development, and the USAF could benefit from more-proficient personnel. To improve feedback, Airmen must first be educated about the complexities of the feedback process. Air-

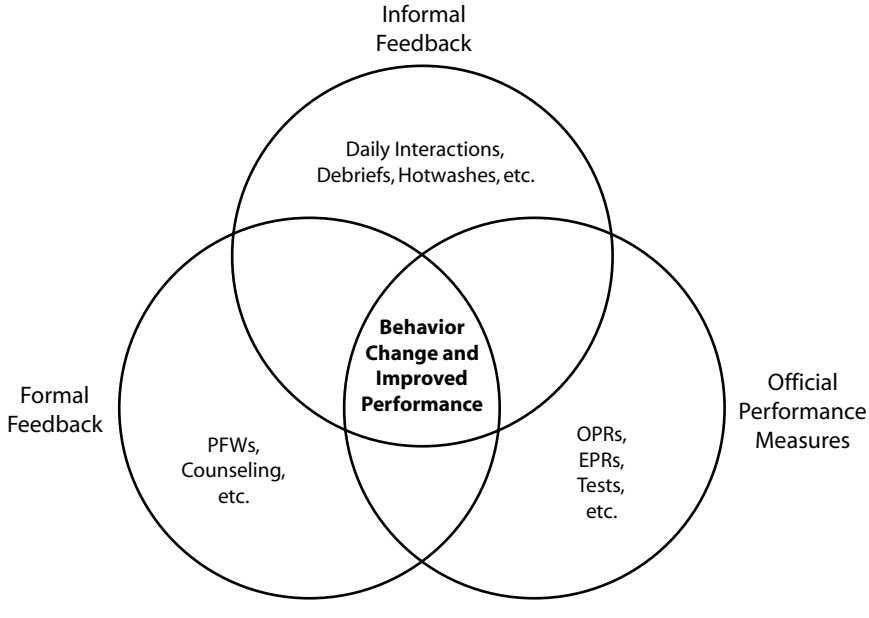


Figure. Air Force feedback system

men often fail to realize the pitfalls of the feedback process and thereby provide ineffective feedback in their daily interactions. USAF senior leaders must be aware of the same pitfalls as they develop initiatives designed to enhance feedback and force development.

Characteristics of Effective Feedback

Organization members must realize that creating effective developmental feedback is a challenging process that requires time and energy. Many believe that simply increasing the amount of feedback and perhaps instituting formal feedback programs will improve organizational effectiveness. This is simply not true. Research demonstrates that feedback can result in more harm than good. One major review estimated that one-third of feedback recipients became less motivated *after* receiving feedback.[7] Although this percentage may seem high, it is likely easy for individuals to recall "real world" examples of coworkers who left a feedback session frustrated and angry, rather than motivated to improve.

The challenges associated with feedback are further illuminated by clarifying that "feedback" really refers to two overlapping processes. First, feedback begins with the collection of information that will be provided to the feedback recipient (i.e., the target). This process is particularly clear when information is assembled formally for a structured feedback event, such as an annual supervisor assessment. Yet, information is constantly gathered informally as well, such as when coworkers form opinions about a particular person's strengths and weaknesses. To make feedback effective, these formal and informal assessments should be accurate. This seems obvious, but research demonstrates repeatedly that the agreement between observers can often be remarkably low.[8] Second, even after information has been developed either through formal or informal means, such information must be delivered to feedback recipients effectively. Indeed, communicating "areas for improvement" is a challenging task. For example, a supervisor informs a subordinate that he or she needs to work on communication skills. If this assessment is *inaccurate*, the subordinate might leave the session unnecessarily concerned about these skills and meanwhile overlook skills that truly need development. Should the assessment be accurate, the supervisor's delivery, if poor, could be detrimental. To elucidate some of the specific factors which can inhibit effective feedback, we will review the feedback process using four main themes: purpose, provider, preparation, and prevalence.

Purpose

When implementing a feedback system, it is important to remain clear about the purpose of the feedback. Feedback can often be construed as developmental or administrative. Developmental feedback is intended primarily to develop the effectiveness of an organization's individual members. It is not connected to any positive or negative administrative action. For example, when an Airman receives feedback about his or her presentation skills, a low rating would not result in an official reprimand or a high rating in any official reward. The commander has simply identified an area where the Airman could improve. This developmental opportunity may be documented to help the commander and the Airman track progress, but such documentation would often be kept confidential, perhaps maintained by the Airman. Alternatively, administrative feedback can influence specific administrative decisions such as adverse actions, bonuses, promotions, or job selection. In these cases, raters and the target know that the assessments will be reflected in the target's personnel records.

I. M. Jawahar and Charles R. Williams reviewed 22 studies that examined feedback programs.[9] They found that ratings were more positive when created for administrative rather than developmental purposes. In the Air Force rating system, OPRs, EPRs, PRFs, and training reports are feedback tools used for administrative purposes. Not surprisingly, feedback generated by these tools tends to be over-

whelmingly positive, and Airmen generally believe (perhaps accurately) that if an OPR or EPR is good to average, then it is actually bad. This positive bias in administrative feedback largely negates the usefulness of administrative feedback for the purpose of developing organizations and people.

Provider

Organizations must decide who will be raters in the feedback process. Raters normally see their own assessment efforts as objective and accurate, but the organizational positions of raters relative to the target individual can lead to inaccuracies in ratings. Traditionally, superiors have been the primary providers of performance feedback. This "top-down" assessment system makes sense. Superiors usually bring a considerable amount of experience to the assessment and development of subordinates. However, research shows that superior assessments are not infallible. Superiors might fail to recognize the strategies that subordinates may employ to ensure they appear at their best.[10] Airmen can also exhibit characteristics (e.g., accepting the status quo) that appear more acceptable to superiors than to peers and subordinates.[11] In addition, superiors can observe only a selection of an Airman's behavior because, quite obviously, they have their own responsibilities and duties to perform. It follows then that superiors sometimes lack important information about their Airmen and therefore may assess them inaccurately.[12]

Some organizations supplement superiors' ratings with assessments from other raters. The following terms describe this kind of feedback: *multirater feedback*, *multisource feedback*, and *360-degree feedback*. Some authors use all of these terms interchangeably. For purposes of this review, multirater feedback and multisource feedback will describe any form of feedback coming from more than one person (e.g., a self-assessment and a peer assessment), and 360-degree feedback will describe a special type of feedback that includes self-, superior, peer, and subordinate assessments.[13] This is not to say that a feedback system should include all these raters. Rather, 360-degree feedback is only one form of multirater feedback. Organizations may have compelling reasons for using particular combinations of these four rater groups or perhaps only one rater (e.g., time, availability, and cost). The important point is that multirater feedback can be powerful because each group of raters provides a different perspective in the feedback process.

Peers and subordinates have distinct advantages and disadvantages as raters, resulting from their particular relationships to a target. Peers may provide informative assessments because they understand best the target's work circumstances. At the same time, peer assessments may be more susceptible to friendship bias because peers might inflate particular performance ratings so their friends will not be viewed unfavorably.[14] Subordinates can also contribute useful information to targets because subordinates are in a unique, and often advantageous, position to evaluate supervisor effectiveness.[15] There is concern that subordinates might provide biased feedback due to fear that negative ratings could result in retaliation, but multiple subordinates can enhance the opportunity to create truly anonymous assessments.[16] However, it is worth noting that supervisors can feel that their authority is undermined when subordinates' ratings are the only source of feedback.[17]

Self-ratings are another source of feedback which offers unique advantages and disadvantages. One obvious disadvantage is that individuals tend to view their own performance more positively than deserved.[18] Even when individuals believe that they are evaluating themselves accurately, they might not be aware of how others interpret their performance.[19] For example, an Airman may consider himself or herself reserved, but others might see the same behavior as apathetic. Self-ratings, however, do provide a unique perspective into individual performance. By allowing Airmen to assess their own performances, they may feel more empowered in the feedback process. Comparing self-ratings to other ratings can also help individuals understand and acknowledge others' perceptions and the important influence that such perceptions can have on

achieving workplace success.[20] When other ratings verify positive self-ratings, they can serve as reinforcement for good performance.

Preparation

Many Airmen believe that they are intrinsically capable of delivering and receiving feedback effectively. They do not understand that giving and receiving feedback is a skill acquired through training and practice. Certainly nobody would think it wise to pilot an aircraft without proper and thorough flight training. Unfortunately, many Airmen fail to draw a similar connection to the feedback process. This is not the only misconception concerning feedback. While numerous individuals agree that it is difficult to *receive* feedback, especially negative feedback, they likely overlook the difficulties involved in *giving* feedback. Indeed, many individuals can experience negative emotions when they provide others with positive or negative feedback.[21] Training can help feedback providers to simply get comfortable with being uncomfortable. After all, providing feedback, particularly in the USAF, is an essential and unavoidable aspect of leadership. Training is also recommended for those who receive feedback.[22] Through training, the targets of feedback can learn how to make the most of their feedback experiences and thereby improve their performances. For example, Airmen probably dislike receiving feedback because they anticipate that it will be negative. However, training can help Airmen understand that they should welcome all kinds of feedback since it can contribute to their long-term growth and success.

Prevalence

Formal feedback should occur at regular intervals so that organization members learn to expect it. Researchers have positively linked the frequency of feedback to superior job performance.[23] However, this finding should not cause leaders to choose quantity over quality. In some organizations it may be impossible due to mission-related, structural, and other reasons to give quality feedback frequently or during certain critical periods of time. Air Force commanders should not offer numerous, superficial feedback sessions. Instead, as research indicates, a commander can add value to single feedback sessions with subsequent follow-up discussions.[24]

Improving Feedback across the USAF

Compared to private organizations, the USAF experiences reduced ability to hire established talent from outside the organization. Instead, the service tends to develop its own people to fill its upper-level positions. The USAF experiences additional personnel-development challenges, considering that military warfare is changing rapidly and that military careers turn over more quickly than do business careers. A typical military "career" often lasts just over 20 years whereas a career in the private sector can last much longer.

Fortunately, the USAF recognizes the importance of effective feedback in terms of organizational effectiveness. Air Force Doctrine Document (AFDD) 1-1, *Leadership and Force Development*, clearly calls for a focus on continued Airman development and ties that development to seeking constructive feedback from coworkers.[25] Furthermore, deliberate development is emphasized in plans to formally develop a more rigorous and effective system of feedback and Airman development.

According to Lt Col Danny Miller (assigned to the Air Staff AF/A1D-Airman Development and Sustainment), there is no immediate plan to institute a USAF-wide multirater-feedback program. Rather, the USAF is developing a broader plan to (a) streamline overlapping USAF training programs, (b) outline enduring competencies needed in Airmen, (c) outline additional occupation-based competencies for Airmen, (d) provide a central Internet-based resource suite that provides leadership-development information for the entire USAF, and (e) improve informal and formal feedback throughout the USAF. This transformation has begun with the implementation of multirater feedback into various USAF agencies. Some of these implementations include

Airman-development programs (e.g., Air War College, the Chief Master Sergeant Leadership Course, and the GS-15 [US Federal Civil Service pay grade] Leadership Course) and similar programs offered within some USAF organizations (e.g., Air Force Personnel Center, Air Force Research Laboratory, and Air Force Materiel Command). The long-term goal is to develop multirater feedback in all professional military education (PME), supervisor, and commander courses and to relate this feedback to each Airman's developmental requirements.[26]

This general plan to improve USAF feedback, while reducing costs by removing redundancies in training programs, is laudable. At the same time, it is important to note that organizations can be resistant to change. Success will require a genuine culture shift at the strategic, operational, and tactical levels.[27]

Strategic

Strategic leadership shapes strategy and policy, ensures integration and proper resourcing, and drives the execution of culture change.[28] Feedback is one part of a complete force-development package that includes providing the right training at the right time, maintaining effective career management with active commander involvement, and focusing on carrying out the wartime mission. Strategic leaders provide a clear, long-term vision regarding feedback and ensure that PME programs include lessons and courses about feedback philosophy, skills, and procedures. In addition, strategic leaders must properly fund and staff the feedback process to make certain that the system is accomplishing its purpose. Senior leaders can guide their inspection teams to confirm that feedback is a command-interest item on inspector-general inspections and staff-assistance visits. Commander's courses should contain a module on the vision and implementation of feedback systems. Without a clearly articulated strategic plan and sustained effort, subordinate commanders will be inconsistent at best when delivering feedback.

Operational

Operational leadership focuses on establishing a vision for the unit, mentoring and coaching for success, and partnering up and down the chain of command to maximize unit effectiveness.[29] This level of leadership is key to the culture change that must take place to establish effective feedback as an integral part of USAF culture. The operational leader should also serve as the example of a feedback provider to leaders at the tactical level. This trickle-down effect allows the operational leader's experience and vision to reach the lowest levels of the unit. Through effective coaching and mentoring, the operational leader can increase efficiency in the unit—a key outcome in today's high-tempo, low-resource environment. Without the support of the operational leader, feedback initiatives are bound to fail.

Tactical

Feedback becomes reality at the tactical level of leadership, which primarily includes personal leadership skills such as the ability to accurately self-assess, inspire trust, and communicate effectively.[30] Tactical leaders are the frontline supervisors responsible for the development of their people. Leaders at this level must take seriously their developmental responsibility. This means that they must take the time to get to know the people in their unit and understand their developmental needs. Tactical leaders must challenge their subordinates to receive and provide developmental feedback on a regular basis and must ensure that subordinate leaders are effectively leading their people as well. In addition, they must set the example by soliciting feedback to improve their leadership skills. Leaders at this level should learn about effective feedback techniques and seek mentors who can help form their feedback skills.

General Recommendations

Even with support from the strategic levels, the USAF should remain attentive to the po-

tential for feedback failure at the operational and tactical levels. Many Airmen at these levels represent the "middle management" of the USAF because they direct the execution of USAF policy. Research in industrial and organizational psychology demonstrates that strategic-level initiatives often fail because they lack "buy-in" at this level. In fact, researchers have referred to middle management as a "concrete layer" due to the likelihood that strategic initiatives will fail there.[31] While the need for effective feedback might seem obvious to senior members of the military who can reflect on careers made up of successes and mistakes, that need might be less obvious to less-experienced and more middle-management Airmen.

Airmen probably tend to see their own behavior as effective and might therefore feel less need to get feedback from others. Additionally, research regarding personal beliefs about leadership demonstrates that some individuals do not believe in leadership development and show reduced motivation for leadership-development-related programs.[32] Furthermore, busy work schedules in many USAF units are unlikely to change. Without authentic buy-in at the tactical level, the high-operations tempo will only exacerbate misgivings about the time required to create an effective formal feedback process. Unless integration and planning are successful, units will conduct formal feedback programs haphazardly, if they do them at all.

Evidence of the potential breakdown is apparent in the PFW, the utility of which appears obvious because it entails nothing more than a formal communication between commanders and Airmen. Yet the PFW seems to be used ineffectively.[33] Furthermore, many can recall the often heated debates over Total Quality Management (TQM) in the mid to late 1990s. Col Charles J. Dunlap Jr., in a 1996 opinion piece about the future of the USAF, was harshly critical of TQM, indicating that it was a faddish program which ultimately undermined military discipline.[34] Negative views of TQM such as Dunlap's were pervasive in the 1990s Air Force, and USAF leaders could face similar "push-back" with any new and mandatory formal feedback system. The ineffectiveness of the PFW and programs like TQM speaks to the difference between instituting change through rules and regulation and creating change by training and encouraging Airmen towards a collective vision. The PFW is required but used poorly, and the USAF must do more than simply require installation of new programs. Through training and sustaining a deep culture shift, Airmen can make the feedback process a major priority.

Despite these cautions, the USAF can and should continue its current efforts to improve the USAF approach to feedback. The continued development of formal feedback programs can assist this process so long as such programs are instituted correctly and given sufficient support. USAF leaders should institute formal feedback programs with attention to the myriad of issues already summarized in this article. Important summary points address successful feedback programs in the context of purpose, provider, preparation, and prevalence (see table).

Leadership should emphasize developmental, rather than administrative, feedback programs. OPRs and EPRs, which are primarily administrative evaluations, receive a great deal of attention. The USAF has a formal developmental-feedback tool in the PFW, but it often has a low priority and is inadequately applied. The development and implementation of new formal-assessment programs could fill the need for developmental feedback to serve Airmen in building their own careers.

Increased emphasis on feedback must be accompanied by effective training regarding the *giving* and *receiving* of feedback. Feedback training might prepare Airmen to deal with potentially negative feedback, decrease defensiveness and other ineffective behaviors, bring self-development ideas to the feedback session, and express disagreement constructively. Learning about giving and receiving feedback can begin in the *Promotion Fitness Examination* (*PFE*) *Study Guide* (AFPAM 36-2241V1) or in books such as London's *Job Feedback*.[35] Both works provide useful tips that are helpful to feedback givers and receivers. The following

Table. Summary of feedback themes

Feedback Theme	*Summary*
Purpose	Distinguish between administrative (OPRs, EPRs, etc.) and developmental feedback.
	Do not link developmental feedback with incentives, promotions, assignments, or penalties.
	Do not communicate feedback as developmental and later use feedback administratively.
Provider	Understand that different raters often bring particular strengths and weaknesses to the feedback process.
	Consider the value of giving and receiving 360-degree feedback (self-assessment as well as assessments by superiors, subordinates, and peers).
Preparation	Practice feedback to improve personal levels of effectiveness.
Prevalence	Balance quantity and quality of feedback.
	Read the situation, and provide the maximum amount of feedback possible, given mission constraints.
	Make feedback meaningful, not trivial.

provides some examples of feedback tips that could be utilized in feedback training:

- Remain professional. If an Airman becomes defensive, do not take it personally and respond with destructive comments.[36]
- Before offering an evaluation, empower Airmen by giving them a chance to describe their own performances and to suggest areas of improvement.[37]
- Provide positive and negative feedback. Review specific accomplishments before launching into improvements.[38]
- Focus on behaviors rather than on general personality characteristics.[39] For example, "I have observed that your production has decreased" rather than "I think you are becoming lazy."
- Listen carefully, and ask questions for clarification.[40]
- Be sincere. Effective feedback givers must be genuinely interested in their personnel.[41]

Most importantly, leadership must not assume that the institution of required feedback programs means that feedback will improve. Extant research indicates that many factors can influence the effectiveness of multirater feedback and that the institution of multirater feedback programs can be ineffective or even deleterious.[42] The USAF must also address the attitudes that Airmen possess about feedback. This process should begin when Airmen enter the USAF and remain consistent throughout their careers. Airmen must be convinced that leadership and professional effectiveness are developable skills and that they must *not* buy into the idea that leadership is something that *they either have or they don't*. Airmen should also understand that their own self-assessments are not necessarily accurate and believe that feedback *can* contribute to their personal success and the overall success of the USAF. A motivated Airman does not need a formal feedback program to receive developmental feedback and can self-generate feedback simply by contacting others, usually fellow Airmen, and asking for assistance. Similarly, a unit commander need not rely only on required formal feedback programs. Commanders have the responsibility to ensure that feedback enhances the development of their people and to supplement such programs when necessary.

Conclusion

The USAF can facilitate force development by increasing Airmen's proficiency with feedback. Airmen will become more engaged in the feedback process as (a) they believe personally that feedback is an important component of their development, and (b) they participate in effective feedback programs. The obvious challenge is that feedback and feedback training require time and energy, but we believe that this is a price worth paying. Giving and receiving feedback effectively is an important leadership competency. As such, feedback training can be viewed as an additional form of force development. Training Airmen to be proficient with feedback might actually reduce costs by ensuring that new formal feedback programs succeed. Finally, change is occurring at an unprecedented rate, and the USAF will experience continued difficulty in predicting future developments. By using effective feedback to develop required profession-based competencies, the USAF can most effectively prepare the next generation of Airmen for the challenges ahead. ❑

Notes

1. Air Force Doctrine Document (AFDD) 1-1, *Leadership and Force Development*, 18 February 2004, iii, http://www.e-publishing.af.mil/pubfiles/af/dd/afdd1-1/afdd1-1.pdf (accessed 8 June 2006).

2. The term *Airmen* often refers to uniformed USAF personnel. It is used because of the specific nature and demands of the military profession. This is not meant to minimize, however, the importance of developing all USAF personnel, civilian or uniformed, as important components of the USAF mission.

3. Air Force Instruction (AFI) 36-2406, *Officer and Enlisted Evaluation Systems*, 15 April 2005, 11, http://www.e-publishing.af.mil/pubfiles/af/36/afi36-2406/afi36-2406.pdf (accessed 8 June 2006).

4. Ibid., 6.

5. Jay M. Jackman and Myra H. Strober, "Fear of Feedback," *Harvard Business Review* 81, no. 4 (April 2003): 102.

6. For further discussion regarding the devastating crash of *Czar 52* at Fairchild AFB and other accidents that may have been prevented through effective feedback, see Anthony T. Kern, *Darker Shades of Blue: The Rogue Pilot* (New York: McGraw-Hill, 1999).

7. Avraham N. Kluger and Angelo DeNisi, "The Effects of Feedback Interventions on Performance: A Historical Review, a Meta-Analysis, and a Preliminary Feedback Intervention Theory," *Psychological Bulletin* 119, no. 2 (March 1996): 254.

8. Gary J. Greguras and Chet Robie, "A New Look at Within-Source Interrater Reliability of 360-Degree Feedback Ratings," *Journal of Applied Psychology* 83, no. 6 (1998): 962–64.

9. I. M. Jawahar and Charles R. Williams, "Where All the Children Are Above Average: The Performance Appraisal Purpose Effect," *Personnel Psychology* 50, no. 4 (Winter 1997): 916.

10. Kayyum A. Bohra and Janak Pandey, "Ingratiation toward Strangers, Friends, and Bosses," *Journal of Social Psychology* 122, no. 2 (April 1984): 217.

11. Sabrina Salam, Johnathan F. Cox, and Henry P. Sims Jr., "In the Eye of the Beholder: How Leadership Relates to 360-Degree Performance Ratings," *Group and Organizational Management* 22, no. 2 (1997): 185–209.

12. Janka I. Stoker and Beate I. J. M. Van der Heijden, "Competence Development and Appraisal in Organizations," *Journal of Career Development* 28, no. 2 (Winter 2001): 103, http://www.indicator-ict.com/docs/pdf/competence%20development%20paper%201.pdf.

13. Dr. Craig A. Foster and Melanie R. F. Law, "How Many Perspectives Provide a Compass? Differentiating 360-Degree and Multi-Source Feedback," *International Journal of Selection and Assessment* 14, no. 3 (September 2006): 290.

14. Glenn M. McEvoy and Paul F. Buller, "User Acceptance of Peer Appraisals in an Industrial Setting," *Personnel Psychology* 40, no. 4 (Winter 1987): 785–86.

15. H. John Bernardin, "Subordinate Appraisal: A Valuable Source of Information about Managers," *Human Resource Management* 25, no. 3 (Fall 1986): 423–24.

16. Ibid., 430.

17. H. John Bernardin, Sue A. Dahmus, and Gregory Redmon, "Attitudes of First-Line Supervisors toward Subordinate Appraisals," *Human Resource Management* 32, no. 2/3 (Summer and Fall 1993): 321–23.

18. Raymond F. Zammuto, Manuel London, and Rendrith M. Rowland, "Organization and Rater Differences in Performance Appraisals," *Personnel Psychology* 35, no. 3 (Autumn 1982): 648–49, 651–52.

19. Leanne E. Atwater and Francis J. Yammarino, "Self-Other Rating Agreement: A Review and Model," *Research in Personnel and Human Resources Management* 15 (1997): 145.

20. Ibid., 161–65.

21. Thomas P. Sawyer Jr., Lisa A. Hollis-Sawyer, and Amanda Pokryfke, "Personality and Social-Evaluative Anxieties Associated with Rating Discomfort in Anticipated Positive and Negative Feedback Conditions," *Social Behavior and Personality* 30, no. 4 (June 2002): 359–72 passim.

22. David A. Waldman and Leanne E. Atwater, "Confronting Barriers to Successful Implementation of Multisource Feedback," in *Handbook of Multisource Feedback*, ed.

David W. Bracken, Carol W. Timmreck, and Allan H. Church (San Francisco, CA: Jossey-Bass, 2001): 474.

23. Anjelo J. Kinicki et al., "A Covariance Structure Analysis of Employees' Response to Performance Feedback," *Journal of Applied Psychology* 89, no. 6 (December 2004): 1063.

24. Manuel London, *Job Feedback: Giving, Seeking, and Using Feedback for Performance Improvement* (Mahwah, NJ: Lawrence Erlbaum Associates, 1997), 81.

25. AFDD 1-1, *Leadership and Force Development*, 5.

26. Lt Col Danny Miller, phone interview by the authors, 17 November 2005.

27. AFDD 1-1, *Leadership and Force Development*, 16–18.

28. Ibid., 17–18.

29. Ibid., 16–17.

30. Ibid., 16.

31. Leonard A. Schlesinger and James L. Heskett, "The Service-Driven Service Company," *Harvard Business Review* 69, no. 5 (September/October 1991): 81.

32. Dr. Craig A. Foster and Jeffrey E. Nelson, "The Influence of Implicit Theories of Leadership Ability on Corresponding Goals and Motivation" (working paper, US Air Force Academy, Colorado Springs, CO, 2005).

33. Saundra J. Reinke and J. Norman Baldwin, "Is Anybody Listening? Performance Evaluation Feedback in the U. S. Air Force," *Journal of Political and Military Sociology* 29, no. 1 (Summer 2001): 166, 172.

34. Col Charles J. Dunlap Jr., "Melancholy Reunion: A Report from the Future on the Collapse of Civil-Military Relations in the United States," *Airpower Journal* 10, no. 4 (Winter 1996): 96–97.

35. Air Force Pamphlet (AFPAM) 36-2241V1, *Promotion Fitness Examination (PFE) Study Guide*, vol. 1, 1 July 2005, 170–73, http://www.e-publishing.af.mil/pubfiles/af/36/afpam36-2241v1/afpam36-2241v1.pdf (accessed 8 June 2006); and London, *Job Feedback*, 89–109.

36. London, *Job Feedback*, 15–22, 101–2.

37. Ibid., 94.

38. Ibid., 94, 100.

39. AFPAM 36-2241V1, *PFE Study Guide*, 171.

40. Ibid., 172.

41. Ibid.

42. For an introduction into research about multirater feedback, see Bracken, Timmreck, and Church, eds., *Handbook of Multisource Feedback*.

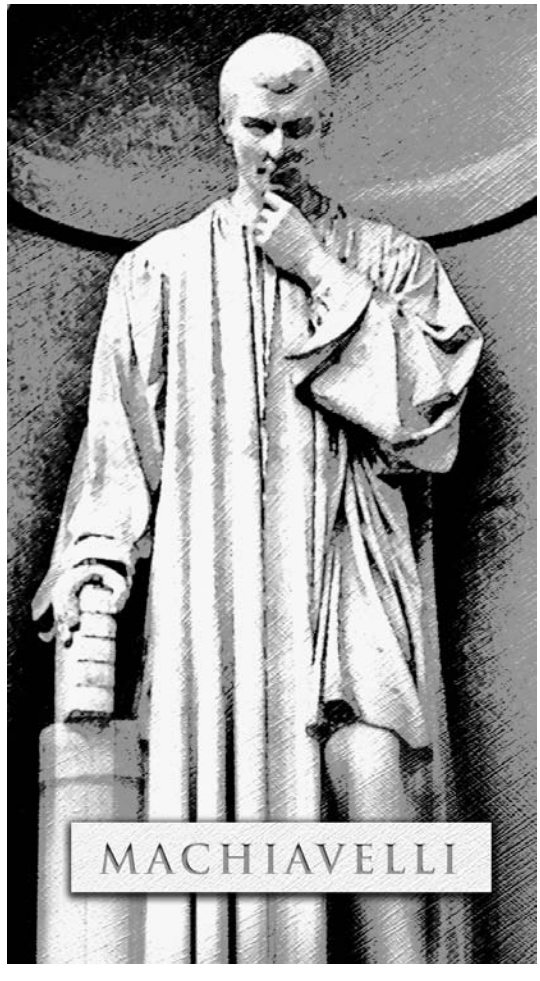
Reality Leadership

Prof. John Charles Kunich
Dr. Richard I. Lester

Editorial Abstract: The authors, both of whom have published on the topic of leadership, posit that despite a myriad of opinions, leadership is "neither mystical nor mysterious." This article tackles the topic of "reality leadership" by attempting to explain that the core of leadership "mak[es] a difference, creat[es] positive change, mov[es] people to get things done, and get[s] rid of everything else that does not contribute to the mission."

There is such a difference between the way we really live and the way we ought to live that the man who neglects the real to study the ideal will learn how to accomplish his ruin, not his salvation.

—Machiavelli, *The Prince*



LEADERSHIP MEANS DIFFERENT things to different people in different contexts, which accounts for the baffling spectrum of theories, models, and methods, all jockeying for the leadership vanguard. Every serious student of the subject has a personal opinion about leadership, even if he or she has not (yet) offered us a written record of it. But leadership is neither mystical nor mysterious, at least in the abstract, where theorists remain unencumbered with the messy chores of implementation and execution. That's why people have written so much about it—everyone wants a quick solution, and it's not hard to write some ideas that make sense on paper and that even sound rather scientific. But after we peel away all the layers of wrapping paper and wade through the packaging popcorn, leadership involves nothing more than making a difference, creating positive change, moving people to get things done, and getting rid of everything else that does not contribute to the mission. This means re-

inforcing core values, articulating a clear and powerful vision, and then setting people free to develop better ways and better ideas. Yes, most of the clichés are true: leadership entails trusting and giving authority back where it belongs—to the human beings who actually perform the great bulk of what we call work. Trust is the glue that holds organizations together, and empowerment is the fruit of trust. True—and far easier to say than to do.[1]

Leadership by cliché will not work unless personal strength, character, skills, and performance lie behind the phalanx of platitudes. The sad truth is that it is never easy to be a leader—to cope with the myriad intractable challenges that come bundled with the territory. If it were easy, many more people would do it. We do not learn most of the useful leadership lessons from reading. As much as we might crave the swift, effortless, and low-impact fix from books and articles, that passive and painless process rarely can substitute for little things like ability, talent, upbringing, diligence, creativity, opportunity, personality, experience, courage, vision, drive, values, perseverance, and luck. If only we could squeeze the essence of those sweet secrets into words on a page and enable readers instantly to make up for decades of error, wasted time, poor habits, inaction, bad advice, ill fortune, and laziness! Maybe if we could conceive a catchy and sophisticated-sounding new name to disguise our refried old bromides—perhaps Eight Omega Leadership or the One-Second Ruler—it would suddenly become a panacea for our power outage. Alas, *instant leadership* remains only a fantasy, even in this age of perpetual gratification, high-speed Internet, and no-fault living. No extreme makeover of the superficial trappings of musty, rusty, and medieval management methods will trick reality for us. The virtual reality of the self-help cult is a poor understudy for no-kidding reality, as numberless frustrated managers discover to their dismay when they fail to wring miracles out of all those gleaming formulas. A wise person understands that leadership success is a process and not an event.

Assuming a leadership role in the real world today guarantees us a mixed bag—more accurately a perverse piñata, loaded with both good and bad surprises as our reward for all that effort to crack open the shell of success. Along with the obvious satisfaction and benefits come tough pressures and responsibilities. Leaders are expected to inspire lethargic people to do their best, handle problem personnel and bad attitudes with ease, make difficult or unpopular decisions before breakfast, maintain high credibility, fend off cutthroat competition from all over the planet, explain senior management's inexplicable positions to staff members, and keep cool in the face of contentious disagreement and unfair criticism.[2] No wonder leaders would like a little help. Based on our experience, we will pass along some lessons we have learned about specific strategies, techniques, and ideas to help leaders live with the challenges unique to their role. These tips will probably not work overnight magic, morphing someone from Homer Simpson into Alexander the Great as he or she sleeps. Anyone looking for that type of happy-news leadership liposuction can put this article down now. Remember, this is reality leadership—not something in the fantasy section.

What Leaders Really Do

The best leaders do not start out with the question "What's best for me?" Rather, they ask, "What can and should I do to make a positive difference?" These leaders constantly ask themselves and their followers, "What are the organization's mission and goals? Do they need to be modified? What surprises might lie ahead that we need to anticipate? What constitutes winning performance in this fluid environment?" In these challenging times, leaders prepare organizations for change and help them adjust as they struggle through it. Leaders never fake it, and there are no shortcuts they can take, as they first learn all they can about the situation, including resources and obstacles, trends and unmet needs, as well as hidden potential and ossified misconceptions. Still, the all-knowing person does not make the best leader—the all-understanding one does. Now more than in the past, a leader can-

not often act like a dictator/tyrant. The leader's people have human needs, and in the modern era, in many quarters, they are accustomed to being treated with dignity, respect, and maybe even kid gloves.

People today need to know—demand to know—that the leader cares and will do his or her utmost to help them get the job done. An old-school General Patton wannabe who tries to shove a "my way or the highway" leadership model past the gritted teeth of today's personnel will soon find himself discredited. Flexibility, sensitivity to individual circumstances, and a determination to empathize are more suited to the twenty-first-century workplace than the old leadership-through-intimidation paradigm. Just as people cannot lead from behind, they cannot lead solely by applying their soles to their workers' behinds—not anymore, at least. And that is a hard lesson. Techniques that might have worked a few decades or centuries or millennia before are not guaranteed to work as well next week. They probably require serious adjustment before we can graft them onto a contemporary leadership style. After all, leadership is not arithmetic or Newtonian physics—closer analogues are chaos math and the quantum-mechanics world of the uncertainty principle. It is all about people, and people are ever-changing. The leader who does not know that, or who does not want to know that, is apt to find no one following his or her lead. Why not? Did not it work for Attila the Hun?[3]

The tried-and-true (and trite) old tricks often don't work on the new dogs in this year's workplace. The reason for that lies at the center of what reality leaders really do—and really need to do—to succeed now. People currently entering the workforce are different from the entry-level employees of even a couple of decades ago in ways that present a leader with a jumbled grab bag of adversities and advantages. They may have shorter attention spans, less acquaintance with strict standards, and lower experience with long, arduous tasks. Today's young employees—even those with college diplomas and advanced degrees—may lack some basic skills and background knowledge once taken for granted. As our educational system has transformed—with much less emphasis on fact learning, rote memorization, and what used to be the fundamentals of reading, writing, mathematics, spelling, grammar, logic, and other disciplines—our graduates require much more critical thinking, remedial education, and training before they can perform at an acceptable level in many jobs. The leader has to provide that education and training. A progressive intellectual environment becomes possible only when critical thinking serves as the foundation of education. Why? Because when students learn to think through the core competencies they are learning, they are in a better position to apply this learning to their lives and daily work. In a world characterized by constant change and increasing complexity, people need critical thinking for economic, social, political, military, and educational survival.

Young graduates today have far more technological sophistication than the previous generation of new employees and usually can teach their leaders a thing or 60 about computer-aided research, software, hardware, and a host of powerful, modern tools. They can handle all manner of telecommunication and high-speed computerized methods with a facility that will astound many old-timer leaders who climb on a chair if someone mentions a mouse in the office. The wise leader is humble enough to use this digital edge to the fullest, even while filling in the young associates on some basic writing and sociocultural fundamentals.

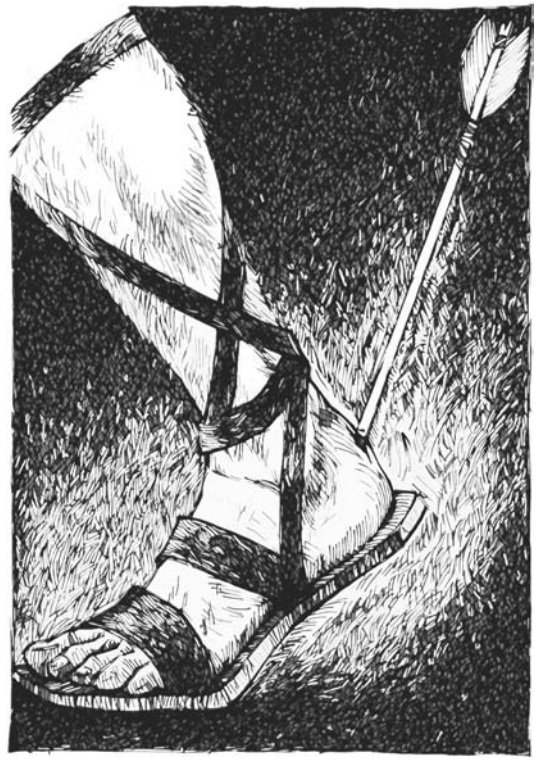
Teacher-leaders cannot safely assume anything about new recruits in terms of knowledge, skill, or attitude—only that they are human and will surprise them in ways that range from delightful to dreadful. If entry-level employees (or even senior ones) appear to have a work-ethic deficit or seem disrespectful or ill mannered, no contemporary Attila can change all that by merely barking a few orders. People have a deep-seated and ineradicable need to achieve and succeed, but a modern leader must find the right way to access that latent potential within each individual, and this often entails considerable teaching and back-to-basics skill training in the workplace. Screams, threats, and periodic exclamations of "You're

fired" or "You just don't fit in" will not compensate for decades of acculturation and educational priorities that are a bit (or a lot) off track from what the leader wants from his or her people. Teaching and learning remain central to what today's leaders really do, and that continues throughout the life cycle of their relationship with their people. (That is why we touch on the concept of perpetual learning later in this article.) If a person ignores either teaching or learning for long, the leader's office will soon house someone new who better "fits in" the twenty-first-century boss's chair.

Healing an Achilles' Heel

Primarily, leaders fail or fall short of their potential because they have an undiscovered and/or unhealed Achilles' heel—a weakness serious enough to negate all of the many positive attributes they may be blessed with. It follows that perhaps one of the most important actions a leader can take is to find and rectify whatever hidden flaw threatens his or her future. This is unpleasant, painful, and arduous work; thus, most people never do it. No off-the-shelf text on liposuction leadership can swiftly suck out our latent and long-festering vulnerability while we recline and rest. Unless we face our flaws, we gamble that one day they will face us—at a moment when a single, unaddressed issue jeopardizes everything we have achieved, and one big "Oh, no" upends a career overflowing with "Attaboys."

The metaphor of an Achilles' heel is potent because legendary Achilles himself was a demigod and the greatest warrior who ever lived, virtually a one-man army capable of winning wars with his unmatched abilities for whatever side he favored. He could slay the enemy's premier hero, even Hector of Troy, and conquer the mightiest of obstacles. Yet his famous heel was ever present throughout his astonishing string of marvelous triumphs, and at the climax of his crowning victory over Troy, it allowed a far inferior enemy to kill him. If a lowly heel can fell the ultimate military genius at the pinnacle of his power, all leaders would



do well to check carefully for whatever vulnerability threatens their own success.

That does not mean that such self-inspection is fun or easy. No one, from Achilles on down, likes to confront his or her own imperfections—especially ones deep and deadly enough to provoke utter failure. Sometimes we have no awareness of our own worst weaknesses, at least on a conscious level, simply because it is far more comfortable to avoid them and pretend that all is fine than to wrestle with such pernicious internal perils. Moreover, some character defects manifest themselves only when a particular, specific combination of unusual circumstances coalesces, which might not happen more than once or twice in a lifetime—if at all. Staring long and closely at ourselves in a starkly lit mirror to identify those often well-concealed weaknesses can be challenging and repugnant work. It involves methodical analysis of often horrible memories of incidents in which things went very wrong.

When and why did this happen? Has it recurred? Could it recur?

All of us could also effortlessly critique many leaders—great and not-so-great, ancient and modern—and catalogue the flaw or cluster of flaws that undermined them. From Julius Caesar, Hannibal, and Alexander the Great to Ronald Reagan, Bill Clinton, and George W. Bush, it is so easy for us to play Name That Heel that one wonders why these prominent individuals did not do it themselves and proactively root out all those inimical defects. How could they not see their glaring blind spots? Why would such successful and eminently experienced leaders make colossal blunders—even make them repeatedly—when the consequences seem so obvious and predictable to us in our retrospection recliners? We can help ourselves to a few cheap laughs at the Big Boys' expense. But then, when it is our turn to literally help ourselves by putting our own character under the microscope, the game jumps suddenly to a much more challenging and decidedly less festive level.

Completely eliminating our greatest weakness may prove impossible, given that it likely formed through many years of experience. At a minimum, however, we ought to identify and then stay away from those specific temptations, situations, preconditions, and circumstances that have proved their potential to breach that weakness and thereby cause our downfall. By gaining cognizance of the existence and nature of our Achilles' heel, we acquire the opportunity to be alert to whatever warning signals tip off the approach of our special combination of dangerous conditions and therefore exercise extra caution to guard against giving in to our weakness. In *The Picture of Dorian Gray*, Oscar Wilde famously but erroneously declared, "The only way to get rid of a temptation is to yield to it," but actually the best remedy is to understand the temptation and what causes it, strive constantly to remain removed from those causes, stay vigilant for early signs of trouble, and then use all our strength to resist surrender.[4] Doing nothing along these lines makes it far more probable that one day people will gossip about our own stunning failure and shake their heads that we could throw our once-promising careers away on something so blatantly foolish and so entirely obvious (to others) that we should never have gotten caught up in it. Finding and healing our Achilles' heel (or heels) can be one of the greatest favors we ever do for ourselves, our people, and our organization.

Service, Not Self

As young children, we tended to believe that being a leader is an unqualified blessing, amounting to getting our own way all the time and calling all the shots. That might be a fair description of a despotic dictator who rules with an iron fist tightly clenched around a bundle of fear and force. Such tyrants live and die by violence and threats, and their methods have no place in a modern free society—even though some megalomaniacs might imagine themselves as divine-right royalty within their little domains. Paradoxically, in our contemporary, self-centered, Me Century culture, where narcissism and self-esteem are paramount, the best leaders put service to others before service to themselves. To lead people who put themselves first, we would do well to check our own egos at the door and focus on what is best for our people, organization, and culture.

This concept of servant leadership is as old as humanity, but we are fated to relearn it every generation. It feels backwards, as if the leader must put aside the perquisites and privileges of the crown to stay on top—almost abdicating the throne to keep it. But authentic leadership does not involve serving ourselves, and self-aggrandizement remains foreign to the true leader, whose proper aim is to move people to do what is best for the greater good—not what is best for the leader's petty and narrow personal interests. Only by regarding the broader interests of others—employees, colleagues, customers, and society—can leaders prevail in a world where people routinely expect to be first. Of course, over time a leader will strive to impart some measure of other-regarding selflessness to his or her employees as well and move the entire

organization into a service mode—but this plan unavoidably begins with the leader's own attitude.[5]

Humility, a modest sense of one's own importance, is basic to reality leadership. For people weaned on a formula of high self-esteem, humility and self-sacrifice would appear oxymoronic—a concept blatantly at odds with itself. But that is precisely why it is so crucial to productive leadership. It is not easy, and it is not obvious—but it is effective. Only by turning outside our constricted, selfish miniworld and looking at what is best for others can we serve them and, ultimately, succeed in our own right. A dictator might demand that his serfs put up a huge statue of him in the city square, but one day that monument to megalomania will be torn down, maybe by those same serfs. The only lasting memorials to leaders are those earned through assiduous devotion to something greater than themselves—and greater than any one person.

That splendid brand of selfless leadership differs greatly from the "best friend" or babysitter leadership you might think appropriate for workers coddled, pampered, and cushioned with an inflated sense of self-esteem since conception. It does no one any favors to dumb down the organization's expected performance level or to numb down our alertness for failure to meet those expectations. Reality leadership demands recognizing the truth about ourselves as well as our coworkers, competitors, customers, and culture—and then insisting on a cooperative and coordinated approach to making that truth work for our organization. No one can do this with sloppy work, lowered standards, tolerance for intolerable attitudes, or excuses for inexcusable behavior. People will eventually respond positively and appropriately to a selfless leader who settles for nothing less than best efforts and high-quality production from everyone—from the leader to the most inexperienced newcomer.

Pampered, grown, and nanny-cosseted self-esteem junkies will probably bristle initially when someone suggests (for maybe the first time in their lives) that their performance is less than above average. However, once it becomes clear that everyone, including the leader, must adhere to a no-excuse, no-kidding production, they too will usually adapt and even take pride in at last meeting and exceeding exacting standards. After all, self-esteem becomes only selfish steam unless real substance lies behind it and we ultimately see undeserved praise as saccharine for the soul. As generations of recruits have learned the hard way from surviving a grueling boot-camp ordeal, they can realize great value by reaching deep within to overcome the steepest challenges of their lives. Furthermore, the genuine sense of pride and camaraderie that comes with such a personal and organizational triumph far outshines any false pride that well-meaning but overly lenient caregivers so easily hand out. Those rewards and accolades we earn are infinitely more satisfying than those given us, precisely because we had to toil, think, struggle, and do more than was comfortable to obtain them. In that sense, the gift of high standards and high expectations for one and all is one of the greatest and truest gifts any reality leader can convey.

Mentoring for Leader Development

One can make a strong argument that leaders are neither born nor passively made; rather, they are developed and develop themselves through education, training, and a special set of experiences. Mentoring offers a good place to begin. It is largely a teaching process, beginning with parental nurturing of children and continuing through the life cycle of organizational and personal interrelationships. A key principle here is that mentoring is both an obligation and a privilege of leadership. It is something we give people. In mentoring, reality leaders provide followers with the guidance they need to make intelligent and informed decisions. Through mentoring, the senior imparts wisdom and experience-derived know-how to the junior. This process includes passing on and discussing principles, traditions, shared values, qualities, and lessons

learned. Mentoring provides a framework to bring about a cultural change in the way the organization views the professional development of competent people. In most organizations today, people must take an uphill and bumpy ride on the road to the top—they simply cannot float there, nor will anyone carry them. Mentoring involves guiding and coaching—helping people move in the right direction. Clearly, mentoring is a vital way to help us reach our desired destination.

Perhaps the most powerful method by which we can shape the professional development of our employees, mentoring has become a buzzword, often carelessly shot into the air along with a dust cloud of other jargon from the unofficial, unwritten dictionary of those who consider themselves on the cutting edge of modern leadership and management. Real mentoring, properly understood, is much more than just another clipping from last week's "Dilbert" cartoon. It can and should be adjusted to fit the idiosyncratic needs and situations of both parties to the mentoring partnership, as elastic and malleable as human beings themselves. The antithesis of the old-school, one-size-fits-all, cookie-cutter mentality, mentoring—because of its capacity to conform to individual circumstances—is ideally suited to today's partnering environment. Thus, it is literally a time machine that allows us to have a profound influence many years beyond today's hubbub and humdrum and allows us to make a significant difference in the lives of our people.

A mentor—a trusted advisor, teacher, counselor, friend, and parent, usually older and more senior in the organization than the person being helped—is present when someone needs assistance in an ongoing process, not just a one-shot, square-filling formality. Because of the widely recognized value of mentoring, many organizations have made it routine, turning it into a meaningless exercise in mandatory window dressing—just one more pro forma ritual to perform and check off on some to-do list. With all the blood drained out of it, mentoring becomes just as ineffective as any other quick-fix leadership "secret" copied mindlessly from some leadership-for-losers book. Throughout our society, authentic mentoring can apply to all leaders and supervisors responsible for getting their work done through other people—but it takes much more than a perfunctory patch. As mentors who take the time to do it right, our greatest validation may come one day when we witness our former protégés—the individuals assisted by mentors—in turn undergo metamorphosis and emerge as mentors themselves.

The modeling of proper behavior, an indispensable ingredient of good mentoring, occurs when the leader demonstrates for the protégé exactly what he or she expects. It is an ongoing exercise in "do as I do," follow-the-leader game theory, but we play this never-ending game for keeps. We have seen too many examples of leaders who consider themselves exempt from the rules—even the laws—that apply to everyone. Corruption, scandal, and ruin on both an individual and institutional level metastasize from the leader's attitude of special privilege. The leader who tries to conceal personal dishonesty, immorality, or lawlessness behind a mask of faux integrity can only mentor people into becoming similar frauds because such rottenness will inevitably be exposed, having permeated the organization at every level. The true mentor must prove that "do as I say" and "do as I do" are utterly indistinguishable, without regard for time, place, or circumstance. It may not always be personally convenient or expedient for the mentor-leader to be and do everything he or she asks of the workers, but it is a nonnegotiable prerequisite of genuine leadership excellence.

As mentors, the fact that we can matter, even if for only one protégé, may be one of the most rewarding events a leader experiences. Neither dramatic nor flashy, this outcome may remain invisible to everyone but the protégé, but to that person it has profound significance. This is not the kind of marquee-magic, big-bang leadership legerdemain many people yearn for—just the kind that really does work a quiet, personal form of magic an inch at a time.[6]

Perpetual Learning

Good leaders understand that organizations cannot grow unless people grow, including the leader and everyone else. Professional development or perpetual learning involves becoming capable of doing something we could not do before. It requires growing and developing more capacity and self-confidence in ourselves and in our people. Now more than ever, leaders must ensure that professional development remains a constant activity, as we mentioned in our section about what leaders really do. We do not go to school once in a lifetime and then put education aside forever; we stay in school all of our lives.

Developing people—really developing them, with all the individually tailored effort that entails—is fundamental to how the organization views itself and how it is viewed by leaders, customers, competitors, and colleagues alike. The organization reifies its capabilities through perpetual learning, enhancing every person from the inside out, and working the same internal alchemy on the overarching team structure. Only by holding the "learning constant" foremost in their vision can reality leaders have a chance of keeping their people fully capable of fulfilling an ever-shifting mission under steadily unsteady circumstances. Given the complexity of life in the world today, no one doubts that continuous learning and adaptation are directly related to and absolutely essential for overall, long-term success.[7]

Leadership and Implementing Change

Do not read the following joke if you have already heard it more than 43 times. How many psychiatrists does it take to change a light bulb? The answer is simple. Only one, but it is very expensive, takes a long time, and the light bulb must want to change. However, unlike changing the legendary light bulb, implementing real change does not necessarily take a long time. It can happen very quickly at some times, while at other times it crawls with imperceptible, glacier-like slowness. This is true of all types of evolution, whether good or bad. A major function of leaders calls for maximizing the former and minimizing the latter. Positive change—the kind that we cause proactively rather than the kind that falls on top of us by default—requires the right strategy. We need a system, including a workable and institutionally internalized process, to bring about the good-news change and identify/dodge the car-crash kind. Without an effective leader engineering useful change, change will inevitably find us even as we sit still, and we will usually not welcome that variety of accidental alteration.[8]

This age of instability can be an uncomfortable time for people who long for things to remain as they are—familiar, well understood, and routine. Since continual change is a given, a leader must resolve to put change to work, squeeze a harness around it, and ride it toward the right horizon. We best predict the future by inventing it, but we cannot do that by mechanically applying any formula from a self-help book, and no do-it-yourself kits exist for this. No matter what neologisms we create to describe our methods and irrespective of how many charts and four-part process lists we concoct to conjure the illusion of quantifiable precision, we still glimpse the future, if at all, through a glass, darkly. But we can look at what we need now and two years from now, and then set purposefully about making it happen. If we devote significant amounts of time on a regular basis to meeting with our people at all levels to brainstorm ideas for dealing with the years to come, we will find ready confirmation of our suspicion that we do not know all the answers and do not have a monopoly on all the good questions. We will also find that action works like a powerful medicine to relieve feelings of fear, helplessness, anger, and uncertainty because we become no longer just passive passengers on a runaway train, but engineers with influence over our journey. Instead of changing with the times, we must make a habit of changing just a little ahead of the times and doing what we can to nudge change in the optimal direction; in the process, we will enhance our living with a constructive purpose.[9]

Conclusion

In summary, we reflect on John W. Gardner, who wrote as thoughtfully as anyone on the complexities of leadership. His words almost constitute a leadership creed: "We need to believe in ourselves and our future but not to believe that life is easy. Life is painful and rain falls on the just. Leaders must help us see failure and frustration not as a reason to doubt ourselves but a reason to strengthen resolve. . . . Don't pray for the day when we finally solve our problems. Pray that we have the freedom to continue working on the problems the future will never cease to throw at us."[10]

Perhaps the synthesis and summation of everything we can do to become ethics-based reality leaders call for using our freedom to the fullest and setting our hearts on doing all we can to develop a group of individuals into a cohesive and purposeful problem-crunching team.[11] This will necessarily entail all of the activities we have covered in this article: comprehending the concepts of leadership, conducting genuine mentoring and teaching, healing our Achilles' heels, practicing perpetual learning, and inventing our own future at all levels. If we become, at our core, members of that team with no interests out of harmony with what is best for the team and the organization it serves, many of the fancy theoretical notions about leadership will take care of themselves—or we and our teammates will take care of them ourselves. Reality leadership may not fit into any academic textbook's equations or inspire any novelist to rhapsodize us into fictional immortality, but it delivers because it embraces the totality of real things and events that leaders come to grips with on a daily basis. ❑

Notes

1. Les T. Csorba, *Trust: The One Thing That Makes or Breaks a Leader* (Nashville: Thomas Nelson, Inc., 2004), 23–24.

2. Warren Blank, *The 108 Skills of Natural Born Leaders* (New York: AMACOM, 2001), 13–14.

3. James M. Kouzes and Barry Z. Posner, *The Leadership Challenge: How to Get Extraordinary Things Done in Organizations* (San Francisco: Jossey-Bass, 1987), 15–16.

4. Oscar Wilde, *The Picture of Dorian Gray*, chap. 2, etext no. 174, *Project Gutenberg*, http://www.gutenberg.org/dirs/etext94/dgray10.txt.

5. Ronald A. Heifetz and Marty Linsky, *Leadership on the Line: Staying Alive through the Dangers of Leading* (Boston: Harvard Business School Press, 2002), 208–9.

6. John C. Kunich and Richard I. Lester, *Survival Kit for Leaders* (Dallas: Skyward Publishing, 2003), 71–73.

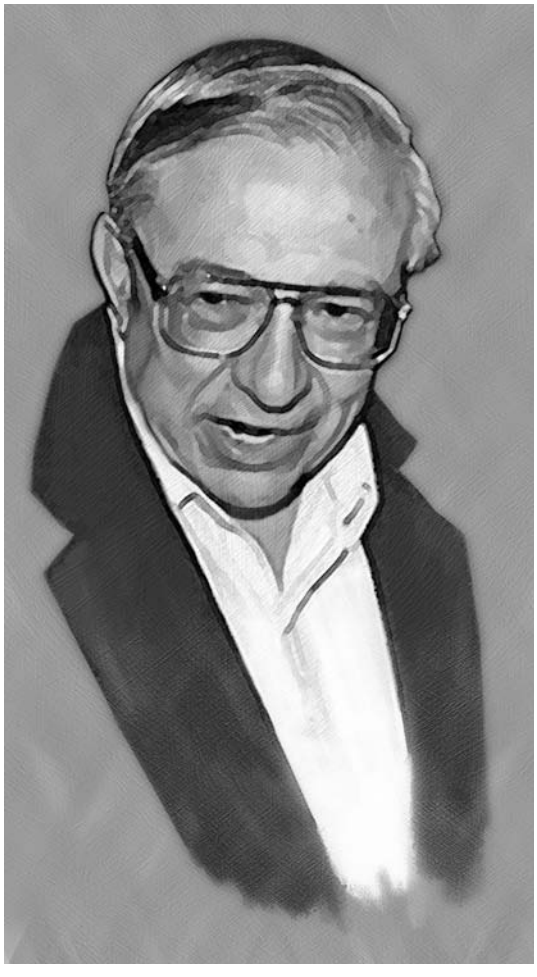
7. Paul Hersey, Kenneth H. Blanchard, and Dewey Johnson, *Management of Organizational Behavior: Leading Human Resources*, 8th ed. (Upper Saddle River, NJ: Prentice Hall, 2001), 229.

8. Oren Harari, *The Leadership Secrets of Colin Powell* (New York: McGraw-Hill, 2002), 23.

9. Rick Warren, *The Purpose Driven Life: What on Earth Am I Here For?* (Grand Rapids, MI: Zondervan, 2002), 312–14.

10. John W. Gardner, *On Leadership* (New York: Free Press, 1993), 195, xii.

11. Jeffrey A. Zink, *Hammer-Proof: A Positive Guide to Values-Based Leadership* (Colorado Springs, CO: Peak Press, 1998), 5.



Military Ethics

Some Lessons Learned from Manuel Davenport

Dr. J. Carl Ficarrotta*

Editorial Abstract: Military leaders at all levels face difficult moral and ethical decisions. Originally presented at a memorial conference for the late Manuel Davenport, this article aims primarily to underscore Professor Davenport's example as an excellent teacher of military ethics, examine several unique themes in his work, and recommend his effective method for approaching problems of military ethics in general.

STARTING AND FIGHTING wars is a morally hazardous business. The philosopher G. E. M. Anscombe describes the peril well: in starting wars, our common foibles have too often led nations to "wrongly think themselves to be in the right."[1] The deadly serious work of fighting wars presents to the military professional in combat even more pitfalls: "Human pride, malice and cruelty are so usual that it is true to say that wars have been mostly mere wickedness on both sides. . . . The probability is that warfare is injustice, that a life of military service is a bad life."[2] We might disagree with Anscombe's estimations of the probability that we will fail, but certainly no other context presents so many

*Manuel Davenport, a generally recognized and influential military ethicist, was known by many people, especially in our Air Force, for his leadership, moral courage, kindness, helpfulness, and wickedly funny sense of humor. I think that the sixth anniversary of his passing (he died on 31 August 2000) presents an apt occasion to remember this man, his impact and example, and the unique methods and doctrines he taught.

Thanks to Dr. Robin Smith, head of the Department of Philosophy at Texas A&M University, for inviting me to present the first version of this article in 2001. Many thanks to the dozens of people who spoke to me about Manuel Davenport as I prepared that first version. Recently, Dr. James Toner of the Air War College made a number of very helpful suggestions. Indeed, all of the editors at *Air and Space Power Journal* who worked with me to bring this to publication exhibited the patience of Job. I am grateful to them all.

opportunities for the worst kinds of immorality. In the face of this danger, some people have actually embraced war as a moral catastrophe, allowing without condemnation any use or abuse of power in international relations and any method of fighting in the prosecution of war. Fortunately, many more of us rightly set our faces against this kind of moral nihilism with respect to war.

With the opposition to nihilism and its radical permissiveness should come yet another worry: that we will do a poor job of formulating our moral judgments (and the accompanying, well-intentioned attempts to remedy or prevent problems). We must not proceed naively, too quickly, or from the "outside" without an appreciation for the real nature of the moral difficulties found in statecraft and the prosecution of warfare. Numbers of thinkers have avoided these risks, become wise and informed specialists in the morality of war, and made many helpful contributions to coping with the thorny problems posed in military ethics. Manuel Davenport was one of those thinkers. Indeed, we can understand in retrospect that he was part of an elite group of military ethicists who have done this vital work truly well.[3] The thoughtfulness, moral conviction, and discipline he brought to the enterprise of doing and teaching military ethics provide us with a great example. We should reflect on that example and see what lessons it can teach us in the present.

Lessons on How to Teach Military Ethics

The places where Davenport taught military ethics allowed his work as a teacher to have maximal reach and impact. Texas A&M University's Aggie Corps of Cadets normally has as many as 2,000 members, making it one of the largest groups of uniformed students in the country.[4] During his long tenure at A&M (starting in 1967), Davenport taught a course in military ethics that touched many of the cadets from this rich source of officers. Moreover, he twice served as a distinguished visiting professor at the Air Force Academy, where he taught military ethics to hundreds more future officers. Here is the first lesson to learn: at the very least, we must place courses in military ethics close to all of our commissioning sources.

On many occasions, I observed Davenport engage these undergraduates, who would soon become our leaders; he was always at their level—engaging, memorable, kind, and funny. Yet at the same time, he remained rigorous and intellectually demanding. In time his teaching provided a widespread, positive influence on how many of us throughout the armed services think about moral problems—influence planted one student at a time. So here is another lesson we should learn in reflecting on Davenport's teaching: we cannot teach military ethics properly by using only posters, pamphlets, or short motivational speeches. Reasonable concerns for efficiency and leveraging our resources must not trump what is essential to the educational process. Individual engagement, one student at a time and over long periods, is a vital part of the job.

Davenport did more than teach many college-aged students on their way to becoming junior officers. He also taught a number of teachers who then went on to educate many, many more undergraduates. The faculty of the Air Force Academy, like the one at West Point, is staffed in large part (indeed, for many years before the 1990s, almost exclusively) by military officers. Some military professors have long-term relationships with the academy, hold doctorates, and have years of teaching experience. Significantly more members of the military faculty, however, are very junior officers recruited from various career fields to serve a single tour of duty—three or four years—as instructors in lower-level introductory courses. They must hold a master's degree in the subject they hope to teach. If no qualified officers who hold the advanced degree are available, then the academy sponsors those with the right credentials for 12- to 18-month fellowships. That is, when necessary, the institution will "grow" its own junior instructors.

As one might expect, very few military officers already hold master's degrees in philosophy, so the lion's share of them must receive

training in graduate schools before coming to work. However, not that many universities can or will accommodate the needs of the services on this count. Short timetables, students who need remedial work, students not able to pursue the doctoral degree, and other complications make it difficult for philosophy departments to admit these officers. But Davenport never said no. Always willing to take academy-bound officers under his wing, he got them through solid master's programs when others might not have. Through his training of these instructors, he of course touched the moral education of thousands of future military officers at both the Air Force Academy and West Point. Here we find yet another lesson: we must not neglect the institutional structures and programs that provide a pipeline of officers with the requisite expertise for teaching military ethics. Such structures and programs (for example, Air Force–sponsored civilian education, the release of officers from their career fields for these "nonstandard" tours and career paths, military billets on the academy staff, etc.) serve as critical nodes in our larger, systematic effort to produce Air Force officers with strong moral character and sure moral-reasoning skills.

During his yearlong visits to the academy, Davenport served as an important advisor to several department heads and mentored many junior faculty members. On his first visit, he became a confidant to Malham Wakin, a colonel at the time (Wakin called Davenport his "senior consultant"). During his second visit, Col Charles Myers felt much the same way. For younger faculty, Davenport led reading groups, offered advice on publishing, and gave of his time freely and generously, both in the office and in the coffee shop, always ready to help with something puzzling, whether personal or professional. The academy's philosophy department is unquestionably stronger as a result of the two years he spent there. Other visitors have had similar beneficial influences. Sharing the expertise of senior scholars in this way provides another important precedent for us to follow: we should find ways to replicate this sort of in-residence arrangement at all levels of ethics education in the Air Force. We cannot replace Davenport, but we *can* hope to benefit from the synergistic and sustained stimulation that a visiting expert can bring to a faculty.

Davenport's influence spread from more places than just Texas A&M and the Air Force Academy. In the early 1980s, a group of military officers formed an organization that would allow them to present papers on problems in military ethics at a regularly held symposium—the Joint Services Conference on Professional Ethics (JSCOPE, now known as the International Symposium for Military Ethics). When the group sought out Davenport to participate, he agreed immediately, serving on the JSCOPE board as its civilian representative, presenting many ground-breaking papers at the conference, and arranging to have Texas A&M host the conference before it found a permanent home in Washington, DC. Year after year in this organization, he facilitated the thinking not only of undergraduates and their teachers, but also of seasoned professionals still struggling with the same problems—people *now in the military*, who will make so many of the hugely important decisions in fighting our nation's wars. So here we find yet another lesson to learn: we should continue to support ongoing ethics forums for military professionals to share ideas and consult with a diverse group of experts. Overall, we should look to Davenport's teaching as a model for what is possible and find ways to keep that kind of flame burning (with undergraduates, their teachers, and working professionals).

What He Taught: The Doctrines

Besides learning from Davenport's example as a great teacher with a wide influence, we obviously cannot neglect to survey *what* he taught. His writing on military ethics reveals helpful contributions in two broad areas. In the first, he articulated and defended some specific doctrines—extensions of or twists on several classic principles in military ethics. In the second, he showed us a method or an approach that we should never fail to appreciate and emulate.

The doctrines he taught ran the gamut of problems in military ethics: moral questions about when to go to war, how we may fight, professional loyalty and competence, and what sorts of people (morally speaking) military professionals should be. He worked broadly inside the just war framework, familiar to any student of military ethics.[5] Here I highlight only a few of the most important and influential ideas that he developed and promulgated—ideas unique or unusual in the literature on these topics.

To begin, Davenport consistently warned us of the dangers of military power and the absolute necessity they create for certain loyalties in people who make up the military. The dangers fall into two general categories. First, if given too much power, the military typically does not relinquish it; hence, the military's influence grows beyond what is fitting, and its function moves from protection toward tyranny. So loyalty to the client state becomes crucially important. The military is and should be characterized by fellowship and a fierce loyalty to the service, yet "duty to client [that is, the client state] must take priority over duty to profession, and in this nation [the United States] we recognize this by the principle of civilian control of the military."[6]

Connected to this notion was Davenport's firm defense of a venerable just war principle: that only legitimate and competent authority—removed from the military itself—should make the decision to go to war. Militaries throughout history have been tempted to think they knew better than the citizens they served, with bad results. In most cases, when members of the military "decide who the enemies of their society are and engage on their own in actions aimed at the destruction of such perceived enemies, the stability of their society is endangered rather than preserved."[7] Moreover, in Davenport's view, we should remove the decision to go to war even from people responsible for the day-to-day tasks of direct rule. Rather, the authority for making war should rest with those responsible for appointing and deposing rulers—in the United States, the people or their representatives. History has shown and reason confirms that "those who directly rule are more difficult to depose if they possess the power to make war."[8] We must keep the dogs of war on a tight leash.

The second danger of military power manifests itself in the conduct of war. Davenport had grave concerns over soldiers in the midst of fighting made "drunk with power." Even if these soldiers recognize that the client state and the rules of morality grant their power to do violence, they may be "tempted to exercise the power . . . without restriction and plead that this was necessary in order to serve the best interests" of their clients.[9] However, military professionals must "distinguish between [their] clients and humanity" and cannot justify destructive actions toward enemy civilians simply because such actions might promote their own interests or even those of fellow citizens back home. The paramount duty of the military professional is "to promote the safety and welfare of *humanity* and this duty, [even] according to military law, takes precedence over duties to clients, who as his fellow citizens are but a particular portion of the human race" (emphasis in original).[10] So discrimination between the innocent civilian and the combatant is one of the military professional's most pressing responsibilities. Temptations to the contrary notwithstanding, this responsibility takes precedence over our other personal or state interests.

This same lexical ordering of values led Davenport to some interesting views on what constituted just cause for warfare. His views were more encompassing than those of people who advocate only for national interests and self-defense: "In an ideal world all violations of human rights should be punished, but in the actual world we may not be able to do this. Our failure to do so, however, should not prevent us from appreciating that our attempts to establish international justice can and should lead to increased moral awareness and an improvement in the actual rules of war. Improvement in the quality of life for all humans is more important than serving our selfish, national interests."[11]

Davenport also had strong views on the kinds of people we need in the military and stumped for the personal qualities he considered indis-

pensable for military service. Elaborating on some ideas of Wakin, Albert Schweitzer, and others, he pointed especially to moral integrity and expert technical competence. He called for courage (both physical and moral), a sense of calling, and a wholeness of person—and made these strong moral demands even in the military professional's private life. For example, Davenport set his face against toleration of adultery for the military officer, even when it remains private: "A person whose continued existence depends upon deceiving himself and others cannot be trusted to execute assigned duties or to provide truthful reports which are subjectively unpleasant or harmful. Such a person . . . cannot be a military professional worthy of respect."[12]

He endorsed these special and demanding military virtues because they are necessary for military functioning. Now this functional approach is a fairly standard way of understanding the justification of military virtues. All along, however, Davenport noticed that these virtues must promote not only military excellence, but also (and at the same time) a rich notion of the good life for anyone, in or out of the military. After all, what counts as a moral military should not be conceived in isolation from the rest of the moral life—in fact, a moral military will be moral *precisely because* it properly preserves a number of important human goods. Virtues for the military professional and those for a good human life as a whole must go hand in hand and blend into a seamless consistency. So Davenport's ultimate groundings for all these demands on military character (that is, military excellence *and* the overarching idea of a good human life) exclude the possibility of judging a Nazi a virtuous fighter simply because, on a certain level, he was a good soldier.

In another theme that runs through Davenport's work, he proposed that the bureaucratic and abstract nature of the military structure creates a number of problems, especially for the military character. In the first place, the structure of the military tends to aggravate its remoteness and isolation from the rest of society. This in turn creates a tendency not to respond adequately when unethical demands are made of the services. As a case in point, he thought that the military frequently finds its true needs unhealthily subordinated to purely selfish political concerns. He also believed that other features of the military structure create problems as well: an all-volunteer force does not adequately represent all walks of life, the military does not effectively recruit enough especially competent people, and the bureaucracy motivates a kind of careerism among officers that focuses merely on promotion rather than real excellence. But Davenport judged that the basically bureaucratic and abstract structure of any large military remains the only one it can have and still perform its function. Hence, "the military organization must [when necessary] change its personnel and its responses to the social environment so that within the existing structure there is a greater commitment to the military objective."[13] Again, he underscored the need for certain virtues or character traits—*certain kinds of people*—in the military. These, then, are some of the unique doctrines that Davenport taught.

What He Taught: The Method

Understanding the *method* by which Davenport developed and taught these doctrines (a method I discerned, for the most part, by his example) proves by far the more difficult lesson to learn; nevertheless, it is one we sorely need in the practice of military ethics. In sum, he was masterfully subtle—always evenhanded and never succumbing to the temptations of oversimplification or dogmatism. He said very clearly that we "should not rush headlong" to our judgments, warning against the "danger and allure . . . of moral shortcuts" and insisting that we engage in "constant questioning of the actual rules of war rather than inflexible adherence to [simplistic] moral absolutes."[14]

Indeed, Davenport resisted all forms of formulaic thinking about military ethics, showing us instead a kind of moral wisdom that grows out of a real humility before this difficult subject matter. In contrast to the deceptive simplicity and clarity of his writing, he had a profound appreciation of moral complexity.

At the foundation of Davenport's thinking, we find the avoidance of one-dimensional theoretical commitments not true to the nature of moral experience. He frequently appealed to utilitarian arguments but was not simply a utilitarian; he spoke of moral duties but was not at base a Kantian; and he occasionally appealed to biblical principles or theologically informed philosophers but gave them no privileged place in his thinking.[15] In the same vein, he realized that moral theories are often not fine grained enough to help in the balancing of competing values but that, in addition, sensitive moral judgment and experience are crucial. Moreover, when approaching a concrete moral issue, he sought the facts—all of them—despite knowing the difficulty of discerning which facts have moral relevance. He also understood that knowing the everyday moral rules does not at once guarantee that we will know which ones properly fit with the situations at hand—or how. And he saw that sometimes a problem involves a lack of moral motivation or a failure to *possess* the virtues (rather than a failure to understand them). I could list more of his cautions. The important point is that Davenport knew that no simple algorithm guarantees a correct moral judgment, which is as much an art as it is a science. In all but the easiest cases, there is no simple way to proceed.

Davenport's understanding of moral judgment is reminiscent of something the philosopher Jay Rosenberg once said about philosophy in general: learning to do good philosophy is something that cannot be reduced to a simple set of rules. Sometimes we must first see how it is done—like learning to dance by watching someone else and then joining in.[16] In the same spirit, let us look at how Davenport handled some tough cases of applied moral reasoning by examining some instances of his method in action.

Take, for example, Davenport's analysis of a dilemma faced by Gen Laurence Kuter, who participated in planning the firebombing of Dresden during World War II. When Kuter's papers and some other previously classified documents became available in the 1990s, Davenport studied the memos associated with the general's decision to participate. He considered the targeting of this largely civilian population center with incendiaries immoral, amounting to a form of terrorism. Apparently, even Kuter believed something similar and held to the idea that "terrorism, including area bombing, was always wrong."[17] So we might think that if Kuter held these views yet still planned the raid, he must have been a weak and compromising sort—the kind Davenport so often claimed was out of place in the military.

But he refused to engage in such a characterization of Kuter. Why? He noted that Kuter tried mightily to dissuade his superiors from carrying out the raid, but he failed: "What seems evident is that he thought he had gained as much moral ground as he could hold, [and] that to push further might jeopardize his future moral credibility."[18] That said, how did Davenport think the moral person should respond in these terrible circumstances?

> To answer this question we would have to consider, as Kuter did, which course of action would contribute most significantly to winning the war and saving the peace: obedience after making one's moral objections known or a refusal on moral grounds to continue to participate in the war. General Kuter clearly believed that he could contribute more to both the moral awareness of his superiors and eventual victory by retaining his military office than by resigning it and becoming a public critic of those who had been his superiors. . . . He leaves us, as he left himself, constrained to preserve his integrity and serve his nation in the face of moral uncertainty. To acknowledge one's finitude and fallibility and yet take a stand according to one's best insights takes a high degree of moral courage. It is much easier to act as a moral coward and refuse to take a moral position out of fear of being mistaken or unpopular, and it is easier still to act on the arrogant and foolhardy assumption that one knows what is best for all humans in all times. The morally brave person fears the harms that come from failing to act and fears the harms that come from blind adherence to absolutes.[19]

Thus, compromising one's principles without objection or second thought is cowardly and easy (easy at least in the moment). In fact, a refusal to compromise on moral principle is almost without exception the courageous, difficult, and proper course—for example, when

no doubt exists about the immorality or illegality of an order, integrity demands nothing less than firm disobedience. Davenport, however, admitted the existence, on very rare occasion, of fearsome circumstances filled with terrible pressures and conflicting duties in which a simple and high-minded refusal might *also* be the relatively easy, yet improper, course. Was Kuter really sure about the immorality of the raid? If the general resigned after vigorously making his objections known, who would replace him? Would the next such raid prove easier without Kuter in place? Without him, what are the chances of stopping another one? Would anyone challenge the moral consciences of his superiors? Would the details of the planning take any steps to mitigate the immorality he perceived? With all these questions open, the right course is not obvious. Michael Walzer notices a similar difficulty in such rare cases when we must do something, even though we judge it wrong, as part of an overall concern for doing the right thing: "We say of such people that they have dirty hands. . . . [Those] with dirty hands, though it may be the case that they had acted well and done what their office required, must nonetheless bear a burden of responsibility and guilt."[20] Whether or not we agree with Davenport (about the general idea or whether it was properly invoked in Kuter's case), his suggestion should give us pause before coming to the conclusion that Kuter plainly erred in compromising. Davenport showed us that a moral judgment often involves more than first meets the mind's eye.

Another case illustrates much the same point. During the 1970s, Davenport, along with Wakin and J. Glenn Gray, was part of the Mountain-Plains Philosophy Conference. In the early months of that decade, the conference decided to put forward a public position paper, bearing the name of the conference, condemning the Vietnam War in clear terms. At the time, doing so would have been easy and (in those academic circles) uncontroversial. Wakin, at the time a colonel in the Air Force, asked the conference not to speak with one voice. If it proceeded as planned, he and other military philosophers in the group would have to withdraw. Davenport stood with the military officers even though he believed the war immoral, all things considered. Although others appeared not to understand, he understood the webs of loyalty in which the military officers found themselves. He respected their position and refused to take a simplistic view, even when it appeared on the surface to be the moral "high ground."

Davenport's reaction to problems of false reporting in the military provides yet another example of his careful reasoning. In the 1980s, beginning in Vietnam and continuing for over a decade, the military discovered a rash of false reporting—about battlefield events, maintenance, readiness, and a host of other things, big and small. Hysteria about the moral fabric of the military had started to spread among commentators. Yet Davenport would not jump on that bandwagon. He had previously done research on the killing of Japanese admiral Isoroku Yamamoto at the end of World War II. Who shot him? The pilots on the mission did not agree, but Davenport did not assume, as many do, that some or all of them were simply lying. In a fine case study, he uncovered how stress and expectations, personal values, and myriad other factors affect perception: "Given the stress produced by combat situations and multiplied by the increasing complexity of weapons and communications systems and in view of the fact that such stress can accentuate the normal tendency to respond to stimuli according to subjective values, what is remarkable is not that there are so many false reports concerning military operations but that, relative to the number possible, there are so few."[21] Ever the fair-minded and clear-headed analyst, he refused to join a frenzy that had no grounding—and he tried to dissuade us from doing so.

Davenport also weighed in on the controversial issues of gays in the military and women serving in combat roles, taking moderate positions at odds with both conservative and radical views on these problems. In defending those stances, he insisted on a careful examination of the actual consequences of proposed policies for the services and our nation. Before excluding women from combat on the basis of alleged bad consequences, we must first do

the empirical work by *showing* the difficulty of integrating them or demonstrating that their presence would affect readiness. (Although Davenport had doubts about the existence of such evidence, he patiently awaited the verdict of actual experience.) Before excluding gays from service for similar reasons, we must first do the empirical work by *showing* that their behavior will seriously impair our ability to accomplish the military mission. Davenport simply did not abide a priori arguments or quick solutions rooted in preconceptions, authority, or ideology.

Conclusion

All of us, both in the military and out, have benefited greatly from what Davenport did—and the wise, careful way he did it. To my mind, he set the bar high in the practice and teaching of military ethics, and we must strive to meet that standard. Present and future generations of leaders and fighters need thorough exposure to the moral problems embedded in what they do. They need thorough education in the philosophical skill and practical wisdom they will need to negotiate these problems. To satisfy these needs, we must (1) persuade first-rate scholars and teachers, in and out of the military, to continue working in military ethics, (2) encourage them to do their work in places (such as academies, war colleges, and conferences for military professionals) where they will have an impact on the military at all levels, and (3) set up and maintain the kinds of institutional policies, practices, and support (such as teacher education, assignment priorities, in-residence visitor arrangements, travel funding, etc.) that will make all this possible. ❑

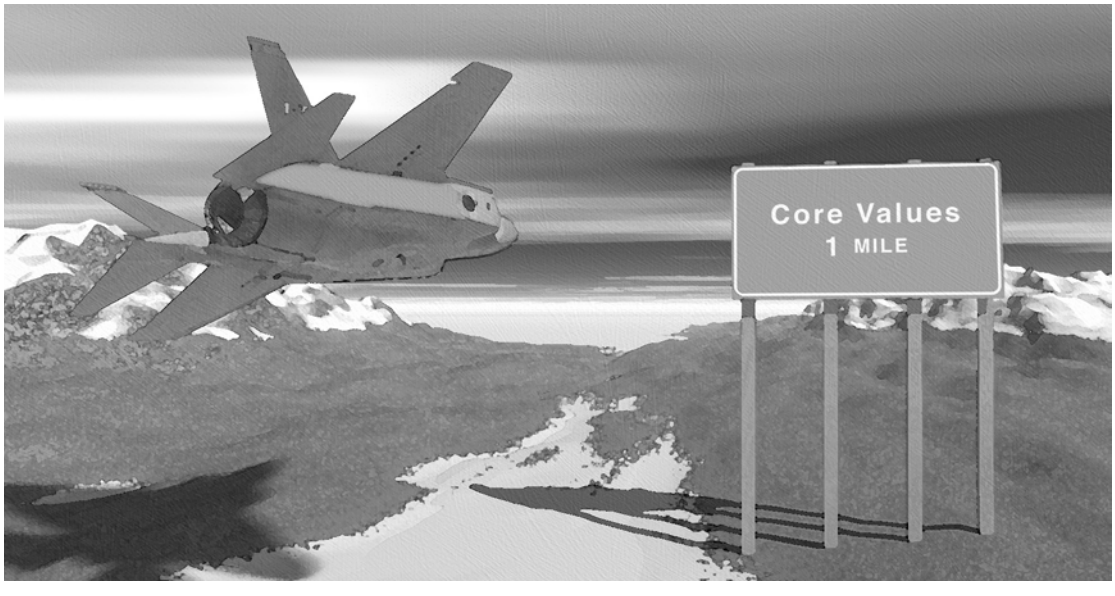
Notes

1. G. E. M. Anscombe, "War and Murder," in *War, Morality, and the Military Profession*, 2d ed., ed. Malham M. Wakin (Boulder, CO: Westview Press, 1986), 286.
2. Ibid.
3. Two others come to mind in the context of thinking about Davenport: J. Glenn Gray and Malham Wakin. I mention them because it is worth noting that in the early years of Davenport's career, while still teaching in Colorado, he cemented personal and professional friendships with these two. Their influences undoubtedly contributed to setting him on his way.
4. "About the Corps," Texas A&M University Corps of Cadets, http://www.aggiecorps.org/home/about.
5. For readers not familiar with just war thinking, many fine summaries of this general approach are available, which I will not attempt to re-create or summarize here. Among many others, see James Turner Johnson, *Just War Tradition and the Restraint of War: A Moral and Historical Inquiry* (Princeton, NJ: Princeton University Press, 1981); Paul Ramsey, *War and the Christian Conscience: How Shall Modern War Be Conducted Justly?* (Durham, NC: Duke University Press, 1961); Nicholas G. Fotion, *Military Ethics: Looking toward the Future* (Stanford, CA: Hoover Institution Press, 1990); or Martin L. Cook, *The Moral Warrior: Ethics and Service in the U.S. Military* (Albany: State University of New York Press, 2004).
6. Manuel Davenport, *The Fellowship of Violence: Readings for Military Ethics* [a complete collection of his work on military ethics] (Acton, MA: Copley Publishing Group, 2000), 4.
7. Ibid., 79.
8. Ibid., 80.
9. Ibid., 5.
10. Ibid., 2–3.
11. Ibid., 181.
12. Ibid., 171.
13. Ibid., 29.
14. Ibid., 144, 181.
15. According to utilitarian thinking about the nature of morality, looking only to the *consequences* of actions, evaluated in terms of the greatest good for the greatest number, is morality's foundational principle. German philosopher Immanuel Kant assigns a similar foundational role to certain primitive duties—but those *not* determined by mere consequences.
16. Jay F. Rosenberg, *The Practice of Philosophy: A Handbook for Beginners*, 2d ed. (Englewood, NJ: Prentice Hall, 1984), vii.
17. Davenport, *Fellowship of Violence*, 116. For a contrasting characterization of the raid, consult Frederick Taylor, *Dresden: Tuesday, February 13, 1945* (New York: HarperCollins, 2004) (reviewed by Maj Paul G. Niesen, *Air and Space Power Journal* 19, no. 3 [Fall 2005]: 122–24).
18. Davenport, *Fellowship of Violence*, 119.
19. Ibid., 120.
20. Michael Walzer, *Just and Unjust Wars: A Moral Argument with Historical Illustrations*, 3d ed. (New York: Basic Books, 2000), 323. See also his "Political Action: The Problem of Dirty Hands," *Philosophy and Public Affairs* 2, no. 1 (Autumn 1972): 160–80.
21. Davenport, *Fellowship of Violence*, 64.

A Critique of the Air Force's Core Values

Dr. Christopher Hugh Toner*

Editorial Abstract: The author performs a close reading and critique of the Air Force's core values. Among his observations, he notes inconsistencies between their presentation in the United States Air Force Core Values *booklet of 1997 and their treatment in Air Force Doctrine Document 1-1,* Leadership and Force Development. *He also argues that Air Force doctrine is written in a way that presents "obstacles to its own propagation."*



As most readers well know, the Air Force's core values consist of "integrity first," "service before self," and "excellence in all we do." Integrity deals largely with character (honesty, courage, and responsibility), service with commitment (duty, respect, and loyalty), and excellence with striving toward perfection (on personal, team, and operational levels). The *United States Air Force Core Values* booklet, January 1997, speaks of a strategy for infusing the core values into Air Force culture—a strategy involving training and education, leadership in the operational Air Force, discussions among Airmen at various levels, and so forth.[1] Years later we can say that in many ways the strategy has succeeded. Every Airman knows the core values, and in my experience (as a former officer in a sister service and a current instructor at Air Command and Staff College), most do not regard them as a management fad but genuinely respect them. Commanders

*I would like to thank Lt Col Paul Moscarelli, Dr. James Toner, Mr. Robert Christensen, Lt Col Terry Bentley, Dr. Marcia Ledlow, an anonymous referee, and the *Air and Space Power Journal* staff for helpful comments on earlier drafts of this article.

relate that a key factor in deciding whether to rehabilitate or separate a troubled troop involves determining his or her commitment to the core values.

Although I could list many other indicators of the health of the program, I will single out one notable shortfall: the fact that most Airmen do not know what I call the elements of each core value (see table). To most of them, integrity means honesty, service means duty, and excellence means sure competence in mission accomplishment. But as Col Charles Myers points out in an influential article, the Nazis could profess such values if that is all they mean, thus reducing the core values to a mantra that any military professional could chant—the bad as well as the good. The presence of such elements as justice and respect for others as persons gives the core values substance and separates them from the "virtues of the SS-man."[2] Of course it is the task of leaders to overcome this shortfall, and sound doctrine seems already in place to support them: the *United States Air Force Core Values* booklet and Air Force Doctrine Document (AFDD) 1-1, *Leadership and Force Development*, February 2004.

I argue, however, that the way doctrine is currently written may present certain obstacles to its own propagation. Air Force leaders as well as the Airmen they lead and mentor will in general find it much easier to "own" doctrine when it possesses internal coherence; clear, logical flow; and an evident, convincing rationale. In some respects, current doctrine fails these tests.

Lack of Coherence between the Air Force's Formulations of the Core Values

The core values have been with us in more or less their current form for a number of years now and, as is proper, have roots in the historical experience of the Air Force and the American military. Since 1997 they have circulated (and continue to circulate) in a standalone format—the core-values booklet. In 2004 the Air Force incorporated them into leadership doctrine as one of the "Leadership Components" (along with competencies and actions) in the first chapter of AFDD 1-1.[3] This is good since a doctrine document is more authoritative than other forms of publication, but it does raise questions about the relationship between the two formulations. Although they are quite close in most respects, a side-by-side comparison reveals some inconsistencies (see table). Boldfaced elements in the table appear in the booklet but not in the doctrine document, and the reverse applies to italicized elements. Underlining indicates relabeled elements that are essentially the same in both formulations.

Two ways of removing the inconsistency suggest themselves. First, we might suppose that AFDD 1-1's formulation simply supersedes the booklet's. But AFDD 1-1 does not state this explicitly, as is usually the case when one publication supersedes another.[4] Nor would this be wise since the booklet contains (in sections 2–4) valuable supplementary materials—such as the core-values strategy mentioned at the outset—not contained in the doctrine document. Second, we might hold that the inconsistencies are merely apparent—the changes merely verbal. This may well be in some cases (e.g., the differently worded elements under "service" and "excellence," underlined in the table). Other changes, however, seem more substantive: AFDD 1-1 has added "honor" and "loyalty," and "duty" is a richer notion than "rule following." In these cases, the later formulation expands and probably improves upon the earlier. But if we look closely at "operational excellence," we can note an important subtraction: in the booklet, under "excellence of external operations," we find a requirement to fight in obedience to the laws of war—a requirement not stated under "operational excellence" in AFDD 1-1. I am not claiming that AFDD 1-1 has backed away from a commitment to the laws of war—simply that fighting in accordance with those laws is no longer explicitly linked to operational excellence. This is regrettable; at the least, it represents a substantive change in the formulation of the core values.

I conclude that real inconsistency exists between the two formulations and, therefore, that

Table. Two formulations of the Air Force's core values

Core Values Booklet			*AFDD 1-1*		
Integrity	Service	Excellence	Integrity	Service	Excellence
Courage	**Rule following**	**Product/service**	Courage	*Duty*	Personal
Honesty	Respect for others	Personal	Honesty	Respect for others	Organizational
Responsibility	Discipline and self-control: anger, appetites, religious toleration	Community: mutual respect, benefit of doubt	Responsibility	Self-Discipline	Resource
Accountability	**Faith in the system**	Resource: material, human	Accountability	Self-Control	Operational
Justice		Operations: internal, external	Justice	Appropriate actions or desires	
Openness			Openness	Tolerance	
Self-Respect			Self-Respect	*Loyalty*	
Humility			Humility		
			Honor		

the Air Force's current teaching on the core values lacks, to some degree, the internal coherence mentioned above.[5] To some extent, then, core-values doctrine needs some rewriting. But as I now argue, one can raise questions about logical flow and rationale as well—problems that may point to a need for further changes.

The Problem of Logical Flow in the Arrangement of Elements

The core-values booklet tells us (in section 2, "Why These Core Values?") that the values and their elements are the "price of admission" to the Air Force.[6] Both documents make clear that their justification is functional: we need Airmen to be trustworthy, to put the service and its mission before their personal goals and desires, and to commit themselves to a high degree of competence. Functional justifications for most, if not all, of the elements of the core values are also fairly straightforward. Military service clearly requires elements such as courage, honesty, accountability, respect, duty, and so forth. Here the authors of the documents wisely follow in the tradition of such military theorists as Gen Sir John Hackett. Someone with a background in the Army or Marine Corps might champion other ways of articulating the values, and anyone might wish some further element explicitly included under one or another value, but there is no real objection here. The core-values booklet explains that

> it is impossible for three or six or nine Core Values to capture the richness that is at the heart of the profession of arms. The values are road signs inviting us to consider key features of the requirements of professional service, but they cannot hope to point to or pick out everything. By examining integrity, service, and excellence, we also eventually discover the importance of duty, honor, country, dedication, fidelity, competence, and a host of other professional requirements and attributes.[7]

As "road signs," the core values and their elements stress moral and professional fea-

tures of military service that, in the historical experience of the Air Force, have proven particularly important. The list of values and elements, compiled by authors well versed in Air Force tradition, remains open to development in the light of further experience and reflection. On the whole, this seems exactly the right approach for doctrine writers to take. Nevertheless, we might ask, given the list, whether the elements are suitably arranged under the values—whether they flow logically. Concerning this matter, I raise some objections.

People often consider integrity synonymous with honesty, but in fact it means something more like wholeness or integration—a fact acknowledged by the two formulations of the core values, AFDD 1-1 describing integrity in terms of "the ability to hold together and properly regulate all of the elements of one's personality."[8] Consistent with this recognition, both documents insist that integrity involves self-control, the core-values booklet speaking explicitly of controlling impulses and appetites. One wonders, then, why the booklet locates the element of discipline and self-control under the value of service and why AFDD 1-1, although breaking this one element into three (self-discipline, self-control, and appropriate actions or desires), follows suit.[9] Here we seem to have a problem—not with the elements themselves but with their logical flow in relation to the values they fall under. Based on its doctrinal definition, self-control should fall under integrity.[10]

Under the general heading of logical flow, a few other questions need answers (here I will just ask them). We seem to have more elements than strictly required. It is not clear, for example, why AFDD 1-1 breaks up the booklet's element of discipline and self-control into self-discipline, self-control, and appropriate actions or desires, mentioned above.[11] The same holds true for the elements of responsibility and accountability, located in both documents under integrity. Although the location is appropriate, why should they constitute two separate elements since neither document (both use very similar language) makes obvious the difference between them?[12] Both documents insist that Airmen "internalize" the core values, a process facilitated by ease of memorization and grasp of the logical flow—and therefore impeded by unnecessary multiplication of the elements.

Finally, one finds no obvious rhyme or reason to the elements' order of presentation under each value. For example, honesty and openness, listed under integrity, seem clearly related. Why then are they separated by three other elements (responsibility, accountability, and justice) rather than listed one after the other (as are responsibility and accountability)? Under service, why is respect for others followed by self-discipline and its allied elements and only then by tolerance, which is clearly related to respect? Duty and loyalty seem importantly related, but they are listed at the opposite ends of the spectrum of elements under service.[13] Rather than illuminating the nature or structure of each core value, the lists of elements under each give the appearance of a grab bag of moral traits—a problem easily fixed by some cutting and pasting.

The Problem of the Rationale of the Core Values

Lastly, I wish to address the rationale or justification of the core values. In discussing doctrine (teaching), we can distinguish among the "what," the lessons taught, and the "why"—the rational process through which the lessons are formulated and justified. Doctrine documents, for good reason, tend to focus on the teaching of the "what," but they typically also tend to give us at least a glimpse of the "why"—of the rationale behind the teaching. Good reasons exist for this as well: understanding the "why" facilitates accepting and internalizing the "what."

Both documents on the core values give us the same glimpse of the rationale. The core-values booklet speaks of their "functional importance," and the doctrine document maintains that "success hinges on the incorporation of these values."[14] That is, these are our values because we have found that they work. This is fine as far as it goes, but I want to suggest that going a little further could help Airmen understand how the core values are grounded in the

nature of their profession, which could then help them internalize the values.

As mentioned above, Colonel Myers has sought to ground the core values on the basic aspects of morality (character, actions, and consequences), but the question of how ultimately to ground values is controverted, and it can be dangerous to do philosophy in public.[15] So one can understand that doctrine writers would shy away from seeking to justify the core values officially in terms of abstract moral theorizing (whether that of Myers or someone else). Bracketing such deep theoretical issues, however, one can offer a rationale for the core values that is deeper than a pragmatic appeal to "what works," while still avoiding the controversies of moral theory.

This rationale takes as its starting point the nature of professionalism. Famously, Samuel Huntington argues that the distinguishing mark of a profession is that its practitioners display expertise ("specialized knowledge and skill in a significant field of human endeavor"), responsibility ("the essential and general character of his service and his monopoly of his skill impose upon the professional man the responsibility to perform the service when required by society"), and corporateness. ("The members of a profession share a sense of organic unity and consciousness of themselves as a group apart from laymen. This collective sense has its origins in the lengthy discipline and training necessary for professional competence, the common bond of work, and the sharing of a unique social responsibility.")[16] In the case of the military profession, the relevant expertise is "the management of violence," together with all that entails (such as training and organizing the force as well as planning and directing its operations). The military has the responsibility of providing security for its "client"—the state and its government. In discussing the corporateness of the military, Huntington focuses on its bureaucratic character—its formal, hierarchical structure—and what sets it apart from civilian culture. He also mentions informal aspects of military corporateness, such as associations, journals, and customs.[17]

From these characteristics we can move to the appropriateness of the core values; before doing so, however, we must clarify that Huntington's conception of a profession is neither idiosyncratic nor, in essence, controversial. In his discussion of the professional status of the military, Brig Gen Anthony E. Hartle, USA, retired, begins with Huntington, whom he acknowledges as "a classic voice on the sociology of professions."[18] He goes on to consider alternative definitions that stress elements not emphasized by Huntington. Although Hartle wishes to show that the military qualifies as a profession on any plausible conception of what constitutes a profession, we can extract another lesson as well: the differences between Huntington's and other influential conceptions of professionalism tend to be relatively minor matters of emphasis. For example, General Hartle mentions such criteria as having a systematic theory of professional practice and a distinct culture.[19] These could be acknowledged by Huntington and captured under his notions of expertise and corporateness, respectively. One need not insist that Huntington's definition of *profession* is superior to all others. Rather, it is enough to see the plausibility of his definition and to know that any alternative put forward will need at least to cover the ground that Huntington covers—differences will tend to be matters of emphasis. In relying on his definition in what follows, therefore, I believe I am on solid ground.

With these three characteristics in hand, we can develop a fairly straightforward rationale for the core values. Arguably each characteristic of the profession may require all of these values, and I will pick up on this line of thought shortly. First I will argue that each characteristic of professionalism calls for one of the Air Force's core values in a certain way, thereby clarifying the particular appropriateness of these values to the military profession.[20] Perhaps the most obvious correspondence lies between expertise and excellence in all we do. We saw that expertise in "the management of violence" entails attendant expertise in training, equipping, and organizing the force—and in planning and directing its operations.[21] This clearly will require commitment to excellence (personal, organizational, resource, and operational).

Next, responsibility calls for service before self. In order to discharge their responsibility to society, professionals will require the "age-old military virtue of selfless dedication to duty" that AFDD 1-1 speaks of under the heading "Service before Self."[22] General Hackett reminds us that the military serves its society under conditions of "unlimited liability," in that service members may well have to risk or lay down their lives—a point explicitly noted in the doctrine document's discussion of service.[23] Further, given that the military serves its society (i.e., operates under civilian control), the elements of duty and loyalty, as extending beyond the military itself to the duly constituted political authorities, are also clearly essential to the military's discharging its social responsibility. As AFDD 1-1 notes with respect to loyalty, "American military professionals demonstrate allegiance to the Constitution and loyalty to the military chain of command and to the President and Secretary of Defense."[24]

Lastly, the corporateness essential to professionalism requires integrity. The corporateness required by military service covers more ground than Huntington's description of it lets on. The rigors of service, especially in combat, require Airmen to put their lives into the hands of other Airmen—often individuals they do not personally know. This in turn requires a high degree of mutual trust. AFDD 1-1 describes integrity as the "moral compass" that serves as "the basis for the *trust* imperative in today's Air Force" (emphasis added).[25] As Air Force chief of staff, Gen Michael Ryan wrote that integrity is "the foundation of trust"—"the unbreakable bond that unifies the force" and enables Airmen to focus on their jobs, knowing that others are doing likewise.[26] As Huntington says, corporateness does involve the "organic unity" of the profession: in the military, this unity must take the form of a force cemented by "the unbreakable bond" of trust whose foundation is integrity.

I suggested above that each professional characteristic may well require all three core values, and I would now like to show how this is indeed the case. While each of the core values "takes the lead" with respect to one or another professional characteristic, all need the support of the other two in meeting the requirements of the characteristic at stake. Let us take expertise first. We have seen how excellence in all we do acts as the lead value for this characteristic, but this commitment to excellence will demand support from elements of integrity (such as responsibility and courage) and service (such as duty and self-discipline). Organizational excellence especially will further require integrity (as the foundation of trust) and additional elements of service such as loyalty, tolerance, and respect for others, precisely because of the team mentality and, indeed, the corporateness (as discussed above in terms of mutual trust) it requires.

We can make similar points with respect to the other two characteristics. Service, for example, although the lead value with respect to the professional characteristic of responsibility, must have support from integrity and excellence. As we saw, the doctrine document speaks of service's centrally involving the "age-old military virtue of selfless dedication to duty." Airmen will not be able to maintain this sort of dedication without drawing upon several of the character traits under integrity: courage to accept risks in the performance of duty, a sense of responsibility, and honesty in dealing with superiors up to and including representatives of the state (here, think of the Lavelle affair in Vietnam or scandals in the acquisition world).[27] Further, one needs a commitment to excellence to develop the character traits already mentioned (personal excellence) and to perform well the service that society requires (organizational and operational excellence).

Finally, we have seen that the lead value for corporateness is integrity, perceived as the foundation of the mutual trust that unifies the force. But if integrity takes the lead here, it will require support from elements of the other core values, such as loyalty and operational excellence (clearly, we cannot trust a disloyal or incompetent person). A commitment to organizational excellence will also be relevant. (Here again we see how interconnected and mutually supporting the core values and their elements are, for as discussed above, organizational excellence in turn calls

upon a number of elements of service and, indeed, upon integrity.)

This, then, is the rationale for the core values that goes deeper than the quick, functional justification asserted in current Air Force teaching, yet it does not risk the controversy involved in the attempt to penetrate the murky depths of abstract moral theory to reach a rock-bottom justification (the question of the ultimate "origin of the Values" that the core-values booklet shies away from).[28] Surely we should not expect doctrine to include a fully worked-up theory of the role of core values in professionalism (of course here I have offered only an indication of how this would go), but it could conceivably include the basic or primary correspondence of characteristics to values, thus facilitating Airmen's understanding of the importance of the Air Force's core values to the service's professionalism.[29]

Beyond the Core Values

Yet, this way of grounding the core values still depends upon the nature and function of the Air Force profession and thus may raise in some minds the specter of relativism: are there really no universal moral standards on which to base our professional ethic? (Are we not "one nation, under God"?)[30] Is there really one morality for one profession and another for another? I myself believe no such thing. However, in some roles certain virtues and, indeed, certain aspects of certain virtues come more into the foreground and therefore more to the notice of reflective practitioners when the time comes to formulate doctrine—including core values—for a given role or profession. All of us need, among other things, to acquire and exercise the four cardinal virtues of prudence, justice, courage, and temperance. Still, justice (roughly definable as the stable disposition of giving to each his or her due) will take somewhat different forms in, say, a mother, drill sergeant, squadron commander, and priest (think about how each might deal with a person under his or her care who has "gone wrong" in some way). The same will hold for the other virtues. That is why different professions will formulate different ethical codes or sets of core values—especially when their formulations deal in the road signs mentioned in the core-values booklet.

Some have argued that the military should explain "the moral framework within which military activities take place" in terms of the cardinal virtues instead of core values.[31] I have considerable sympathy with this view in principle. It is worth noting, however, that these four virtues *are* taught as elements of the values.[32] Further, the core values have a history of some years now (and an even longer history if we recognize that their framers did not create them from scratch but drew on American military tradition in formulating them). Given that integrity, service, and excellence have become substantially embedded in the culture of the Air Force, we should not too hastily set them aside for another set of values or virtues, especially if the core values already embrace this other set to some significant degree. Perhaps, in any event, the question of which virtues are "cardinal"—pivotal to living a good human life—goes beyond the purview of Air Force doctrine. Perhaps too the same might be said with respect to the debate between moral relativists and universalists. All of this, in any event, lies beyond the scope of this article.

Yet, we should note that a full understanding of the core values and their place in the military profession cannot altogether escape deeper questions about the "origin of the Values." The core values may "work," and military professionalism may need them; still, Airmen must face the question of whether they can fully internalize them—that is to say, harmonize them with their deepest convictions about how they should live. If they cannot, they should seek another vocation. Or if enough patriotic Americans could not (I mention this only as a theoretical possibility), then the military ethic as formulated in doctrine should be reconsidered.

The American people, too, must consider the role of the military profession in the life of the nation and in so doing must obviously appeal to moral principles more basic than the core values (the laws of nature and of nature's God and certain truths held to be self-evident,

for example). For a society cannot endorse a profession that violates its basic moral convictions. Thus, while torture, perfidy, terror bombing, and other forms of indiscriminate or disproportionate warfare might contribute to fighting effectively (taking this in a morally neutral sense of battlefield effectiveness), they remain inconsistent with American values and concern for universal human rights. *Therefore*, the Air Force core values rightly contain elements that rule out such practices (obedience to laws of war under "excellence" in the core-values booklet and in both formulations, "justice" under "integrity," and the injunction to respect the worth and dignity of all humans as part of "respect for others" under "service"). Such practices, although consistent with the hypothetical function of (merely) fighting effectively, are inconsistent with the United States Air Force's *actual* function of serving militarily the moral ends of the American Republic in accordance with its Constitution.[33] This is a good thing, for it helps make unmistakable the real difference between the core values and the "virtues of the SS-man." Again, doctrine writers might reasonably declare that abstract theoretical concerns about the basis and validity of human-rights claims lie well beyond their purview. But it may well be worth stressing that the American military's function—which grounds the core values—itself has moral content, namely serving, honoring, and promoting American values, treaty obligations, and so forth.

In closing, let me make a final remark about the purpose of this article. The argument moves from some technical (at times nitpicking) criticisms about the consistency between the two existing formulations of the core values, through some formal concerns about the logical flow among values and their elements, to some quite broad and suggestive concerns about their rationale. Through all of this, the article presents a critique of doctrine for which, as a whole, I have a high regard. I offer these comments in a collegial spirit, and if the article opens a dialogue among readers, it will have well served my purpose in writing it. ❑

Notes

1. *United States Air Force Core Values* (Washington, DC: Department of the Air Force, 1 January 1997), http://www.usafa.af.mil/core-value/cv-mastr.html. I use the term *Airman* as Air Force Doctrine Document (AFDD) 1-1 uses it: "Any US Air Force member (officer or enlisted; active, reserve, or guard; and Department of the Air Force civilians) who supports and defends the US Constitution and serves our country." AFDD 1-1, *Leadership and Force Development*, 18 February 2004, 2, https://www.doctrine.af.mil/afdcprivateweb/AFDD_Page_HTML/Doctrine_Docs/afdd1-1.pdf. What of contractors? I think it would be wonderful if they would embrace and live by the core values (although holding them accountable might prove difficult), but applying *Airmen* to them would overstretch the term.

2. Col Charles R. Myers, "The Core Values: Framing and Resolving Ethical Issues for the Air Force," *Airpower Journal* 11, no. 1 (Spring 1997): 40, 52n7, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj97/spr97/myers.pdf. Myers, of course, goes on to respond to this and other questions about the appropriateness of the core values.

3. AFDD 1-1, *Leadership and Force Development*, 3.

4. Mr. Robert Christensen of the Air Force Doctrine Center pointed out to me that because the core-values booklet was an unofficial publication (not a numbered doctrine document, instruction, or pamphlet), it did not need to be superseded (in fact, in a sense, could not be superseded). Nevertheless, the booklet has a certain amount of customary authority due to its circulation over time and its use in education and training (it clearly had *some* sort of authoritative sanction, official or otherwise). Clearing up the conflict between the two documents, then, would be a useful service, whether done in a revision of the doctrine document, a policy letter, or some other appropriate format.

5. We might even suggest that one finds no unified Air Force understanding of the core values that gets beneath the bumper-sticker level down to the elements. One would think that a doctrine document would codify such an understanding, but two further points seem to underline how this is not the case. First, in his *Letter to Airmen* dated 13 February 2006 (http://www.af.mil/library/viewpoints/secaf.asp?id=217), Secretary of the Air Force Michael W. Wynne discusses the core values in a way that seems to place loyalty under integrity and honor under excellence (contra both documents discussed here). Second, the history of the core values presented at the January 2006 USAF Strategic Planning Workshop on Core Values made *no mention of AFDD 1-1*, let alone of the doctrine document's reformulation of the elements of the values.

6. *United States Air Force Core Values.*

7. Ibid.

8. AFDD 1-1, *Leadership and Force Development*, 4.

9. *United States Air Force Core Values*; and AFDD 1-1, *Leadership and Force Development*, 6.

10. In the core-values booklet, we can identify a possible explanation of this apparent discrepancy. There the elements of service are portrayed as "behaviors" (whereas the elements under integrity are portrayed as "moral traits"). *United States Air Force Core Values.* Presumably *behavior* displaying a lack of self-control (excessive shows of anger, inappropriate sexual overtures, etc.) is inconsistent with putting service before self, while the *moral trait* of self-control is part of integrity. Such a reading receives additional support from Colonel Myers's interpretation of the core values, according to which the values correspond to the elements of moral theory: integrity to character, service to action, excellence to consequences. Myers, "Core Values." But this sort of response is not available for AFDD 1-1, which explicitly treats the elements under service before self as "moral attributes." AFDD 1-1, *Leadership and Force Development*, 5–7. Taken in this way, the element of self-control clearly belongs under integrity, given the doctrine document's own definitions. Its inclusion (along with self-discipline and appropriate actions or desires) under integrity would greatly improve the logical flow of the formulation. Finally, let me note that an early draft of a revision of AFDD 1-1 that I have seen incorporates some of the changes I suggest.

11. The descriptions of the first two both speak of controlling anger, the description of self-discipline explicitly enjoins self-control, and the description of self-control explicitly rules out "inappropriate actions or desires." Perhaps self-discipline is intended to focus more on self-improvement while self-control focuses more on refraining from negative actions (one could read the text this way). Further, the language of the description of appropriate actions or desires focuses more explicitly on refraining from substance abuse or unprofessional relationships (such as fraternization). All of this content is fine, but given the very substantial overlap, it is just not clear why three separate elements are required.

12. *United States Air Force Core Values*; and AFDD 1-1, *Leadership and Force Development*, 5. Of course, it is easy to put plausible constructions upon them that distinguish them. One favored by me and many of my colleagues and students maintains that one *accepts* responsibility for one's own performance while one *holds* others accountable (and accepts being held accountable by others). If plausible, such a reading is not mandated by the documents, and there is certainly nothing unnatural about speaking of *accepting accountability* and *holding others responsible.* Both terms, of course, are prevalent in military culture, and it is understandable that doctrine writers would want to retain them. If so, however, and if they are to be listed as separate elements under integrity, then a clearer distinction between them would help Airmen grasp the structure of the core values.

13. *United States Air Force Core Values*; and AFDD 1-1, *Leadership and Force Development*, 5–7.

14. *United States Air Force Core Values*; and AFDD 1-1, *Leadership and Force Development*, 4.

15. Likewise for moral theology: the core-values booklet is sensitive to this, begging off any deep explanation of the "origin of the Values" and insisting that they are independent of "Chapel programs." *United States Air Force Core Values.*

16. Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: Belknap Press of Harvard University Press, 1957). The quotations appear on pages 8, 9, and 10, respectively.

17. Ibid., 11–18. I should note that he is quite restrictive about who counts as a military professional, essentially limiting membership to "line," "rated," or "combat arms" officers. Most of us today will be more inclusive, but we can be so without rejecting other aspects of Huntington's conception of military professionalism.

18. Anthony E. Hartle, *Moral Issues in Military Decision Making*, 2d ed., rev. (Lawrence: University Press of Kansas, 2004), 11.

19. See ibid., 22, and chap. 2 as a whole.

20. In saying this I intend no slight toward the core values of the other services. One could pick out similar correspondences for honor, courage, and commitment or for duty, honor, country (traditional if not official core Army values). The value is the important thing—not the label.

21. We might prefer to come up with a more pleasant formulation, such as "the ordered application of force in the resolution of a social problem." See Gen Sir John Hackett, *The Profession of Arms* (London: Times Publishing Company, 1963), 3.

22. AFDD 1-1, *Leadership and Force Development*, 5.

23. Hackett, *Profession of Arms*, 63; and AFDD 1-1, *Leadership and Force Development*, 5.

24. AFDD 1-1, *Leadership and Force Development*, 7.

25. Ibid., 4.

26. Gen Michael E. Ryan, "Reflections on the Core Values," in AU-24, *Concepts for Air Force Leadership*, ed. Richard I. Lester and A. Glenn Morton (Maxwell AFB, AL: Air University Press, 2001), 53, http://www.au.af.mil/au/awc/awcgate/au-24/ryan.pdf.

27. This case of dishonest reporting resulted in, among other things, a policy letter from Gen John Ryan, chief of staff at that time, on the absolute centrality of integrity to military service. I suspect that this letter influenced later work on the core values. For a brief account of the affair and a reference to General Ryan's letter, see James H. Toner, *Morals under the Gun: The Cardinal Virtues, Military Ethics, and American Society* (Lexington: University Press of Kentucky, 2000), 91–93.

28. *United States Air Force Core Values.*

29. One might ask whether this rationale proves too much. Does it not imply that *every* profession should adapt core values of integrity, service, and excellence? In a way, perhaps it does. Members of every profession will need to honor and embody values along these lines if they wish to maintain a cohesive corporateness, discharge their responsibility to society, and maintain and continually enhance their expertise. But nothing in this rationale implies that every profession will or should conceptualize these values in the same way or use the same labels. The legal profession, for example, surely requires integrity, but the kind of courage lawyers need—the nature and line of accountability, the particular requirements of honesty and openness, and so forth—will differ. Even within

other military services, different missions and traditions will fully justify different formulations of core values—both in terms of the "letter" (the names and ordering of the values and their elements) and to a lesser degree the "spirit" or substance of the ethic (the sort of character and behavior required by practitioners of that branch of the military profession).

30. One may debate the meaning of such a phrase in such a context, but it seems *at the least* to imply that we are answerable to some moral standard well above and beyond our own narrow interests.

31. AFDD 1-1, *Leadership and Force Development*, 4. Toner, for example, argues this in *Morals under the Gun*.

32. They are not labeled "cardinal virtues," but integrity includes justice and courage, and service includes temperance (self-control and appropriate actions or desires) and, most tenuously, prudence (the elements of rule following and duty speak of the importance of exercising good judgment in the performance of duty). Although we may debate whether they receive enough emphasis, at least they are there.

33. Here I wish to bracket thorny questions about whether there are *ever* times when it might be permissible to engage in practices of torture, terror bombing, or the like (say in a ticking-time-bomb scenario or a situation like that faced by Great Britain in late 1940)—my point is just that the core values correctly prohibit them (at least) in all but truly extreme circumstances. Anthony Hartle's *Moral Issues in Military Decision Making* takes up such questions and further provides an extended treatment of the relation among the three main influences on the American military ethic: the exigencies of the profession, the values of American society, and the laws of war. He argues (see especially the discussion of social differentiation in chap. 8) not only that American values and the laws of war serve as "boundary conditions" on the military ethic, but also that they have to a considerable extent penetrated the texture of that ethic, which is thus not merely functional. The case of the Air Force's teaching on respect for others is a partial confirmation of Hartle's thesis, as is the inclusion of obeying the laws of war under operational excellence (in the core-values booklet).

AIR & SPACE POWER JOURNAL

http://www.airpower.maxwell.af.mil

• *Air & Space Power Journal – English*
http://www.airpower.maxwell.af.mil/airchronicles/apje.html

• *Air & Space Power Journal – En Español*
http://www.airpower.maxwell.af.mil/apjinternational/apjiesp.html

• *Air & Space Power Journal – Em Português*
http://www.airpower.maxwell.af.mil/apjinternational/apjipor.html

• *Air & Space Power Journal – Arabic*
http://www.airpower.maxwell.af.mil/apjinternational/aspjarabic.html

• *Air & Space Power Journal – En Français*
http://www.airpower.maxwell.af.mil/apjinternational/aspjfrench.html

• *Chronicles Online Journal*
http://www.airpower.maxwell.af.mil/airchronicles/cc.html

New USAF Doctrine Publication

Air Force Doctrine Document 2-9.1, *Weather Operations*

Maj James C. Ulman, USAF

THE PUBLICATION OF Air Force Doctrine Document (AFDD) 2-9.1, *Weather Operations*, 3 May 2006, marks the first appearance of a document of this type that examines this particular subject. Joint Publication 3-59, *Joint Doctrine, Tactics, Techniques, and Procedures for Meteorological and Oceanographic Operations*, 23 March 1999, the only official doctrine for military weather operations available to this point, quite frankly is far too long in the tooth to be of much use. Badly in need of an update, it remains in joint coordination for revision, and the fourth edition of US Joint Forces Command's *Joint Meteorology and Oceanography (METOC) Handbook*, 1 April 2002, an excellent reference manual for military meteorologists at all levels, is an unofficial publication.

The Air Force Doctrine Center, therefore, issued AFDD 2-9.1 to address weather operations in the context of service doctrine. In the overall scheme of things, it does a good job of generically presenting the function of weather forces in peacetime and combat, their organization, and, in a very general sense, their education and training.

Obviously the author of this document carefully avoids dealing too specifically with organizational issues, given recent efforts to redefine the roles and missions of weather units at all echelons of command and the frequent changes in organization and employment that occur over time. Weather forces have reengineered over the last several years (starting roughly in 1997), producing a sea change not only in their organization but also in the performance of weather-support missions at the various levels of war (strategic, operational, and tactical). The training of these forces from beginning to end has undergone a complete overhaul as well. Rather than weather observers/specialists and forecasters/technicians, we now have weather journeymen and craftsmen.

As for the doctrine document itself, it concisely explains the organization and training of these forces and the way they fit into the joint picture. The first chapter neatly details the purpose of weather forces: to provide accurate and timely weather information and effects on operations for war fighters and other consumers of that data in a consistent, relevant fashion.

As a description of the collection, refinement, and delivery of weather information to various users, the second chapter examines the process that forms the basis of environmental prediction. Weather personnel then tailor these forecasts to specific users for their particular needs, culminating in what the doctrine refers to as integration—basically the employment and/or exploitation of the information by the user.

Chapter 3 delves into more specifics about the organization of weather forces, both from the service and joint perspective. It offers in-depth descriptions of where, how, and why weather forces should be included and/or integrated into Air Force components (including a welcome introductory discussion on

integrating weather forces into a war-fighting headquarters), air and space expeditionary task forces, air and space operations centers, joint and multinational operations, special operations, and US Army operations. The chapter provides a short summary of some of the larger, fixed operational units/facilities as well. The list includes some of the "centers of excellence" in the Air Force's weather hierarchy, such as the Air Force Weather Agency at Offutt AFB, Nebraska, and operational weather squadrons—sources of regional expertise in support of the combatant commands.

Although chapter 4 does not address the training sequence of weather personnel, AFDD 2-9.1 does close with a brief discussion of some of the training venues to which both nonweather and dedicated weather personnel should be exposed: on-the-job experiences, classrooms, laboratories, exercises, and war games, to name a few. The document emphasizes the fact that weather personnel require a wide variety of training environments and that, depending on the needs of the supported customer, certain areas may require more attention than others. For example, a weather-support person in special operations will need greater training in and exposure to field skills and scientific meteorology than will his or her counterpart working in an air and space operations center.

My only (minor) criticism of the document is that it never refers to one key piece of very common (current) terminology: that of the usually base- or wing-level/Army division or brigade-level combat weather team. The base-/post-level weather-support discussion on page 17 describes the team's function very well but for some reason never uses the term.

In total, the doctrine document appears to do a fine job not only of describing what the weather function does for the war fighter but also of explaining the process of accomplishing that mission—both the how and the why. Most likely its generic qualities will enable the document to stand on its own for a significant period of time without being unduly affected by fairly common and oftentimes radical changes in force structure. We in the Air Force have needed AFDD 2-9.1 for a long time, and we finally have a description of the Air Force's weather function, the reason for its existence, and the ways it benefits the war fighter. ❑

To Learn More . . .

Air Force Doctrine Center. https://www.doctrine.af.mil/Main.asp.

Air Force Doctrine Document 2-9.1. *Weather Operations*, 3 May 2006. https://www.doctrine.af.mil/afdcprivateweb/AFDD_Page_HTML/Doctrine_Docs/afdd2-9-1.pdf.

Joint Publication 3-59. *Joint Doctrine, Tactics, Techniques, and Procedures for Meteorological and Oceanographic Operations*, 23 March 1999. http://www.dtic.mil/doctrine/jel/new_pubs/jp3_59.pdf.

US Joint Forces Command. *Joint Meteorology and Oceanography (METOC) Handbook*. 4th ed., 1 April 2002. http://www.forscom.army.mil/weathr/Publications/JointMETOCHandbook.pdf.

Book Reviews

Air Power against Terror: America's Conduct of Operation Enduring Freedom by Benjamin S. Lambeth. RAND National Research Institute (http://www.rand.org/pubs/monographs/MG166), 1776 Main Street, P.O. Box 2138, Santa Monica, California 90407-2138, 2005, 456 pages, $35.00 (softcover) (electronic version free).

To the distress of many Airmen, emerging histories of the global war on terrorism (GWOT) too often make it seem as if the Air Force were little more than a bit player. The reasons for this are complex and beyond the scope of this review; suffice it to say, however, the phenomenon is real, and the consequences are serious. Too many people who should—and need to—know better just don't.

Even those who wear Air Force uniforms are not all that well informed. The absence of articulate, knowledgeable Airmen is quite serious as America's national-security planning is at risk of underplaying and underresourcing Air Force capabilities. This "information gap" is not necessarily nefarious but is at least partly explainable by the fact that few authors in the cacophony of GWOT-related books truly understand the air weapon.

A new book by veteran RAND analyst Ben Lambeth is a desperately needed and very welcome step towards rectifying that deficiency. Focused exclusively on Operation Enduring Freedom, it is one of the few accounts that properly approaches the effort as fundamentally an *air* operation, not a special-forces action *supported* by air, as some revisionists assert. It provides a level of detail and insight about the air war (which actually was the bulk of the conflict) that is simply unavailable elsewhere.

How did Lambeth do it? The old-fashioned way: by combining a careful study of source material with numerous and lengthy personal interviews. (Full disclosure: this writer was interviewed for the book and quoted in it.) As a result, the reader is treated to a detailed account of how newly fielded technologies, including unmanned Global Hawk reconnaissance aircraft and unmanned (but armed) Predators, made their battlespace appearances to give the Air Force's intelligence, surveillance, and reconnaissance (ISR) assets unprecedented persistence and, in the case of the Predator, lethality.

Lambeth emphasizes the command-and-control and sensor-to-shooter dimensions of airpower employment. Regarding the latter, he identifies the "greatest tactical innovation of the war" as the linkage of precision weaponry with precise targeting by the Air Force's terminal attack controllers and special-forces troops on the ground. Indeed, the extensive use of these "human" ISR sensors against emerging targets decisively differentiated Enduring Freedom from predecessor operations. He also underlines the strategic value of airlift operations in an environment distant from existing supply points.

It is a mistake, however, to assume that Lambeth simply wrote a paean to airpower. Perhaps the most intriguing part of the book is the chapter with the radically understated title "Problems with Execution." Here he details, in a remarkably evenhanded manner, early clashes and frustrations between the Army-centric US Central Command and the Air Force–centric combined air operations center. Among other things, he carefully examines the impact of access to real-time information by multiple layers of the command structure as well as the deleterious effect of rear-area staffers engaging in "cyber rubbernecking."

Lambeth sagely warns that although technology is reducing the sensor-to-shooter cycle dramatically, lengthier decision cycles occasioned by complex and "oversubscribed vetting processes," often involving higher headquarters, could wipe out efficiency gains. He recognizes that modern conflicts are extremely sensitive to civilian casualties and other political and legal restraints but suggests that such imperatives can nevertheless be accommo-

dated by greater delegation and decentralization of decision-making processes.

Lambeth also explores the difficulties surrounding Operation Anaconda, an Army-conceived operation that ran into serious trouble when enemy resistance on the high ground surrounding the Shah-i-Kot valley proved much more formidable than expected. As a result, eight Americans died, and many more were injured. While he does cite deficiencies in the Army's planning for Anaconda, many airpower advocates may be dissatisfied with his lukewarm critique. Some believe that the Army designed the operation to marginalize the potential contribution of non-Army air assets, especially fixed-winged combat aircraft, but Lambeth seems to attribute the shortfalls to mere communication failures.

The book suffers from a couple of annoyances. One is the RAND-report style, which often assumes that a reader will not consume the whole book. Accordingly, the work begins with a lengthy summary and ends with an expansive conclusion. All of this is fine for skimmers but repetitive for those digesting the full text. The absence of an index is a bit exasperating and makes the study not as useful as it might be.

But these are relatively minor complaints in relation to the book's tremendous overall value. It is not merely a must-read for people interested in the full history of Enduring Freedom; it is an absolutely essential document for anyone who wants to understand the potential of airpower in modern warfare and real-world command-and-control issues. Unsurprisingly, the chief of staff recently added it to the Air Force reading list; it is almost inconceivable that any Airman would not want it on his or her personal bookshelf.

Maj Gen Charles J. Dunlap Jr., USAF
Washington, DC

The Enemy at Trafalgar: Eye-Witness Narratives, Dispatches and Letters from the French and Spanish Fleets edited by Edward Fraser. Chatham Publishing (http://www.chathampublishing.com/index.html), Park House, 1 Russell Gardens, London NW11 9NN, 2004, 464 pages, $34.95 (hardcover).

It should not surprise anyone that, 200 years after the Battle of Trafalgar, books on the subject are appearing in record numbers. After all, it was the last and arguably the greatest fleet action of the Age of Sail, and its legacy, Lord Adm Horatio Nelson, is possibly the greatest hero England has ever known. Even more extraordinary, the publication of one of the latest volumes on the battle was prompted not by the bicentennial but by the centennial of Trafalgar.

Edward Fraser published *The Enemy at Trafalgar* in 1906, with the centenary celebration fresh in his mind, "to render tribute to the gallant men at whose expense our own Nelson achieved his crowning fame." That is, English readers of a book on Trafalgar already knew the story of Nelson and Adm Cuthbert Collingwood breaking the line of the Combined Fleet and carrying the day with superior seamanship and gunnery. But they did not know the other side of the story. Fraser particularly wished to show that the battle was not a walkover for the English fleet—that the French and Spanish had in fact fought bravely and well. Although some of the newer books on Nelson and Trafalgar—for example, Tim Clayton and Phil Craig's *Trafalgar: The Men, the Battle, the Storm*—endeavor to treat both sides, most accounts assume an English perspective.

Part of the difficulty, of course, is language. Most English and American readers do not read French and Spanish, and most French and Spanish accounts do not appear in English. Fraser ameliorates this problem by translating dozens of reports of the action and placing them in context. Clearly, however, the book did not intend to facilitate reading for the monolingual since one finds significant passages in untranslated French or, occasionally, in Spanish. Furthermore, Fraser sometimes includes quotations in languages with which the educated readership of an earlier generation might have been more at home: Dante in Italian, for example, or Virgil in Latin. In general, these diversions are brief and do not lead to significant interpretive difficulties for the uninitiated reader.

If Fraser falls short in the area of linguistic accessibility, he succeeds marvelously in providing an alternative perspective on the battle. That history is generally told by the winning side is an accepted position, but in studying the outcomes of battles—particularly the decisions of victorious commanders—one needs to account for adversarial decision making. Nelson's victory makes sense only as the obverse of Adm Pierre de Villeneuve's defeat, a point that Fraser aptly makes. In many ways he was ahead of his time—perhaps ahead of our time. How many books in English provide an Arab perspective on the Arab-Israeli wars, a Vietnamese perspective on the Vietnam War, or an Iraqi perspective on the Gulf Wars? Nor have the English learned the lesson. Among the numerous books on the Falklands

War, only Martin Middlebrook's *The Fight for the "Malvinas"* offers an Argentine view.

Fraser also offers readers the human perspective, providing biographical information on the French and Spanish captains and admirals that show them to be professionals and honorable men. Instead of demonizing the sailors of the Combined Fleet, he portrays them as men fighting courageously and willing to die for their countries, just as surely as Nelson was willing to die for England. He succeeds splendidly.

The Enemy at Trafalgar is not for everyone. It should never be the first book one reads about the battle since it makes too many assumptions about the reader's knowledge. But for anyone with a reasonable grasp of this great fleet battle, it is a wonderful book. For readers without an acquaintance with French or Spanish who want to view the battle from the perspective of the other side, it may be the only game in town.

Robert S. Bolia
Wright-Patterson AFB, Ohio

The Last Sentry: The True Story That Inspired *The Hunt for Red October* by Gregory D. Young and Nate Braden. Naval Institute Press (http://www.usni.org/press/press.html), USNI Operations Center, 2062 Generals Highway, Annapolis, Maryland 21401-6780, 2005, 288 pages, $28.95 (hardcover).

For those who don't recall, Tom Clancy's novel *The Hunt for Red October* told the story of a vessel of the Soviet navy, under the old communist regime, that tried to defect to the West. *The Last Sentry* provides readers the true story behind Clancy's premise by recording events that occurred aboard the *Storozhevoy*, a Kirvak destroyer that tried to change the old Brezhnev-era Soviet Union, as it sailed from Riga in Latvia, then a Soviet satellite state in the Baltic. Some individuals in the Soviet KGB, Communist Party, and the West believed that the ship and its crew attempted to defect to Sweden, but the truth, as always, is a bit more complex.

In 1975 the ship's political officer, Valery Sablin, the third-ranking officer in the Soviet naval hierarchy at the time, had become so disillusioned with the party and Premier Leonid Brezhnev in particular that he decided to launch a revolution from within by sailing the *Storozhevoy* into the Baltic and broadcasting a manifesto to persuade the Soviet populace to overthrow or change the regime. As authors Gregory Young and Nate Braden describe quite clearly, he was influenced by the revolutionary behavior of Russian naval officers who mutinied in 1905 after the disasters of the Russo-Japanese War. The most remarkable part of the story is that a political officer—not one of the other ship officers—decided to mutiny. During the takeover, a select group of enlisted and warrant officers locked up the captain and tried to sail out of Riga harbor, into the Baltic, and then on to Leningrad. Most Western readers will be disappointed to learn that Sablin had no intention of going to Sweden but that he wished to instigate radical change in the Soviet Union by overthrowing Brezhnev. The KGB executed him for his role in the mutiny.

Young, a Naval Postgraduate School student, managed to unearth the facts of these events with the help of recently released Soviet-period KGB documents. Up to that time, most of the details of the mutiny had remained unknown, and reports of the incident in the open press were wrong. So-called experts could only guess at what had happened. Even the Swedish intelligence service, which possessed excellent intercept facilities, could not pierce the fog surrounding the events.

Unfortunately, *The Last Sentry* does not provide sufficient information about Soviet life during the Brezhnev years, which would allow readers to understand the circumstances in which Sablin reached his difficult and heroic decision. Nevertheless, historians and analysts should find this Cold War text useful to their reevaluations as more facts about that era emerge. And, of course, it is a must-read for aficionados of Tom Clancy.

Capt Gilles Van Nederveen, USAF, Retired
Fairfax, Virginia

Luftwaffe Victorious: An Alternate History by Mike Spick. Stackpole Books (http://www.stackpolebooks.com), 5067 Ritter Road, Mechanicsburg, Pennsylvania 17055-6921, 2005, 256 pages, $34.95 (hardcover).

Luftwaffe Victorious, a speculative history, assumes that the German Luftwaffe enjoyed more success than it actually did during World War II. Personally, I have never liked alternate histories, but, having read several excellent books by author Mike Spick, I hoped that his in-depth knowledge would actually breathe some life into this most tiresome of genres. Unfortunately, I was wrong.

The inherent problem with any alternate history, of course, is that one must change history to make it work. The author of other excellent books such as *Allied Fighter Aces* and *Luftwaffe Fighter Aces*, Spick does an excellent job of not making too many absurd historical twists. In fact, he sets up the premise well by killing off Hermann Göring during the Battle of Britain and allowing Gen Walther Wever, the leading proponent for the development of a four-engine heavy bomber, to survive (in reality, he died in 1936). Spick then lets some well-placed pieces fall as they very well may have. Here, his superior knowledge and insight help move the book forward, and he does a better job than most others would have. For example, many of his notions of the employment of Luftwaffe heavy bombers are very interesting, as is the argument that German jet fighters entering service in 1943 would have seriously hampered our efforts during the Combined Bomber Offensive. One must simply keep in mind that in reading alternate history, reality does not necessarily exist as we know it.

The idea of changing history and proposing how things might have happened does not appeal to me. The permutations are so infinite that one loses the value of true history in attempting to write a coherent alternate version. I was very disappointed in this effort by the author, who is one of my favorites. I hope that he returns to the high-quality historical work he has produced in the past. Unfortunately, I cannot recommend *Luftwaffe Victorious* since it offers very little of historical value.

Lt Col Robert Tate, USAFR
Maxwell AFB, Alabama

Hindenburg: Icon of German Militarism by Dennis E. Showalter and William J. Astore. Potomac Books, Inc. (http://www.potomacbooksinc.com), 22841 Quicksilver Drive, Dulles, Virginia 20166, 2005, 160 pages, $19.95 (hardcover), $12.95 (softcover).

An icon is "an image or representation"; in the Eastern Orthodox Church, it is "a representation or picture of a sacred Christian personage." Militarism is the "exaltation of the ideals of the professional military class; predominance of the military in the administration or policy of a state; or a policy in which military preparedness is of primary importance." The subtitle of this wonderful, short biography of Paul Ludwig Hans Anton von Beneckendorff und von Hindenburg—the victor of the battle of Tannenburg in August 1914, quasi-military dictator of Germany from 1917 to 1918, and the second and last president of the Weimar Republic—well conveys the image of Hindenburg as the definitive representative of German militarism, revered by Germans "as an icon of such Prussian virtues as discipline, duty, order, and respectability" (p. ix).

The authors of this fair, insightful, and well-balanced analysis are very well qualified to write about Hindenburg. Dr. Showalter, who has taught history at Colorado College, the US Military Academy, and the US Air Force Academy, has written several well-known books on German military history and has served as president of the Society for Military History. Dr. Astore read modern history at Oxford University, taught military history at the US Air Force Academy, and currently serves as associate provost and dean of students at the Defense Language Institute's Foreign Language Center.

In relatively few pages, the authors capture Hindenburg as a product of conservative Prussia (later, Wilhelmine, Germany) and of the army. Born to a Junker family in East Prussia, he attended cadet academies and served in the Prussian army during the wars of unification. After 1871 he attended the War Academy, received various assignments, none of which were particularly auspicious, and steadily rose in rank and position until his retirement as a general in 1911. When the Great War started, he was recalled to duty and appointed supreme commander of German forces in the east. In that position, he defeated the Russians at the battle of Tannenburg, enshrining his name into contemporary German minds and military history.

After Germany's defeat at Verdun, France, and War Minister Erich von Falkenhayn's dismissal in late 1916, Hindenburg—along with Erich Ludendorff, his chief of staff—took over military direction of the war. As virtual dictators, they oversaw many of Germany's most important wartime decisions: the resumption of unrestricted submarine warfare, Theobold von Bethmann-Hollweg's dismissal as chancellor, Russia's defeat and negotiation of the Treaty of Brest-Litovsk, and the final German offensives of March–June 1918. After Germany's catastrophic defeat, Hindenburg helped create the "stabbed in the back" myth, led Germany as president of the Weimar Republic, and, most tragically, acquiesced to Adolf Hitler's rise to power before his death.

Readers can view both sides of Hindenburg in this well-paced narrative. Showalter and Astore demonstrate his capabilities and competency as an operational commander—as well as his inability to think strategically or integrate nonmilitary aspects of modern warfare, such as technology and eco-

nomics, into his decision making. They show how he brought stability and peace to Weimar Germany after 1925—but could not cope with the growing instability and violence of Germany in the early 1930s. Moreover, the authors present Hindenburg's failure to make an unpopular but needed decision at several key junctures (e.g., late October 1918), leaving others to do so—thus, putting the onus of making that decision on them. Yet, the German people, as Showalter and Astore point out, continually looked at Hindenburg as "a strong man to provide honor, stability, and direction" (p. 76) because of his military accomplishments (as well as their perceptions of these accomplishments) and his martial appearance.

Although this fine work doesn't provide anything new about Hindenburg, it is the first new biography of him in years. The authors give a fair appraisal of his weaknesses and strengths and provide useful insights into how and why he came to represent German militarism from 1914 to 1934, a critical period in both German and European history. I highly recommend *Hindenburg: Icon of German Militarism* to both military historians and general readers, who will find its brevity, clarity, and critical analysis well worth the reading.

Dr. Robert B. Kane
Eglin AFB, Florida

Strategic Management Methodology: Generally Accepted Principles for Practitioners by C. W. Roney. Praeger Publishers (http://www.praeger.com), 88 Post Road West, Westport, Connecticut 06881-5007, 2004, 360 pages, $69.95 (hardcover).

An academic text and an entry in the Guidelines for Strategists series, Professor Roney's *Strategic Management Methodology* reviews and summarizes existing literature on strategic planning for the business community. It does require some familiarity with business practices and planning to ensure the survival of the company and maximizing shareholders' value. Although some business principles will never work in the military, Roney's presentation allows the military community to understand the planning guidance that business professionals utilize to meet the demands of business cycles.

Individuals involved with planning and programming will find some of the principles of cycle planning familiar, but, unlike the military, the business community must plan for success or face immediate failure. Classical planning reached an impasse when replanning did not keep pace with changing business climates from the late 1950s until the 1970s when data automation reached maturity for business and accounting programming. As two deep recessions in 1982–83 and 1990–91 hit America, critics of business planning cited the inability of the planning profession to predict these slowdowns. Business planners needed more complex and reactive electronic-planning programs. With the modeling of more variables and their factoring into strategic planning, technology allowed the introduction of classic models into the planning profession. Aligning planning methodology to a particular industry is vital in strategic planning.

Roney charts different methods of strategic planning, noting their successes and drawbacks, as well as the ways business has implemented academic theory to its advantage. Two principal modes, adaptive and developmental, are the opposite ends of autonomy. Adaptive planning is highly innovative and unlikely to be incremental. Developmental planning is less radically responsive to a business's environmental circumstances. A neoclassical planning model involves both internal capabilities, such as resources, strengths, and weaknesses, and the external environment, including opportunities, threats to industry markets, strategy, and an approach to pursuing goals. Strategy is then broken down into immediate, short-term tasks; progress reviews; and evaluation steps. One then draws up reprogramming steps for future contingencies. Roney offers a comprehensive overview by examining the models in detail and describing what academics and theorists have written about models, approaches, and methodologies.

Some factors that have changed strategic planning in recent years include affordable personal computers, assessment of the external business environment, comprehensive analysis, more effective strategy implementation, rapid feedback, response, adaptability, and better replanning, all of which have altered the business-planning profession so that even the smallest businesses can now plan. As professionals have acquired more tools and visibility, so have businesses experienced a need to have in-house staff help line managers plan, program, and manage the businesses of the nation.

The text also details some of the more interesting developments in the planning profession, the integration of short- and long-term planning, and the linking of goals and objectives. Selecting the planning horizon—the initial duration of the plan's coverage—seems to present a continuing problem to the planning profession. The business cycle and rapidly changing business climate have made these

variables both critical and difficult for strategic business planners.

Roney explores in detail hurdles represented by resistance to planning and the actual plan itself, as well as variations in business-leadership styles. His comprehensive analysis, applied to both wealth creation for stockholders and business survival, allows the reader to visualize the depth and extent to which planning must go in order to achieve success in today's business world. Even smaller businesses use new software planning products to survive.

Roney argues that practices and planning remain the same for both single and multiunit businesses. Matters become complicated when new units or products are created and financial equations must be factored in to ensure that momentary changes in business units do not cause extended hardship to other units. Most Air Force officers will be familiar with the final chapters of the book, which examine the scoring of plan implementation: management by objective, balanced scorecard, project management, budgeting and control, management-development programs, and so forth.

Although required reading for graduate students in business school, *Strategic Management Methodology* would probably appeal only to Air Force officers who conduct planning and programming and related analyses. However, anyone interested in strategic planning may wish to use the book as a starting point and a guide to further study. Readers should be aware that Professor Roney has plans for more texts on strategic decision making and corporate restructuring to meet today's business challenges.

Capt Gilles Van Nederveen, USAF, Retired
Fairfax, Virginia

Halcones de Malvinas by Comodoro Pablo Marcos Rafael Carballo. Ediciones Argentinidad (http://www.ediciones.argentinidad.com), Buenos Aires, Argentina, 2005, 480 pages, AR$50.00 (softcover).

Halcones de Malvinas is a collection of almost 90 personal vignettes written in Spanish by Argentinean veterans of the Falklands/Malvinas War of 1982 between Argentina and Great Britain. The vignettes recount the experiences of fighter pilots, transport crews, helicopter pilots, ground troops, antiaircraft-artillery crews, chaplains, and many others. Comodoro Carballo, a renowned A-4 Skyhawk pilot for the Fuerza Aérea Argentina (FAA) (Argentinean air force), flew combat missions in the war. Previous books by this accomplished writer—*Halcones sobre Malvinas* and *Dios y los Halcones*—serve as points of departure for *Halcones de Malvinas*. Incidentally, the title may have a double meaning: in a narrow sense, "falcons" refers to the nickname of the author's fighter squadron, but one can also see that the word refers more broadly to the spirit of the FAA and the nation.

The book repeatedly emphasizes the justness of Argentina's wartime cause. British readers may wince at references to Royal Navy "pirate ships" and British "usurpers," and a remark that British air operations "reminded me of Hitler and his relentless aerial assault against London" (p. 459) seems a bit harsh. On the other hand, the vignettes consistently make clear that the Argentineans did not hate the British people. Apart from some sore topics such as the British use of both Beluga air-dropped mines (considered illegal by the Argentineans) and the fearsome Gurka infantrymen, *Halcones de Malvinas* depicts a relatively chivalrous war. One especially gripping chapter entitled "Swimming among the Frigates" describes how the British rescued an injured Argentinean A-4 pilot after shooting him down during a low-altitude attack against a Royal Navy ship, gave him good medical care, treated him well, and repatriated him after the war. Similarly, the book mentions that Argentinean forces handled captured and dead British personnel with dignity.

The strong religious and nationalist undercurrent that runs throughout *Halcones de Malvinas* provides insight into the motivation of FAA pilots, known for their sheer bravery and audacity. The reader sees that for the Argentineans, the war was—and remains—almost a holy quest to recover lands they strongly believe the British wrongfully expropriated. Furthermore, one quickly becomes aware of Comodoro Carballo's strong Catholic faith and patriotism. Such sentiments are important components of the Argentinean national identity, from which the FAA drew moral strength.

Unshakable faith in its cause interacted with religion and nationalism to enable the FAA to perform impressive combat exploits. Despite fully understanding that the British possessed superior military technology, the Argentineans confronted them nevertheless. Conducting strike missions by navigating at extremely low altitudes in bad weather enabled bold Argentinean pilots to repeatedly slip past British radar coverage and combat air patrols to deliver some very damaging attacks. Argentineans are also quite proud of their achievements in airlift and antiaircraft artillery. Additionally, several

chapters criticize apparent British efforts to downplay Argentinean successes by insisting, for example, that the failure of many Argentinean bombs to detonate (a notable feature of the war) resulted from employing ordnance in unexpected ways rather than from ineptitude. The Argentineans also maintain that they damaged the Royal Navy aircraft carrier *Invincible* during a daring Exocet missile and bomb attack on 30 May 1982.

Readers unfamiliar with the overall course of the Falklands/Malvinas War will want to consult a reference work prior to reading *Halcones de Malvinas*. Although Comodoro Carballo presents the vignettes in generally chronological order and briefly sets the stage for each one, his book is not a campaign study. Additionally, American readers should not be misled by the fact that during the entire war, Argentina flew only about 500 sorties—a slow day during Operations Desert Storm or Iraqi Freedom, let alone the 1,000-bomber raids of World War II. Rather, one should realize that the relatively small FAA devoted practically all its resources to the war and paid a very heavy price, losing 55 of its members.

This book not only commemorates the wartime sacrifices of FAA members and their families, but also will help veterans come to terms with their grief over lost comrades and their lingering disappointment at losing the war. Indeed, a sense of frustration lies just below the surface of many of the vignettes. Comodoro Carballo continues to contribute to his beloved FAA by serving as an instructor at its academy, instilling patriotic military virtues in his students. *Halcones de Malvinas* offers many personal, tactical details about the human side of the Falklands/Malvinas War, nicely complementing broader works that address the war from strategic and operational perspectives.

Lt Col Paul D. Berg, USAF
Maxwell AFB, Alabama

Warlords Rising: Confronting Violent Non-State Actors by Troy S. Thomas, Stephen D. Kiser, and William D. Casebeer. Lexington Books (http://www.lexingtonbooks.com), 4501 Forbes Boulevard, Suite 200, Lanham, Maryland 20706, 2005, 268 pages, $75.00 (hardcover), $34.95 (softcover).

Military planners and operators understand systems. Defense in depth, carrier battle groups, and Col John Warden's five rings—to name just a few—are familiar systems to contemporary war fighters. But as the United States heads toward the sixth year of the global war on terror, representing violent nonstate actors (VNSA) *as a system* remains elusive to all but a few pockets of the Department of Defense. Indeed, the type of deliberate, reflective, and fastidious systems-level inquiry undertaken during the Cold War that resulted in key successes (e.g., stealth technology and network-centric warfare) has yet to transition to the terrorism field.

In *Warlords Rising*, authors Thomas, Kiser, and Casebeer seek to rectify this deficiency. Specifically, the book offers an analytical framework through which one can systemically view terrorist organizations as one category of VNSAs. Leveraging open-systems theory, the authors perceive these organizations not as unique, isolated entities but as structures that continuously transform, based on the resources available in their proximate environments. By examining terrorist groups as organizations that ingest environmental resources while producing various outputs (e.g., identity and violence), Thomas, Kiser, and Casebeer provide us with *an inventive framework for organizing "what we know" (or what we think we know) about how VNSAs really work.*

Chapter 1 straightforwardly introduces some of the information-age challenges to the state-dominated international system that are well expressed elsewhere—particularly the *netwar* concept (see, for example, John Arquilla and David Ronfeldt, *The Advent of Netwar* [Santa Monica, CA: RAND Corporation, 1996]; and John Arquilla and David Ronfeldt, eds., *In Athena's Camp: Preparing for Conflict in the Information Age* [Santa Monica, CA: RAND Corporation, 1997]). This introductory material also provides a cursory overview of open-systems theory, which forms the basis of the work. Drawing heavily on central Asia as a case study, chapter 2 outlines some of the environmental conditions that contribute to the rise of VNSAs—often postulated in other works as possible "root causes" of contentious collective violence. Chapter 5 introduces the types of agents who serve as the core VNSA actors (e.g., warlords, ethnopolitical militants, and religious militants). Chapter 6 then situates these conditions and agents within the overarching scaffolding of collective violence. Readers new to VNSA inquiry would do well to start their reading with these chapters.

For those more familiar with VNSAs, chapters 3, 4, and 7 and the appendix form the intellectual core of the book. These sections express how systems thinking can assist in VNSA analysis, from which effective counterstrategies may result. Chapter 3, for example, introduces how one might apply the simple framework of general-systems theory—inputs, transformations, and outputs—to VNSAs,

thus enhancing our understanding of their subsystem dynamics. By viewing VNSAs not as isolated entities but as actors within a broader environment, the authors describe how failures of governance, identity cleavages, identity mobilization, and reinforcing actions in the proximate environment can enable VNSAs to dominate a particular sociopolitical niche. Similarly, Chapter 4 explores how the internal subsystems of VNSAs—classified as support, cognition, maintenance, and conversion—perpetuate the VNSA life cycle and may prove vulnerable to countering techniques. In Chapter 7, Thomas, Kiser, and Casebeer offer further insight into these countering strategies, but like writers of many similar works (e.g., Paul Davis and Brian Jenkins, *Deterrence and Influence in Counterterrorism: A Component in the War on al Qaeda* [Santa Monica, CA: RAND Corporation, 2002]), the authors focus on coercion and conquest. They forgo detailed discussion of how one might employ *enticement and attraction* (see Joseph S. Nye's concept of soft power in his *Soft Power: The Means to Success in World Politics* [Cambridge, MA: Public Affairs, 2004]) to great effect in countering VNSAs. Finally, chapter 8 includes the authors' suggestions for future work in developing their concepts.

For readers intrigued by the power of systems-level modeling, *Warlords Rising* closes with an insightful systems-dynamic model of Sendero Luminoso (Shining Path) recruitment in the appendix, a powerful example of how *conceptual* models of terrorist organizations might be translated into *computational* models of the same. This ending puts the authors at the leading edge of terrorism studies, as they join but a handful of scholars attempting to define some of terrorism's processes so rigorously that computational models can be used to explore the phenomenon.

As the authors note, *Warlords Rising* is not a panacea. Indeed, the work's understated tone and mildly disjointed organization sometimes beguile the power of its message—that (1) the systems perspective is a powerful means for exploring VNSA dynamics, and (2) the transition from understanding terrorism via natural-language and conceptual models to computational models is nigh. Further, *Warlords Rising* is not for the intellectually faint of heart. It is dense, integrative, and—like its subject matter—complex. Nonetheless, military planners and operators will find the work insightful and useful. Without a doubt, individuals who appreciate the fact that contemporary war fighting is indisputably dependent upon the "system of systems" approach will find it invaluable for demystifying VNSAs and some of the processes through which they produce collective violence.

Maj Tara A. "Torch" Leweling, USAF
Naval Postgraduate School

You're Stepping on My Cloak and Dagger by Roger Hall. Naval Institute Press (http://www.usni.org/press/press.html), 291 Wood Road, Annapolis, Maryland 21402, 2004, 224 pages, $16.95 (softcover).

According to a time-honored military platitude, "Never volunteer for anything." Apparently, this message was lost on Lt Roger Hall, a young Army officer who volunteers to join the newly established Office of Strategic Services (OSS) to quench his thirst for adventure and find a way out of Louisiana. With deadpan wit, the grown-up Roger Hall details his experiences as an OSS officer in *You're Stepping on My Cloak and Dagger*, which received wide acclaim when it first appeared in 1957. Little wonder. The author's ability to blend humor into the serious business of espionage is unparalleled. Equally appealing is his mastery of the similie. Recounting the morning before his first jump at airborne school, Hall describes the somber scene as "being about as colorful as a pound of flour" (p. 53). The follies commence as he checks into OSS headquarters in Washington.

Like any agent-in-waiting, Lieutenant Hall begins his OSS service in 1943 as a trainee. As he soon learns, an agent's training is endless, the majority of it tedious. All the same, Hall excels, gets picked up for instructor duty, and is sent to area F, where he describes his cohorts as interesting as "a flock of birdseed salesmen" (p. 32). Promptly seeking reassignment, he volunteers to instruct students at area B, a similarly dismal stop in the OSS alphabet soup. Escaping area B, however, will require a trip to airborne school. Hall is reluctant to take the plunge, so his boss takes the initiative: "I've volunteered for you. You'll be leaving tomorrow night. I've been. Now you're going" (p. 43). Case closed.

Despite a few rough landings, Lieutenant Hall survives airborne school. Armed with parachute wings and tactical prowess, he catches the attention of his superiors. Impressed by his easy camaraderie, an affable self-confidence, and his "glistening" evaluation report, they allow him to write his own ticket. Eager to join the fight in Europe, he volunteers to join the Special Operations Division, in which his devil-may-care attitude finds a cordial au-

dience. Before long, the amusingly sardonic lieutenant is bound for England. But is he also bound for the glory he so desires?

First stop is the British airborne school, where he befriends the chief instructor, Captain Leghorn. Here again, the jocular Lieutenant Hall succeeds. In fact he does so well that he'll go back to see his buddy the captain twice more! Yet England is far removed from the fight, so Hall pleads with his civilian boss for an opportunity to prove himself. A few months later, good fortune strikes. At last, the unrelenting Hall is awarded with a parachute, choice of weapons, a British Wimpy bomber, a cyanide tablet (just in case), and a real mission into France—the raison d'être for a special-operations type!

Unfortunately for Lieutenant Hall, his mission will not likely transfer to the silver screen. Once he finds himself on the ground, events quickly unfold in a comedy of errors. No one bothered to tell Hall that the Second Armored Division's quick work of the German Wehrmacht would land him behind *friendly* lines! He recalls that his reception party "all reeked of wine" and that, with no enemy to harass, he spent his brief time in France sitting in a farmhouse where he "watched it rain" (p. 168). His second trip to France lands him no closer to the fight. Working as an OSS liaison at Headquarters Allied Expeditionary Force, the only fighting Hall does is with a scrawny, turtle-faced, horn-rims-wearing staff officer named Major Ffoulkes (p. 180). Surviving Ffoulkes, he returns to England and jump school. All the while, the young lieutenant begs for a true cloak-and-dagger OSS mission, one that will land him in the history books. In the spring of 1945, it appears that he finally gets one—an opportunity to jump into Norway and lead a partisan force against the retreating Germans.

Training for the mission in Scotland, he teams up with Maj William Colby, the legendary OSS officer and future head of the Central Intelligence Agency. The two men lead separate elements. Colby, whom Hall considers a "close friend," takes the first team in March. Weeks later the lieutenant departs for Norway via Sweden on, as he calls it, Operation Better Late than Never (p. 207). Here again, events disrupt his quest for grandeur when he and his crack team arrive a day late and an armed enemy short: the Nazis have surrendered.

You're Stepping on My Cloak and Dagger is a laugh-a-minute read with dialogue reminiscent of a Marx brothers movie. Roger Hall takes a lighthearted look at the dangerous and often dirty business of espionage. This book is not an academic, comprehensive history of the OSS—and Hall did not intend it to be. Rather, he wants to make the reader laugh while introducing a few historical characters. To that end, he succeeds. *You're Stepping on My Cloak and Dagger* will appeal to military-intelligence practitioners and enthusiasts alike, as well as unconventional thinkers who, like young lieutenant Roger Hall, sometimes find themselves volunteering just to be different.

Maj Joseph T. Benson, USAF
Naval Postgraduate School

Shockwave: Countdown to Hiroshima by Stephen Walker. HarperCollins Publishers (http://www.harpercollins.com), 10 East 53d Street, New York 10022, 2005, 368 pages, $26.95 (hardcover), $14.95 (softcover).

More than 60 years have passed since Col Paul Tibbets and his crew aboard the B-29 *Enola Gay* released the "Little Boy" atomic bomb from 31,000 feet above Hiroshima in August 1945, effectively ending Japan's options for further resistance in World War II. That bombing continues to be one of the most controversial aerial missions in history. In *Shockwave*, Stephen Walker adds what other accounts of this event have omitted: a remarkable human touch. Drawing on interviews with survivors of the original Manhattan Project team, members of the 509th Composite Bomb Group, and citizens of Hiroshima who survived the attack, Walker weaves a historically accurate story into an almost novel-like work.

Unlike most treatments of the Hiroshima mission, which come across as somewhat sterile and lifeless, *Shockwave* is a real page-turner. Reminiscences of the scientists and military personnel reveal actions of the individual actors as they carry out their tasks and missions, all flowing inexorably towards the destruction of Hiroshima. At the same time, civilian and military personnel in the city go about their day-to-day activities in support of the Japanese Empire as they unknowingly come closer and closer to annihilation.

The book begins on the evening of the first atomic test, code-named Trinity, in the deserts outside Alamogordo, New Mexico. Readers find themselves 100 feet above ground zero in the tower along with scientist Don Hornig, assigned by Manhattan Project leader Robert Oppenheimer to stand guard over "the gadget," as a lightning storm rages outside. The claustrophobic compartment is filled almost entirely by the device, and one gets a sense of the bomb as a living creature awaiting

birth instead of an inert mass of metal, wires, explosives, and a plutonium core. As the storm grows, 10,000 feet away from the tower, Oppenheimer and Gen Leslie Groves, military director of the project, decide whether or not to proceed—eventually giving the go-ahead for very early in the morning of 16 July 1945. As the narrative unfolds and energy released from the blast reaches "60 million degrees centigrade and 10,000 times hotter than the surface of the sun," the recollections of the people there are more impressive than any numeric description of the event could ever hope to be.

The book steadily progresses from the New Mexico desert, to the USS *Indianapolis*, which transported the bomb, to Tinian Island, where the *Enola Gay* awaited. All the pieces fall together, pulling the reader along with a sense of inevitability as decisions by American and Japanese government and military officials indicate that the dropping of the atomic bomb was the only choice left to end the war, short of a full-scale invasion of the Japanese mainland.

Walker takes us on a tour around the tiny island of Tinian, describing the various segregated organizations on the base, each one kept in the dark about what the other is doing. The bomb and its components stay on one side of the island, and members of the 509th Composite Bomb Group remain apart from the rest of the flyers there. Only Tibbets and Capt Deak Parsons, USN, fully understand what is about to happen. The pilots of the 509th only know that their mission might end the war. Not until the *Enola Gay* is airborne does one of the crew ask Tibbets, "Is this a physicist's nightmare? Are we splitting atoms today?" Walker's description of the bombing run puts the reader inside the B-29, through release of the bomb and the aircraft's dramatic banking turn, on the streets of Hiroshima and the surrounding hillsides, and across the bay, allowing a multiangular view of the explosion from various points surrounding the city.

I consider *Shockwave* the best book on the atomic-bombing missions written to date. Technically accurate and well written, the book is both shocking and phenomenal, depicting the bombing as horrific but necessary. Members of the world's most technologically advanced military force in history must keep in mind that airpower has not always consisted of Joint Direct Attack Munitions and joint standoff weapons—we must remember that one plane, one mission, and one bomb can have strategic implications.

Capt Brian Laslie, USAF
Maxwell AFB, Alabama

No Prouder Place: Canadians and the Bomber Command Experience, 1939–1945 by David L. Bashow. Vanwell Publishing Limited (http://www.vanwell.com), St. Catharines, Ontario L2R 7S2, Canada, 2005, 538 pages, $60.00 (Canadian) (hardcover).

> *It drives one mad to think that some Canadian boor, who probably can't even find Europe on the globe, flies here from a country glutted with natural resources which his people don't know how to exploit, to bombard a continent with a crowded population.*
>
> —Joseph Goebbels

In response to this bit of chauvinism thinly disguised as irony, David L. Bashow provides a splendid account of the facts and spirit of Canada's contribution to the Royal Air Force (RAF) Bomber Command of World War II. This accomplished historian and author has successfully tackled the subject with impressive depth by providing equal measures of campaign-level analysis, scholarly tactical detail, and precious personal accounts from the Canadians who crewed swift Mosquitoes, venerable Lancasters, and all manner of aircraft in between.

No Prouder Place traces the uncertain path from initial forays against coastal targets to the ultimate onslaught against Germany's heartland. Bashow addresses the familiar debates—night versus daylight operations, the Reich's center of gravity, and campaign diversions to support Operation Overlord—but from a Royal Canadian Air Force (RCAF) perspective. His account is remarkable for its careful examination of several special subjects, such as the Ruhr Dam raids (in which 30 percent of the aircrews were Canadian), the force-multiplier aspects of the Mosquito force, and the impact of Germany's cutting-edge jets and rocket-powered fighters.

Bashow presents the bombing campaign's escalation (a tenfold increase in RAF/RCAF nightly tonnage between 1942 and 1944) alongside the human toll on Germans and Canadians. (At the peak of operations, 75 percent of trained Canadian aircrews could expect to be killed or wounded in action, taken prisoner, or killed in training/noncombat operations.) The text is packed with tactical information regarding 1940s-era navigation technology, electronic warfare, life-support equipment, defensive-counterair tactics, air-traffic-control and air-to-air-deconfliction methods, aiming-point marking, and the time-distance challenges of striking Berlin and other deep targets.

Much of the content is common to widely documented British and American experiences, but Bashow vividly presents his story within the context of Canadian crews serving with the British and those assigned to the Canadianized 6 Group. He outlines the Canadians' various adaptations to the RAF's class-conscious personnel system and consequences of the dreaded "lack of moral fibre" designation. The rich tapestry of firsthand anecdotes throughout the work, however, makes *No Prouder Place* truly special. The author has done a great service by preserving important oral histories of flight-deck experiences and anxieties inherent in wartime lifestyles.

This volume easily surpasses Bashow's previous fine achievement, *All the Fine Young Eagles*, which recounts the contributions of Canada's World War II fighter pilots. *No Prouder Place* soundly documents another vital chapter of Canada's military heritage. It is a must-read for those wishing to further their understanding of the Combined Bomber Offensive of the RAF and US Army Air Forces.

Col Gaylen L. "GT" Tovrea, USAF, Retired
Albuquerque, New Mexico

In Hostile Skies: An American B-24 Pilot in World War II by James M. Davis. Edited by David L. Snead. University of North Texas Press (http://www.unt.edu/untpress), P.O. Box 311336, Denton, Texas 76203-1336, 2006, 304 pages, $27.95 (hardcover).

In Hostile Skies is another of many aerial tales of World War II bomber crews—but the story never fails to stimulate wonder, no matter how many times it is told. James Davis flew into battle in command of a heavy bomber at age 22, with but a few hundred hours of flying time, a copilot who had never before landed the B-24, and an equally green crew. They did this against a German air force that had been at battle for five years or more—albeit many of its pilots were mere boys too.

Davis and his crew flew their Liberator across the Atlantic in 1944, not long before the Normandy landings. He gives a day-by-day account of his 35 missions there in clear, swift-moving prose. It is hard for the modern aircrew member to appreciate the terror of facing flak day after day—doing six-to-nine-hour missions over Germany, sometimes for three or four consecutive days. If Hitler's flak did not get these Airmen, maybe the English weather would. Like many others then, Davis was a young newlywed, off to war before the honeymoon was over. Completing his missions and thinking he would then be released from this terror, he returned to the United States only to discover that he and his crew were to be retrained in the B-29 and redeployed to the Pacific for the final battles over Japan. Davis's description of his efforts to steal a little time with his family as he passed through transition training at many different places brings back memories of a harsher, harder time in America. He had already sent his wife back home to Texas, and he and his crew were on the point of taking off across the Pacific when the United States dropped nuclear weapons on Japan, releasing them from a renewal of the ordeal.

For readers versed in the history of strategic bombing in World War II, not much is particularly new in this story, however well it is told. The editor clearly did a great deal of research, down to citing practically all of Davis's missions in the footnotes, but they really do not add much to the tale. In the end, *Hostile Skies* is worthwhile recreational reading for modern air warriors, for it is an engaging war story. However, they will have to look elsewhere for an understanding of the larger issues involved in the air war over Europe.

Dr. David R. Mets
Maxwell AFB, Alabama

Rockets and Missiles: The Life Story of a Technology by A. Bowdoin Van Riper. Greenwood Publishing Group (http://info.greenwood.com), 88 Post Road West, P.O. Box 5007, Westport, Connecticut 06881-5007, 2004, 200 pages, $45.00 (hardcover).

This text is part of the Greenwood Technographies series, designed to give a high-level overview of a particular technology and relate its impact on history. *Rockets and Missiles* takes the reader from ancient Greece, via ancient China, into the twentieth century, when missile technology became mature enough to have an effect on warfare. In 200 pages, one can provide only so much detail—a fact that the publisher and editor have taken into account. The book does contain minor errors. For example, Peenemünde, the World War II German rocket research center, is on the Baltic, not the North Sea. Overall, however, the book is well done. Perhaps more disappointing is the fact that the author does not include Corona, the first American reconnaissance-satellite program, or that he does

not mention other countries' space-reconnaissance developments. These programs, together with innovations in intercontinental ballistic missiles, pushed rocket development forward in the 1950s and 1960s. The book does address space exploration and the use of tactical missiles to destroy aircraft and tanks but, again, does not examine the specific impact on military operations simply because there is no room to do so. In sum, the text lacks the analytical and historical depth necessary to interest military officers. *Rockets and Missiles* may prove useful in an ROTC classroom, but other readers will have to seek more detailed information from other texts.

Capt Gilles Van Nederveen, USAF, Retired
Fairfax, Virginia

The First Men In: U.S. Paratroopers and the Fight to Save D-Day by Ed Ruggero. HarperCollins Publishers (http://www.harpercollins.com), 10 East 53d Street, New York, New York 10022, 2006, 368 pages, $26.95 (hardcover).

I've always felt that really good historical war books don't just recount events. The better ones take readers from the comfort of their chairs and drop them in amongst the soldiers, with the smell of cordite, the crack of flying bullets, the exhaustion and hunger, and eventually the agony and anguish that accompany the wounded and dying in battle. Not only do these books give us the chronology of events or tactics in a battle, but also they figuratively transform us into members of that squad who do what they do.

My military experiences don't begin to compare with anything like those that frontline soldiers of World War II had to endure, so I try to relive portions of their lives through just such books. In his new release, *The First Men In*, Ed Ruggero provides just such an opportunity, delivering us into the heart of the 82d Airborne Division as the All-Americans prepare for and eventually execute their D-day missions in June 1944. Ruggero possesses the remarkable ability to fashion this account from a variety of records and disparate interviews—60 years after the fact. I have walked the ground of Ste. Mere Eglese and flown over several of the bridges, roads, and beaches trod upon by the troopers described in this book—all of which the author captures well. Along the journey, we meet individuals such as Brig Gen Jim Gavin, the 82d's assistant division commander, who served as one of the lead planners for all US airborne operations on D-day; Capt Roy Creek, a quick-witted airborne infantry officer instrumental in the capture of the Chef du Pont Causeway on 6 June; and, among others, the bazooka team of Marcus Heim and Leonold Peterson, who both received the Distinguished Service Cross for their actions in stopping German tanks on the La Fière Bridge on D-day.

In *The First Men In*, Ruggero begins with events that lead to the planning and preparation for the D-day missions. We learn the background of how the airborne and glider assaults will progress, how planners decided on the objectives, and why they were important in supporting the landings at the beaches. The detail is sufficient to capture context and intent but not so overwhelming that it squelches the story's drama.

Through the following chapters, we see the implementation of this master plan. Strategy moves into action. The classic war movie *The Longest Day* doesn't begin to describe what the troopers endured, nor does the movie do justice to the dedication and determination demonstrated by the troopers as they executed their missions. For example, we learn of sacrifice: Pfc Charles DeGlopper's one-man stand near Cauquigny with a Browning automatic rifle as he stood in the open, firing at the Germans and buying just a few seconds with his life so his comrades could safely pull back to better defensive positions (pp. 273–74). We also see desperation and stark determination in Capt John Dolan, commander of A Company, 505th Parachute Infantry Regiment, when he responds to a query from a platoon leader about pulling back his few remaining positions from the La Fière Bridge. He replies, "I don't know a better place to die," followed by the verbal order "Stay where you are" (p. 258).

Very few Airmen see this side of war. Operations in Iraq and Afghanistan have changed that for some of us, but on a larger scale, many Airmen never really see "front lines," as do our Army brethren. However, Ruggero's work helps us not only see these frontline events but also understand the consequences of our actions as Airmen: botched airdrops, mistakes in reconnaissance interpretation, or even something as mundane as the mishandling of rations and ammunition supplies.

I could find little fault with *The First Men In*. This book is a marvelous recounting of the paratrooper's contribution to D-day, both as a study in airborne tactics and history as well as a good story that readers just won't be able to put down.

Maj Paul Niesen, USAF
Scott AFB, Illinois

Interagency Fratricide: Policy Failures in the Persian Gulf and Bosnia by Maj Vicki J. Rast. Air University Press (http://www.au.af.mil/au/aul/aupress), 131 West Shumacher Avenue, Maxwell AFB, Alabama 36112-6615, 2004, 458 pages, $42.00 (softcover). Available at http://www.au.af.mil/au/aul/aupress/Books/Rast/newrast.pdf.

Vicki J. Rast, now a lieutenant colonel at the US Air Force Academy, has written an important study that officers assigned to high-level staff positions should read with care. Rast conducted interviews with 135 people involved in the decision-making process in the administrations of George H. W. Bush and Bill Clinton, including H. Norman Schwarzkopf, Brent Scowcroft, John M. Shalikashvili, Condoleezza Rice, Lawrence S. Eagleburger, Richard B. Cheney, and other prominent individuals. Although the author identifies all the interviewees at the end of the book, she quotes them anonymously within the text. Drawing upon these interviews, she contends in a clearly stated thesis that "in the final analysis, the gap between diplomats and war fighters dominates an interagency process likely to produce a policy that brings about *war termination* in the form of cease-fire. However, it almost inevitably fails to achieve *conflict termination* in the form of sustainable peace" (p. xix, emphasis in original).

Using the model of bureaucratic politics pioneered by Graham Allison, Rast contends that people developed decisions based primarily on their administrative position. The result is interagency conflict that, according to her, is the product of five factors: "1. defects in leadership, 2. the absence of strategic vision, 3. dissimilar organization cultures, 4. disparate worldviews, and 5. the absence of an integrated interagency planning mechanism" (pp. xix–xx).

Rast supports these claims effectively throughout this book. However, the first half is loaded with long, dull explanations on topics such as rational-choice theory and conflict-termination models. This material clearly needs to be present, but a reader pressed for time can safely skip it. The study becomes much more informative when Rast analyzes her two case studies, using source material in an effective and interesting fashion to support her claims. Many times readers feel as if they are there alongside the policy makers.

Although the author has produced a useful study, it raises certain questions. That interagency disputes existed is clearly irrefutable, but was it all that important? Was the inability to produce a sustainable peace the product of these disagreements between various bureaucracies, or was it the product of fundamentally flawed policies? If so, then these bureaucratic disputes might have played only secondary roles. These small questions notwithstanding, Rast has produced an informative and useful study for both the academic intellectual and the practitioner.

Dr. Nicholas Evan Sarantakes
University of Southern Mississippi

Hammer from Above: Marine Air Combat over Iraq by Jay A. Stout. Presidio Press (http://www.randomhouse.com/rhpg/category/military), Random House Publishing Group, 1745 Broadway, New York, New York 10019, 2005, 416 pages, $25.95 (hardcover), $15.95 (softcover).

At a conference on close air support in June 2006, I asked a couple of Marine aviators what they thought of *Hammer from Above*, which I had just finished reading on the flight to Washington. All of them knew about the book, and two of them had read it. Most of us know that marines make a point of having situational awareness about their service's materials. It's too bad that Air Force Airmen do not share this practice about Air Force operations. Moreover, it is too bad that no comprehensive study exists on Air Force operations over Iraq and Afghanistan. Readers anxious to get a sense of the air war will have to settle for this Marine Corps emphasis. Interestingly, Gen T. Michael "Buzz" Moseley, chief of staff of the Air Force, wrote the very complimentary foreword. Perhaps a Marine Corps leader will write the foreword for an Air Force account of Iraqi operations in the near future.

The marines, who knew some of the flyers mentioned in the book, agreed that the personal and colorful identifications were accurate, even if the overall analysis failed to match their own opinions. They also indicated that the author provides an anecdotal rather than a balanced historical account. Jay Stout, a retired Marine Corps aviator, admits that he hurriedly transcribed the series of interviews he had collected and makes no apology that *Hammer from Above* reflects nothing more than his own impressions of Marine Corps operations in Iraq.

That said, the book was a fun read and proved very informative since Stout not only describes a dozen or so specific operations to cover the activities of helicopter and fixed-winged air units, but also offers a primer on how things work—from headquarters to squadrons to very important for-

ward refueling and repair bases that sustain helicopter operations. He covers the aircraft, its weapons, and operational parameters. Novices will enjoy reading this account, some of it pretty basic, as much as experienced airpower advocates will appreciate the opportunity to review.

Some missions proved dangerous and deadly, particularly those of the Cobra units. Providing close air support with helicopters is far riskier than with fast-moving fixed-wing aircraft—and usually not nearly as destructive. The coalition had to call in aircraft from all services and nations to destroy buildings and tanks. Nearly every helicopter operation drew enemy bullet and rocket strikes. Medevac operations during the first few days in Baghdad were particularly gruesome—and costly to men and equipment. Marine aviators suffered casualties, but strikes against the Fedayeen produced a kill ratio far greater for the enemy.

Ultimately the close-in action described by the author is much more exciting than the normal air operations of the Air Force, which involve flying air cover on long missions, hauling men and materiel, refueling other aircraft, or flying command and control, with only the occasional mission attracting enemy fire. Close contact with the enemy gives the Marine Corps its fine reputation and promotes a wide audience for *Hammer from Above*. The Air Force account of the Iraqi war will have to be a different kind of study.

Dr. Dan Mortensen
Maxwell AFB, Alabama

Offense, Defense, and War edited by Michael E. Brown, Owen R. Coté Jr., Sean M. Lynn-Jones, and Steven E. Miller. MIT Press (http://www-mitpress.mit.edu), Five Cambridge Center, Cambridge, Massachusetts 02142-1493, 2004, 416 pages, $27.00 (softcover).

This book, part of the International Security Readers series, is a compilation of 13 articles published from the mid-1970s though 2003. Offense-defense strategy, an international-relations theory, depends upon the concept that international relations and political interaction are influenced by the nature of the execution of offensive military operations in the prevailing international system. War becomes more likely in this system when offense or conquest is relatively easy to perform. Most of the literature on this theory dates back to World War I. Articles such as Stephen Van Evera's "The Cult of the Offensive and the Origins of the First World War" and Scott D. Sagan's "1914 Revisited: Allies, Offense, and Instability" are two of the better known contributions to the topic. Robert Jervis's article "Cooperation under the Security Dilemma" is the best known theoretical example of the prisoners' dilemma used during the height of the Cold War to examine US-Soviet relations in light of strategic nuclear weapons.

Although some political scientists used these complex arguments during the Cold War to press for comprehensive or limited arms control, national decision makers tended to use their own calculus to arrive at policies. Military policies can also be guided or formed by offense-defense assessments. If theorists are correct, some policies could drive states to optimal military postures. Currently, analysts in the field hold that the revolution in military affairs has shifted the offense-defense balance toward offense. Other critics maintain that Van Evera's initial conclusions are flawed and thus need reexamination or modification in light of the many variables he cites. In broad categories, they include technological, doctrinal, geographical, domestic, and diplomatic factors. Another criticism (almost universal with regard to political theory) is that offense-defense theory lacks empirical support.

The most substantial dilemma for advocates of offense-defense theory is that in the current transitional nature of international relations and war, offense-defense applies less than transnational terrorism, with its threat of weapons of mass destruction. One cannot define the privatization of war that dominates warfare today with defense-dominance theory. The lack of territorial conquest since the conclusion of Soviet operations in Afghanistan makes offensive-oriented theory appear misplaced into today's world. However, post-9/11 operations may revive empire theories that look to classical Rome and Athens with regard to international politics and war. Thus, the theoretical arguments of this book no longer hold the relevance they once did. Offering a compact summary of the subject and an extensive bibliography, *Offense, Defense, and War* is of primary interest to historians and theorists who seek to map out political theories of the Cold War era.

Capt Gilles Van Nederveen, USAF, Retired
Fairfax, Virginia

Mission Debrief

Air and Space Power Journal, the US Air Force's professional journal, is published in English, Spanish, Portuguese, Arabic, and French. Each version has its own personality as well as an editor—a native speaker of the particular language and an expert in the region of coverage—who selects the *Journal*'s content. We're always looking for good, thought-provoking articles up to 5,000 words in length, written in any of our published languages. All submissions will be edited in accordance with the standards set forth in the *Air University Style and Author Guide* (available online at http://aupress.maxwell.af.mil/Resources/style/austyle_guide.pdf). For details, please see our guidelines for submitting articles at http://www.airpower.maxwell.af.mil/airchronicles/howto1.html. You can contact us by e-mail at aspj@maxwell.af.mil; regular mail at *Air and Space Power Journal*, 401 Chennault Circle, Maxwell AFB AL 36112-6428; phone at DSN 493-5322 (commercial [334] 953-5322); or fax at DSN 493-5811.

Subscribing to *ASPJ*: Both Printed and Electronic Subscriptions Are Available

Printed copy

- The *Journal* is available free to all USAF organizations as described below in the section "Is Your Organization Receiving Its Proper Number of *ASPJ* Copies?" Other US government and foreign military organizations may also receive the *Journal* for free by contacting the editor at aspj@maxwell.af.mil.
- Nonmilitary and nongovernmental organizations may receive the *Journal* by contacting the Superintendent of Documents by any of the following methods: writing to New Orders, Superintendent of Documents, P.O. Box 371954, Pittsburgh PA 15250-7954; calling (202) 512-1800 (voice), (866) 512-1800 (toll-free outside the DC area), or (202) 512-2104 (fax); or visiting http://bookstore.gpo.gov/collections/military_journals.jsp on the Internet. The *Journal*'s official designation is AFRP 10-1, *Air and Space Power Journal*, stock number 708-007-00000-5. The cost is $32.00 ($44.80 for international mail). Major credit cards are accepted.

Free electronic copy

- Anyone can receive the *Journal* electronically by doing the following. Log on to the "Subscription Center" at the Air Force Link Web site http://www.af.mil/subscribe, select *Air and Space Power Journal* (English, Spanish, Portuguese, and/or French editions), enter your name and e-mail address, and then click on the "submit" button. You will immediately receive an e-mail asking you to reply in order to confirm your subscription. You won't receive your subscription unless you reply to that message. Electronic subscription is free.

Is Your Organization Receiving Its Proper Number of *ASPJ* Copies?

The following "Basis of Issue" criteria guide the free distribution of *Air and Space Power Journal* to USAF and governmental organizations in the United States and other countries. These criteria are only planning factors—not absolute limits. If your unit has different needs, please contact us at aspj@maxwell.af.mil.

- One copy for each general on active duty with the US Air Force or Air Reserve Forces.
- One copy for every five active duty US Air Force officers in grades second lieutenant through colonel.
- One copy for each US Air Force or Air Reserve Forces office of public affairs.
- Three copies for each Air Reserve Forces unit down to squadron level.
- Three copies for each air attaché or advisory-group function.
- One copy for each US Air Force or US government library.
- Other US military, US government, or foreign military organizations wishing to receive the *Journal* should contact us at aspj@maxwell.af.mil.

If your organization is not receiving its authorized copies, please contact us.

Cumulative Article Index

A cumulative index of *ASPJ* articles, listed alphabetically by the author's last name, is available at http://www.airpower.maxwell.af.mil/airchronicles/apjindex.html.

The Editor

OUR CONTRIBUTORS

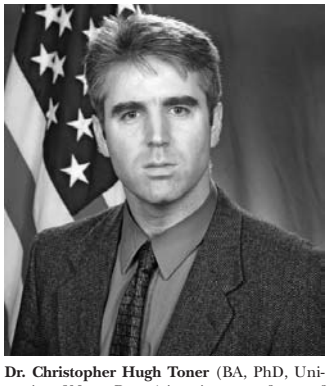
Gen Bruce Carlson (BA, University of Minnesota–Duluth; MA, Webster University; MA, Naval War College) serves as commander, Air Force Materiel Command, Wright-Patterson AFB, Ohio. His staff assignments have included positions at Tactical Air Command, Headquarters US Air Force, the Office of the Secretary of the Air Force, the Office of the Secretary of Defense, and the Joint Staff (as director of force structure, resources, and assessment). Additionally, he commanded the Air Force's stealth fighter wing, the 49th, at Holloman AFB, New Mexico. Prior to assuming his current position, he served as commander, Eighth Air Force, Barksdale AFB, Louisiana, and as joint functional component commander, Space and Global Strike, US Strategic Command, Offutt AFB, Nebraska. A command pilot with more than 3,000 flying hours and combat experience in the OV-10, General Carlson has flown multiple aircraft weapons systems.

Melanie R. F. Law (BA, Indiana State University; MA, University of Colorado–Denver) is a private consultant. She served as a research and teaching assistant for the University of Colorado–Denver where she received the Outstanding Graduate Student Award. More recently she worked as a research associate with the United States Air Force Academy, Department of Behavioral Sciences and Leadership, in a position funded by a grant from the Air Force Research Laboratory. Additionally she served as a guest speaker in introductory psychology, statistics, research methods, and leadership courses as well as assisted in delivering one-on-one leadership feedback to cadets. Ms. Law's current research interests include personality and power, mentor-protégé similarity and success, effective-performance feedback for employee development, leadership perceptions and gender differences, and charismatic and transformational leadership.

Dr. Craig A. Foster (BA, Washington University in St. Louis; MA, PhD, University of North Carolina) is director of research in the Department of Behavioral Sciences and Leadership (DFBL) at the United States Air Force Academy. At the University of North Carolina, he won a university-wide award for excellence in undergraduate teaching. As a faculty member at the Air Force Academy, he has taught several courses within the DFBL, including Introduction to Behavioral Sciences, Social Psychology, Statistical Principles in Behavioral Science, Psychological Operations, and Foundations of Leadership and Character. He has also served in a variety of roles, typically in the areas of assessment and leadership. Dr. Foster continues to pursue research in the areas of power, leadership development, and feedback. His recent publications include work on organizational feedback and secret romantic relationships.

Dr. J. Carl Ficarrotta (BA, Mercer University; MA, Emory University; PhD, University of North Carolina–Chapel Hill) is a professor of philosophy at the US Air Force Academy, where he has taught for 13 years. He speaks regularly on the topic of military ethics to audiences throughout the United States and Canada. The editor of *The Leader's Imperative: Ethics, Integrity, and Responsibility* (Purdue University Press, 2001), Dr. Ficarrotta has also published a number of articles on topics in theoretical and applied ethics, including "Are Military Professionals Bound by a Higher Moral Standard?" *Armed Forces and Society*, 1997.

Dr. Richard I. Lester (BA, MA, Auburn University; postgradute study, University of London; PhD, Victoria University of Manchester, United Kingdom) is dean of academic affairs, Ira C. Eaker College for Professional Development, Air University, Maxwell AFB, Alabama. He previously served as chief of social and behavioral sciences, US Armed Forces Institute; education officer with Strategic Air Command and United States Air Forces in Europe; and faculty member at the University of Maryland. He is the recipient of the State of Alabama Commendation Medal, Meritorious Civil Service Award, and Exemplary Civil Service Award. Widely published in national and international journals, Dr. Lester frequently lectures at military institutions in the United States and abroad.



Dr. Christopher Hugh Toner (BA, PhD, University of Notre Dame) is assistant professor of leadership and ethics in the Department of Leadership, Command, and Professional Development at Air Command and Staff College, Maxwell AFB, Alabama. Dr. Toner served as an active duty Army officer for five years and for one additional year as a mobilized reservist at Headquarters United States Central Command, MacDill AFB, Florida, in the Plans and Policy Directorate. His research focuses on moral theory, military ethics, and the history of philosophy (especially medieval). He has published articles on Aristotle, Aquinas, and moral theory; his articles on military ethics have appeared in such journals as the *Philosophical Quarterly*, the *American Catholic Philosophical Quarterly*, and the *Journal of Military Ethics*. He lives in Montgomery with his wife, Ruth, and their three sons.

Col Gary A. Packard Jr. (USAFA; MAS, Embry-Riddle Aeronautical University; MA, Michigan State University; PhD, University of North Carolina) is permanent professor and head of the Department of Behavioral Sciences and Leadership (DFBL) at the United States Air Force Academy, Colorado Springs, Colorado. Colonel Packard leads a diverse faculty of psychologists, sociologists, and industrial/organizational and human-factors engineers responsible for teaching over 30 undergraduate courses to more than 3,000 cadets annually. The DFBL conducts several Academy-wide leadership programs; runs the Leadership Reaction Course during Basic Cadet Training; operates several laboratories; and administrates and serves as adjunct faculty for up to 20 US Air Force officers seeking a master's degree in counseling and leadership with the University of Colorado at Colorado Springs. Prior to joining the faculty, Colonel Packard was commander of the 32d Flying Training Squadron at Vance AFB, Oklahoma. He has over 3,900 flying hours in T-37, T-38, T-1A, TG-7A, and KC-10 aircraft.

Prof. John Charles Kunich (BS, MS, University of Illinois–Chicago; JD, Harvard Law School; LLM, George Washington University School of Law) is a professor of law at Appalachian School of Law, Grundy, Virginia, where he teaches courses in property, trial advocacy, and the First Amendment. In the Air Force, he served as both a prosecutor and a defense attorney in the Judge Advocate General (JAG) Corps, an instructor at the JAG School, chief counsel on constitutional torts and tax for Headquarters General Litigation Division, an environmental and labor attorney with Air Force Space Command, and senior legal counsel for Falcon AFB, Colorado. The author of five books and numerous law-journal articles, Professor Kunich is a graduate of Squadron Officer School, Air Command and Staff College, and Air War College.

Subscription to the *Air and Space Power Journal* for People Not Affiliated with the Military or Government

Copy this page, fill it out, and mail it along with a check or credit card number to

Superintendent of Documents
P.O. Box 371954
Pittsburgh PA 15250-7954

Make all checks payable to
Superintendent of Documents

OR

Fax your orders: (202) 512-2104

Phone your orders:
D.C. Metro area (202) 512-1800
toll-free outside D.C. area (866) 512-1800

Order online:
http://bookstore.gpo.gov/collections/military_journals.jsp

Order Processing Code:
*5679

❏ Yes, please send me ____ subscription(s) of the ***Air and Space Power Journal*** (AURE) for $32.00 each ($44.80 foreign).

The total cost of my order is $_____. Price includes regular shipping and handling and is subject to change. International customers please add 25%.

_____
Company or personal name (Please type or print)

_____
Additional address/attention line

_____
Street address

_____
City, State, Zip Code

_____
Daytime phone including area code

_____
Purchase order number (optional)

Charge your order. It's easy!

For privacy protection, check the box below:

❏ Do not make my name available to other mailers

Check method of payment:

❏ Check payable to Superintendent of Documents

❏ GPO Deposit Account ☐☐☐☐☐☐☐ – ☐

❏ VISA ❏ MasterCard ❏ Discover ❏ American Express

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

☐☐☐☐ (expiration date)

Thank you for your order!

_____
Authorizing signature 11/95

Important: Please include this completed order form with your remittance.

EDITORIAL ADVISORY BOARD

Gen John A. Shaud, USAF, Retired
Lt Gen Bradley C. Hosmer, USAF, Retired
Maj Gen I. B. Holley Jr., USAFR, Retired, ***Duke University (professor emeritus)***
Col Steven D. Carey, USAF, ***College of Aerospace Doctrine, Research and Education***
Dr. J. Douglas Beason, Colonel, USAF, Retired, ***Los Alamos National Laboratory***
Dr. Alexander S. Cochran, ***National Defense University***
Prof. Thomas B. Grassey, ***Naval War College***
Lt Col Dave Mets, USAF, Retired, ***School of Advanced Air and Space Studies (professor emeritus)***

Left to right: Maj Cesar Augusto Espíndola Bueno, Força Aérea Brasileira (Brazilian air force), presents plaques to Mr. Almerisio B. Lopes, editor of *Air and Space Power Journal—Português*, and to Col Steven D. Carey, commandant of the College of Aerospace Doctrine, Research and Education, during a visit by the Brazilian Air Command and Staff College's class of 2006 to Maxwell AFB, Alabama (7 August 2006).

Left to right: CDR Angel I. Oliveras, US Navy, US Military Group, Nicaragua; Lt Col Paul D. Berg, chief of professional journals; Lt Col Luis F. Fuentes, USAF, retired, editor of *Air and Space Power Journal—Español*; and Col Jorge Miranda Jaime, chief of staff, Fuerza Aérea Ejército de Nicaragua (Nicaraguan air force) (26 May 2006, Managua, Nicaragua).