

Expeditionary Leaders, CINCs, and Chairmen

Shaping Air Force Officers for Leadership Roles in the Twenty-First Century

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Editorial Abstract: In this article, APJ is honored to play a part in announcing to the Air Force the Developing Aerospace Leaders project. The twenty-first-century international environment suggests that our aerospace leaders may need to be more skilled in strategic thinking than their predecessors. How should the Air Force change the currently stovepiped career-and-assignment structure to develop strategy-savvy officers with experience broad enough to lead in an uncertain future? Rising to the challenge of producing such strategist-leaders, the Air Force chief of staff initiated the Developing Aerospace Leaders project in October 1999. Dr. Smith, a member of that team, outlines some of the challenges and proposes one possible solution requiring a substantially changed system of professional military education with specially selected "strategist grooming" assignments for its graduates.



Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 2000		2. REPORT TYPE		3. DATES COVERED 00-00-2000 to 00-00-2000	
4. TITLE AND SUBTITLE Expeditionary Leaders, CINCs, and Chairmen. Shaping Air Force Officers for Leadership Roles in the Twenty-First Century				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air and Space Power Journal, 155 N. Twining Street, Maxwell AFB, AL, 36112-6026				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 15	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

ONE OF THE clearest imperatives of the emerging century for the United States Air Force is to prepare its senior officers for enhanced leadership roles in a rapidly changing and challenging national-security-policy environment. A truly expeditionary force will require greater skills in regional languages, cultures, and political-military dynamics. But more importantly, the global aerospace force—a primary instrument of choice for protecting and attaining national interests—will require organizational leadership, strategic knowledge, and perspective to ensure the full consideration of the unique contribution of aerospace power to enhance the nation's security. As Gen Michael E. Ryan, the Air Force chief of staff, recently put it, the Air Force has an institutional responsibility to “ensure complete understanding of national security interests and . . . fully exploit the aerospace domain to support national objectives.”¹ This is what is behind the chief's Developing Aerospace Leaders initiative. The Air Force must prepare its leaders with the global skills to command and lead expeditionary operations successfully. It must also build and foster operationally savvy leaders who have the enhanced strategic vision and expertise to serve as commanders in chief (CINC) and chairmen, as well as key senior advisors to CINCs and chairmen. Those strategic leaders will not emerge by accident. They must be prepared, shaped, mentored, and fostered across an entire career of growth and experience. This requires specific development beyond that which exists today.

This article briefly outlines the why, what, and how of preparing the Air Force officer corps for leadership roles within the emerging US national-security environment. It begins with the *why*, summarizing both the international and domestic political-military changes that are presenting a new and expanded set of complex challenges to our strategic leaders. It then addresses the *what*, the broad set of strategic competencies required for aerospace leadership within the changing environment. Finally, it suggests the

outline of *how*, a holistic approach toward shaping strategic leaders across a career of service for ultimate participation in senior national-security roles.

Changed and Changing Context

International Security Environment

Turned upside down by recent events, the international environment of US national security continues to seek a new equilibrium across the next few decades at least. The coincidental impacts of the end of the cold war and the conduct of the Gulf War upended the established global political and security dynamic while simultaneously bringing the full weight of the ongoing “revolution in military affairs/revolution in military technologies” to bear within the operational dimension. This immediately created new conflict structures and new response mechanisms, all with vastly expanded expectations of the efficacy of force on a widening array of not-necessarily-military problems. The “opportunities” to succeed or fail and the almost unquestioned expectations of “success” all increased, while the realities of the complex calculus of the “threat” became ever deeper and murkier.²

The future international-security environment is still largely a hazy picture. It promises a whole new world superimposed upon the skeleton of a lingering past. Threats could emanate from emerging peers, certainly from failed and rogue states, and as asymmetries from states and nonstates as well—and this in the face of the widening availability of even the most dangerous weapons and delivery systems. Just as the threats remain hazy, there appear only threads of a response strategy—one with changed concepts of deterrence, compellence, and denial, for instance. Without a clear strategy with which to face an uncertain range of threats, one cannot decide upon a firm structure. What we can do today is prepare and employ general capabilities in a range of functional areas, old and new, all against significant resource limitations. Just as

the threat and response are uncertain, so is a clear concept of a decision structure to address them—this in an era when the experience base in the whole range of security is shrinking, both within the government and the public.

Currently—and, more importantly, into the foreseeable future—this security uncertainty imposes a wide and formidable set of requirements and expectations on the Air Force. As the military service with the widest range of mission tasking across the entire spectrum of “cooperative” surface-force support and “independent” national-objectives-support operations, the Air Force finds itself tasked with conducting surgical and sterile operations as well as missions ranging from humanitarian assistance to nuclear deterrence, from peace support to countering weapons of mass destruction, and from military operations other than war to space-based and cyber-based operations. In a reactive political environment, aerospace assets offer rapid and proven response options, often in situations in which past success is only marginally related to the current challenge. Our leaders must be both broadly and deeply prepared across the operational, technological, political, and organizational dimensions to adapt and truly lead an adaptive force on an uncharted path. The international future, then, offers up a whole slate of questions and requirements, and sets a steep agenda for preparing strategic leaders.

Domestic Political Environment

Like international security, the domestic environment has also undergone profound change. The Goldwater-Nichols Department of Defense Reorganization Act of 1986 altered the decision structure for security policy, creating new roles for and expectations of military participants in the interagency security-policy process. The end of the cold war then shifted the focus and priorities of the political players in that process quickly and clearly away from traditional security concerns toward domestic, social, and economic arenas of policy. Consequently, today’s military strate-

gic leader must be prepared for deeper involvement in policy, at a higher level and within an environment where knowledge of and experience with the military dimension of policy are rapidly diminishing. The stakes and expectations here are greater, and they continue to grow.

The traditional American adage that “politics stops at the water’s edge” was representative of the expectation of bipartisan (and largely unquestioned) support for presidential prerogatives in the foreign- and security-policy arenas. In fact, scholars referred to the “two presidencies” to indicate the vast differences in congressional support for presidents on foreign and defense issues, as opposed to domestic legislation.³ Later analysis indicated clear differences in executive/legislative relations on three sets of issues, with clear presidential prerogative in crisis situations, executive lead and general congressional following (but not without some questioning) on issues of strategy, and full congressional debate—even frequent divergence—on weapons system and other “structural” questions.⁴ In the post-cold-war era, these distinctions have all but disappeared. Presidential decisions to employ military force in “crises” were actively questioned, with congressional authorization ultimately demanded and only narrowly granted, for both the Gulf War and Kosovo operations. Security politics today are characterized as fully engaged, partisan, and inter-branch issues of debate and conflict.⁵ As one observer reacted to the Senate’s failure to ratify the Comprehensive Test Ban Treaty in October 1999, “This time politics washed over the entire continental shelf.”⁶

Aerospace Leadership in Today’s National-Security Environments

The continuing changes in both the international and domestic dimensions of US national security combine to create ever-increasing demands for additional, more capable, and more expert strategists within the uniformed military. As the technologies and capabilities of aerospace power offer perhaps the greatest flexibility and comparative advantage for dealing with

emerging threats, it becomes most incumbent on the Air Force to provide competent leaders to represent both the realistic capabilities and limitations of aerospace power within the decision structure.

Thus, the *why* of specifically developing Air Force strategists is clear. The dynamic complexities of the international environment demand specialized knowledge and attention. At the same time, the domestic policy-making process and its evolved roles for uniformed military officers require active and expert involvement. Both the decreasing knowledge of and attention to national security and, particularly, military issues, instruments, and factors mandate a deeper, active policy involvement to educate and even advocate in the national-security interest. Finally, although this *why* applies to each of the uniformed services, it is particularly incumbent upon the Air Force—the service that offers, debatably, the widest range of usable and useful military options in a constrained operational environment—to build an officer corps steeped in strategic perspective and incorporating a cadre of expert senior strategists to best advance the national interest. As General Ryan put it, the requirement “is to develop officers who understand the full spectrum of Aerospace Expeditionary Forces and aerospace operations, leaders who can be articulate in staff assignments, in joint assignments, in operational assignments—regardless of their core specialty.”⁷

Strategist Competencies and Aerospace Leaders

The clarity and power of the *why* behind developing aerospace officers who are strategically minded also provide us a road map to the *what*—the specific characteristics and competencies that this officer corps must develop to fulfill its mandated and desired roles. Recent studies of officer requirements within the changed environments indicate a premium on three linked sets of attributes of senior military leaders: enlightened leadership; broad and deep operational expertise; and

strategic, political-military perspective and ability.⁸ These competencies are developed here in two broad groups. First are the competencies more aligned with Air Force leadership and operations—those of most direct application in expeditionary and global aerospace operations. Second are the competencies more aligned with policy, strategy, and plans—those of most direct application to aerospace component commanders in their staff advisory role, to CINCs and their staffs, to the Air Force chief of staff in his Joint Chiefs of Staff (JCS) role, and to the chairman and his JCS advisors. Every aerospace officer needs an increased level of exposure, experience, and even expertise in both groups of competencies, with the depth and breadth of expertise—particularly in the second group of competencies—increasing with rank and preparation for command and/or staff policy and strategy involvement. In all cases, this is a broader set of competencies than we deliberately develop today. Specifically in the strategy and organizational arenas, as well as in the evolving national-security environment, these competencies must also be developed much more deeply.

Leadership, Technology, and Operations Competencies

In addition to the deep and broad functional expertise required of leaders within today's operational environment, senior aerospace command requires further broadening and deepening of selected dimensions in order to most fully succeed within the changed national-security environment.

Leadership. Aerospace leaders today must attain the capacity to think and exercise judgement based on strategic perspective. This involves critical and flexible thinking, creativity, synthesis, and integration skills. It also requires effective communications and advocacy skills. The aerospace leader must be adept at peer leadership and matrix management and be able to build and sustain effective teams, including nontraditional ones such as joint, coalition, and interagency teams. Further, all leadership can be truly effective only when it is based on the most ex-

emplary qualities of character, as the nation demands.

Technology. In today's military environment—particularly the aerospace realm—technical knowledge and the ability to effectively orchestrate complex and diverse technical components are essential. Leaders must be able to adopt an engineering, technical thought process to frame and resolve the ill-defined problems that confront senior commanders daily. They must also be skilled at applying a systems perspective to ensure the effective integration of the wide range of diverse technologies represented in joint and coalition operations. Finally, they must be versed in air, space, and cyber systems and in their independent and synergistic applications.

Operations. The aerospace leader must approach command with a full capability to apply the Air Force's core competencies and the joint, overarching, operational concepts that they reinforce. That leader must also be fully prepared to exercise effective command through expeditionary operations, with an ingrained appreciation for global and regional security, as well as political, geographic, cultural, and language factors that affect aerospace operations. Aerospace operators must also be expert at applying aerospace power within the joint and coalition planning processes, and in exercising effective command and control of aerospace operations through the combined air operations center structure. Within the application of aerospace power, the leader must fully optimize and orchestrate space and information capabilities as key enablers—even primary systems—and must also be fully capable of incorporating specialized aerospace missions and systems such as special operations and combat search and rescue. Because of the breadth of the set of nationally tasked aerospace missions, the aerospace operator must also be knowledgeable of nuclear-deterrence systems and nuclear operations. Finally, the aerospace operator must be fully prepared to direct and conduct aerospace operations in defense of the homeland or in force projections, both from bases in the continental

United States and from forward-deployed locations.

Strategy and Organizational Competencies

Beyond those essential competencies, senior aerospace leaders in the twenty-first century will require a more specific set of competencies in the strategy and multifaceted organizational arenas that constitute today's context of national security and aerospace-power applications.

Strategy. It is absolutely incumbent upon aerospace leaders to be well grounded in the complex character of both the global and regional national-security environments in which they operate. This grounding must go beyond the traditional focus on political, historical, geostrategic, and even cultural factors to address such issues as economic security and interdependence, and environmental security as background to stability or conflict. It is also imperative to be fully versed in the complexities of regional ethnic conflict, issues of failed and failing states, and other broad regional-security challenges. Transnational threats such as terrorism, drugs, and crime must be factored in as they affect both regional and global security. The full cast of players in the emerging security environment must be incorporated into senior leaders' understanding. These include states, international organizations, and other supranational influences, as well as nongovernmental organizations, multinational corporations, and other nonstate actors and their many roles in international relations, today and tomorrow. Finally, all of this complexity must be addressed within the context of globalized information and the rapid proliferation of technology. The world indeed has changed, it is still changing, and it presents a new arena that aerospace leaders must be fully prepared to enter.

Within that changing environment, the senior aerospace leader must also understand the changing role, efficacy, and use of military power, particularly in conjunction with nonmilitary instruments. Today's environment has already presented us with nontradi-

tional applications of aerospace power across a widening spectrum of military operations. Although the essence of war remains largely consistent, the aerospace leader particularly must be able to trace both the factors of continuity and the impetus of change in how military forces and force are employed today. This leader must also be expert in understanding and applying coalition aerospace power within the constraints of both the American and coalition systems of command and support. Significantly, the aerospace leader, as much as any other military commander, must understand and be prepared to articulate both the promise and the limits of modern military power in a wide range of international scenarios.

One essential knowledge set for this commander is a solid grounding in national-security strategy—its legacy and evolution, the set of interests and objectives that are its cornerstone, the threats it addresses, the way it sees the integration of the various instruments of power that seek those interests in the face of defined threats, and the way the military—particularly aerospace power—fits into the strategy it communicates. This leader must be equally well versed in the national military strategy, not only the specific tenets but also the political-military context—from the place and role of the military in the US Constitution, government, and society to the utilization of that concept across all levels of force application. This takes on ever-greater importance as we see a continuing blurring of the divisions among the traditional political, military, and economic dimensions of policy and strategy. This integration of instruments will only continue, even accelerate, in the face of revolutionary advances in information, science, and technology.

Organization. The aerospace leader must also be fully competent in understanding and playing constructive roles in the processes of formulating and implementing security strategy and military strategy. That leader must understand our national, Department of Defense (DOD), Air Force, alliance, and coalition-partner decision structures and processes.

Within the US government—certainly for both the executive and legislative branches—this includes firm knowledge of other government-agency planning systems, the complex dynamics of the interagency-policy process, and the roles played by extragovernmental players, including interest groups, corporations, public opinion, and the news media. Further, a broad understanding of joint and alliance planning and execution systems is required, as is a detailed appreciation for coalition-partner civil-military relations and processes. The foundational formulation of combined operational effects is as important as the orchestration of those effects in practical execution, from shaping activities to combat.

Aerospace Perspective

Finally, in all of those myriad activities and responsibilities that the aerospace leader must prepare to competently undertake, the underlying construct must be the full understanding and articulation of military command from the unique perspective of aerospace power. This leader must be able to articulate the promise and the reality of what aerospace can contribute to national power, even to advocate that position when aerospace offers the most effective and/or efficient means of attaining national objectives. Such an aerospace perspective can be fully understood and articulated only by an aerospace leader—historically, the perspective has been overlooked or undervalued by those coming to the table from other environments, as recognized in 1943 in Field Manual 100-20, which asserted that only an airman could effectively command air forces.⁹ The extent of the added uniqueness of air and space, of aerospace, magnifies this imperative today and in the process makes it ever more incumbent on the aerospace leader to ensure that the aerospace perspective is on the table.

Developing Aerospace Strategists

Against the *why* and the *what* of developing aerospace officers with strategic expertise and

perspective, we now consider *how* to make that happen through a careerwide program of strategist development. That development must begin from the very outset of the aerospace officer's military career and continue with the core of the development effort found in education.

In an insightful article in the journal *The Public Interest*, Theodore J. Crackel wrote that "American military education has at its heart two crucial processes—the making of lieutenants and the making of colonels. How we prepare young men to lead others into battle, and how we ensure that those who assume the highest commands are well-qualified, are issues that must be addressed with utmost seriousness, because failure here can have the gravest consequences."¹⁰ Crackel made this point for the cold-war-era military and couched its focus in terms of preparation for operational command. But the article's broadened essence rings true today: educating junior officers to assume their central roles in national-security-policy implementation and educating senior leaders for their national-security-policy formulation and oversight roles are the "bookends" of the cross-career development of commanders, chiefs, CINCs, and chairmen.

From his perspective as CINC, Gen John R. Galvin, USA, Retired, both underscored and expanded on Crackel's theme in calling for the creation of "strategists" within the US military:

We need strategists . . . throughout the services. At all levels. We need senior generals and admirals who can provide solid military advice to our political leadership, and we need young officers who can provide solid military advice—options, details, the results of analysis—to the generals and admirals. We need military strategists, officers, all up and down the line, because it takes a junior strategist to implement what the senior strategist wants done, and it (usually) takes the input of juniors to help a senior strategist arrive at his conclusions.¹¹

"Making lieutenants" includes establishing a solid foundation of knowledge and skills in national security upon which the officer can build across a career. "Making colonels" in-

volves synthesizing their accumulated experiences and preparing them to take the next step up to active roles within the national-security-policy process. As stated, these two focal points provide roughly the bookends of a career-long process of broadening and deepening the officer's strategic perspective and skill set.

The focus here on education is not misplaced; after all, it provides the essential foundation in the development of strategic and organizational competence. A base level of knowledge, a firm grounding in the processes and organizational dynamics of strategy, and—most importantly—the development of a strategic context and perspective against which to analyze subsequent observations gained from direct exposure are all requisite educational outcomes. Education provides the framework against and upon which all experience will be made meaningful and competency enhanced. Although education is the essential first piece in the development effort, subsequent experience maximizes the educational benefits. Selective outplacement from educational programs—certainly, the identification of "strategist" assignment opportunities—is necessary to provide full mastery of "the strategist art." Finally, the Air Force, in identifying such positions and in certifying strategist competency, must regard faculty duty as valuable experience. As education is the essential base of competency here, teaching strategy deepens officer skills more significantly than in almost any other set of aerospace skills.

Table 1 outlines the education continuum of aerospace leaders and strategists across an entire career. Two columns display each formal and informal educational program. The "Aerospace Leader" column addresses the programs as they should ensure an enhanced strategic competence for all aerospace leaders entering an expeditionary era. Every officer participating in these programs will broaden required strategist competency through that participation. The "Strategist Specialist" column outlines the contributions those same programs should make to create a

Table 1**Educational Development of Aerospace Strategists**

<i>Educational Program</i>	<i>Aerospace Leader</i>	<i>Strategist Specialist</i>
Capstone	Capstone	Capstone
Air War College (AWC) Resident	AWC Enhanced Core	AWC Electives + Research
AWC Nonresident	AWC Nonresident Program	AWC Enrichment + Research
Fellows Program	Strategist Focus	Strategist Immersion
School of Advanced Airpower Studies (SAAS)	Strategist Fusion within Core	SAAS Core + Research
Air Command and Staff College (ACSC) Resident	ACSC Enhanced Core	ACSC Electives + Research
ACSC Nonresident	ACSC Nonresident Program	ACSC Enrichment
Graduate Education	Leader Enrichment	Strategist Major
Air Force Intern	Strategist Overview	Strategist Immersion
Guided Research	Leader Enrichment	Strategic Research
Mentoring/Self-Study	Universal Materials	Strategist Materials
Squadron Officer School (SOS)	SOS + On-Line	Foundation
Aerospace Basic Course (ABC)	ABC + On-Line	Foundation
Officer Training School (OTS)	OTS + On-Line	College Major/Electives
Reserve Officer Training Corps (ROTC)	ROTC + Suggested Electives	College Major/Electives
US Air Force Academy (USAFA)	Core	Core/Major

cadre of strategist specialists within the field-grade ranks and prepare them for direct roles as political-military staffers in advisory positions to our most senior service and joint leaders, as well as for uniformed service outside DOD. This strategist-specialist track would expand on and invigorate existing political-military specialty programs and would focus outside of intelligence and into operations and planning/programming. The Air Force should review existing billets requiring political-

military expertise and tailor a single strategist-development program to produce a pool of qualified specialists. Finally and ideally, those aerospace operators most fully prepared to become competitive for selection as J-5s and senior Joint Staff leaders, CINCs, or chairmen would take one or more selective excursions into the right column for further broadening and strategic deepening while tracking up the “Aerospace Leader” column as an integral part of their operational career.

Currently, a senior Air Force officer completing the full complement of Air Force professional military education (PME) courses in residence (plus the Armed Forces Staff College) will spend approximately 33 months, or just under 8 percent, of a 35-year career in PME. Those officers adding either the Air Force Intern Program or SAAS will log approximately 45 months in school, or almost 11 percent of the 35-year career. Finally, completing both the Intern Program and SAAS, or completing an in-residence graduate-degree program, will entail approximately 57 school months, or almost 14 percent of the 35 years. The suggested path of strategist-leader development here would fall within the range of the latter two categories above—11 to 14 percent. Details of those education programs at each level of career progression are presented below.

Precommissioning and Primary Commissioned Education: The Foundation

General Galvin reaffirmed the requirement to begin the preparation of strategists from the very beginning of an officer's military career: "We need to agree that strategy is not an 'elective' of the later years of an officer's career—that work in this field needs to begin early. The lieutenant does not have to be a strategist, but he must be aware that what he is absorbing will contribute to a knowledge of tactics and operational art constituting milestones on the way to ability in the field of strategy."¹²

Precommissioning and early commissioned educational programs must provide the solid foundation—both in terms of knowledge and perspective—upon which career experiences can be "absorbed" to deepen and broaden the junior officer's progression up the learning curve toward strategist. Each of the formal educational programs at this level has distinct and complementary roles to play.

Precommissioning Education. Among the three precommissioning education programs addressed here (USAFA, ROTC, and OTS), USAFA has the luxury of four years' dedi-

cated time to prepare its graduates. This allows the Academy to provide a universal core curriculum of 109 semester hours, a common academic experience that provides a broad and selectively deep foundation across the full range of strategic competencies. USAFA also offers strategist-relevant academic majors and minors that provide a jump start, either further up the generalist-leader path or into the entry levels of the strategist-specialist track. ROTC and OTS are much more time-constrained than USAFA, but careful tailoring of their programs—along with selective borrowing of materials and copying of program elements from USAFA—provides significant strategist preparation. ROTC should provide its cadets—except those majoring or completing a minor degree in a strategist-relevant discipline—with a list of desired elective courses. Cadets could then seek to work some or all of these courses into their academic schedules. The Air Force could also work with ROTC-host universities to allow academic substitutions or other accommodations to allow cadets to better incorporate such courses into already-prescribed programs. Also, the ROTC curriculum should incorporate increased emphasis on strategist constructs into its existing lesson plans. Finally, given additional resources, the Air Force should require selected strategist-preparation courses regardless of academic major. For OTS, completion of this same list of suggested courses would be desired. As an alternative, and for the ROTC-sourced officer who cannot complete the suggested electives, the Air Force should provide a distance-learning strategist-reading program. Gaining a strategist-relevant degree, completion of the strategist electives, or successful accomplishment of this distance-learning program should be prerequisite to reporting for the Aerospace Basic Course.

Primary Commissioned Education. Although the prerequisite academic and self-study programs outlined above will provide a cognitive, foundational building block for strategist development, ABC should reinforce that knowledge through specific applications

where indicated across the entire curriculum. It should also build on that foundation to create the more affective strategic perspective required of all aerospace leaders. Case studies in applications of military—specifically aerospace—power and a host of experiential learning exercises should deliberately incorporate political-military issues and lessons to apply and reinforce the prerequisite programs. These applications must emphasize Air Force leadership practice to provide further broad foundation prior to technical (and narrower) specialization. The Air Force should provide a second-level strategist distance-learning reading list and education program to build on the ROTC/OTS/ABC prerequisite program, this one as prerequisite to SOS. The objective here should be to keep the young leader engaged in strategist thinking and development and also to reinforce the strategic perspective, even at a career point when the junior officer in the field is immersed in deepening his or her technical specialization. This program should emphasize more complex applications of aerospace power with a clear focus on issues and examples of integrating the political, economic, informational, and military instruments. The SOS programs, then, should incorporate both cognitive and affective emphasis on (1) aerospace-capability integration toward maximizing aerospace effects and (2) national-instrument integration (and aerospace power's place in that integration) toward the attainment of national military and security objectives. Again, the key here is reinforcing a strategic perspective in our developing leaders. Finally, ABC and SOS programs should be developed as a deliberate pair—SOS building directly on ABC—and both designed to complement precommissioning programs to complete a smooth and synergistic launch to the aerospace leader's/strategist's career.

Thus, the initial tier of leader and strategist development should include a foundation building block of knowledge and, at least as importantly, a strategic attitude and worldview upon which further development can be based. Continuing education and selective as-

signment, then, provide the follow-on steps up the learning curve to senior-strategist competencies.

Professional Military and Civilian Graduate Education: Broadening and Deepening

The road to producing strategists, it follows, must proceed through career-long development of strategic leadership, operational competence, and strategist preparation. Staged, continuing education provides the framework of knowledge and skills behind inspiring, employing, and conceptually integrating strategic constructs in each of these dimensions.¹³

Air Force Intern Program. Available only to a handful of officers each year, the Air Force Intern Program is a valuable launching pad for starting at least those few officers on the path to senior-strategist competency. Participating officers from operational specialties should be assigned to functions providing a broadening of national and servicewide perspectives on aerospace power, particularly strategic perspectives contributing to strategist development. Junior officers with deeper strategic backgrounds through education and/or experience should be provided immersion in selected staff functions toward deeper specialization in strategic arenas en route to midcareer assignments back to such functions. Although the second year of the intern program—with its opportunity to complete a graduate degree in conjunction with the internship—is currently unfunded, providing a civilian graduate education, particularly in strategic subject areas for selected officers, would pay the Air Force positive dividends.

Civilian Graduate Education. Such education in security studies and other strategist specialties provides a large step up the learning curve toward advanced strategic competency. These programs provide knowledge and experience while also exposing selected officers to broader strategic perspectives—civilian as well as military—and a wider range of strategist practitioners, many of whom may eventually fill civilian-strategist positions

within the interagency process.¹⁴ Following civilian graduate education with assignment to a position that allows mentored application—whether staff duty or faculty positions—would provide a valuable internship for strategic specialists.

Continuum of Professional Military Education. The sequence of formal PME programs—in the Air Force, ranging from the lieutenant's ABC through the general officer's Capstone course—periodically provides specific study of the profession of arms. Increasingly, in the face of the complexities of the operating environment where the Air Force operates, PME must also allow reflection and focus on critical thinking and reinforce the value of a strategic perspective as the context within which that thinking must take place. As the military faces increased blurring of traditionally separate roles, PME must infuse a focus on the national military strategy as it seeks to integrate military power with diplomatic, economic, and informational instruments. It must address both the efficacy and limitations of military power within the complex international environment—particularly, unique aspects of military power such as aerospace power. Each level must reinforce its predecessor(s), broaden selectively, and deepen the officer's foundation across the continuum, as well as build educational experiences to reinforce and expand on both prior education and practical experience toward enhanced competence.

The *intermediate service school* (ISS) has become the primary vehicle for taking the expertise developed in tactical experience and transitioning to the operational level of war. For the Air Force, this also has made ACSC the center of education on applied operational airpower and air campaign planning. With increasing emphasis on the broader concepts of aerospace warfare, this operational focus must remain at the center of the ACSC/ISS experience. However, through focus on integrated learning outcomes rather than curriculum hours, ACSC should ensure that the political-military dimension is incorporated into all operational cases and lessons

and that the political/environmental and organizational context of aerospace operations and the political constraints on campaign planning are clearly present in the curriculum. This dimension is currently not fully introduced until senior service school (SSS), and the gap between the operationally oriented ISS and the more strategic SSS is artificially wide. ISS graduates will find themselves in positions requiring a broader operational and strategic perspective, and ISS cannot simply stop with the operational aspects of modern aerospace operations. The strategic aspects of aerospace operations can also be reinforced through strategically focused elective courses and the mentored, sponsored research that is again an important part of the ACSC curriculum.

Within this suggested framework, the *School of Advanced Airpower Studies* stands as the "finishing school" to greatly deepen operational focus and campaign-planning expertise, but it also provides a bridge to a deeper strategic focus. Here again, along with more specific aerospace broadening, the curriculum should incorporate strong emphasis on the policy side of core campaign studies and cases, all toward a full examination of the true potential—and limitations—of aerospace power. Further, the research requirement could be tailored to incorporate the strategic aspects of the subject researched. SAAS should stand as a selective path toward enhanced airman-strategist competency en route to senior positions determining, directing, and applying national military strategy. The SAAS experience is unique and valuable, and the Air Force must select its best people, give them the best possible education, and assign them selectively throughout the remainder of their careers to ensure full return on this investment. Finally, SAAS must remain a small and selective school, but its materials and lesson plans should be made available to the force for more universal self-study and mentored development.

The focus at the *senior service school* level is correctly on the strategic level of warfare, just as the ISS focus is on operations. Even so,

some focus on strategic context should be moved down to ISS to narrow the gap between these two levels and establish the strategic context behind complex aerospace operations. For this same reason, focus on the policy process, the interagency process, and the integration of military—particularly aerospace—power into the broader national-security strategy must be highlighted in the AWC curriculum. I also advocate the requirement for a strategic research project in the AWC program. The students learn more in experiential activities such as applied research than they do in more static classroom experiences, and accomplishing research directly related to the strategic path they will follow after graduation can only enhance the AWC learning experience.

Nonresident or distance-learning ISS/SSS programs should play an expanded role, bringing as much of the resident PME experience as possible to officers in the field. This requires a continuing commitment of resources to ensure currency, relevance, and scaled rigor. The current AWC option that allows sponsored research should be continued and encouraged. These programs should be tailored to provide both a substitute PME experience for those who cannot attend in residence and a valuable professional resource for other Air Force personnel to employ to enhance their professional competence.

Participation in the *Air Force Fellows Program* in lieu of resident PME should be the result of specific selection, with the program tailored to provide strategic-leadership enhancement to the individual officer. Almost all of the host institutions for research-oriented fellowships provide an automatic strategic focus to the program, with the added opportunity for the officer to become deeply immersed in the chosen research topic. Further, the non-DOD fellowships, particularly White House and Legislative Fellowships, provide an unmatched opportunity for deep strategist immersion. Extensive exposure to strategic thinking through a fellowship can provide true “icing on the cake” for strategist development within an otherwise

operationally focused officer, and the Air Force should institutionally ensure that its people take full advantage of this unique opportunity by increasing attention on the selection and outplacement of its Fellows.

The *General Officer Capstone Course* should provide a brief finishing school for senior strategists—a specific security-policy tutorial focusing attention on direct participation in policy and strategy within joint and interagency processes. The emphasis should be on the roles of senior leaders and opportunities for responsible presentation—even advocacy—of military options in the national interest, particularly the unique promise and limitations of aerospace power.

PME is central to the development of strategically competent leaders and strategist specialists. A strategist focus can best be ensured through horizontal integration of the curricula at each level, infusing strategic lessons into existing cases and instruction—cutting across the academic stovepipes of separate curricular focus such as communications, leadership, military studies, and so forth—rather than creating new categories or hours. It should also ensure smooth vertical integration, building from one level and program smoothly to the next without gaps or artificial divisions between operational and strategic levels of emphasis. This two-dimensional integration should also ensure full incorporation of the nonresident school programs and of the special programs such as SAAS and the Fellows. PME should establish a strategic framework early in the officer’s career so that each subsequent operational and educational experience can extend and fill out that framework toward strategist competence. Finally, PME must also ensure full diagonal integration, with joint PME not a unique experience in terms of strategist focus but simply one other avenue toward strategist exposure. Aerospace power cannot be a separate focus but must be fully incorporated into strategist development, certainly by Air Force PME and through educational panels and channels into joint PME as well.

Continuing Mentorship, Self-Study, and Guided Research: The Finishing Touch of Strategic Professionalism

It is critical to formally prepare both lieutenants and colonels—and all ranks in between. However, strategist preparation also requires less formal mentorship, as well as self-study across an officer's entire military career.¹⁵ As General Galvin put it, "A look at history will show that *highly motivated self-development* is the key to producing the best strategists. We need to foster and nurture this" (emphasis in original).¹⁶

Mentorship and Self-Development. Perhaps the best way to "foster and nurture" individual development is through both formal and informal mentorship. Commanders and supervisors should mentor their subordinates on more than directly job-centered topics, including imparting strategic perspective and motivating self-study efforts. Every Air Force leader should endeavor to inspire and develop two or three qualified (and improved) replacements. Further, those leaders with advanced strategic competency should work hard to ensure that they pass on that knowledge and perspective to both peers and subordinates—everyone whom they influence. The Air Force should provide materials and guidance, including the materials used in the formal education programs noted above, to support active mentoring. Ultimately, however, individual effort will mark great strategists—those who can go beyond formal education to read, analyze, and internalize strategic vision and wisdom. This too must be supported with materials that the individual can easily access and use to advance strategic knowledge.

Guided Research. Research is a great teacher. The researcher cannot hide behind surface, short-term skimming but must delve deeply into the subject. Thus, that researcher will learn more in one application than in a hundred books, and strategic research will provide selective depth and enhanced, demonstrated expertise. Mentoring and guidance are also extremely valuable here, particularly as the operationally experienced offi-

cer makes the leap into the strategic arena for the first time.

Institutional Investment

Behind all of the formal and informal programs and efforts above lie the requirements for specific and serious Air Force commitment and human-resources investment.

Educational Materials. One fundamental requirement is the provision of materials. As cited above, the educational materials from all Air Force schools should be made available to as wide a professional audience as possible. Air University Press plays a key role here, and that role may need to be expanded in selected areas such as the strategist arena to meet specific institutional requirements. Other Air Force publishers, including USAFA academic departments and Air Force research institutes, can also contribute to this effort. The Air Force should institutionally expand the Chief's Reading List to incorporate a wider range of rank-appropriate leader and strategist-development materials and should resource participating Air Force publishing entities to support the effort.

Educational Methods. Ongoing research is determining optimal distance-learning programs and techniques, and both materials and programs to use those materials should be developed and fielded to support officer development within an expeditionary force. Again, centralized commitment and resourcing are needed for this effort to succeed.

Faculties and Facilities. Human-resource development does not traditionally compete well when in competition with operational and systems-development imperatives. But effective leader-strategist development rests on effective curricula, materials, and faculties. We need to fully value their contribution and ensure their resourcing—including recognition that faculty duty must be a career-enhancing experience. Too often we prevent our best officers from serving as formal developers of other leaders. If we want the best, we must be willing to free up some of our best to develop the next generation. We must also value those who are willing to make what are

today significant career sacrifices to lead our educational programs. To cite General Galvin one last time, “We must create incentives to keep the best teachers for extended terms. Service as an instructor should be a prized assignment.”¹⁷

Institutionalization. A one-time, short-term “pass” at enhanced leader-strategist development is not enough. In the end, such development requires a strong institutional investment and commitment—quality leadership requires enduring investment. We are the world’s best aerospace force, and we owe it to ourselves not only to continue as the best, but also to improve and advance aerospace power to enhance the national interest. We need to consciously develop people with strategic vision to lead the way.

Conclusion

This article is intended as a foundation for further discussion and analysis, to anchor a debate toward continuing update and review of the preparation of Air Force strategic leaders for the military and the nation. It is “not intended to provide [an] . . . ideal process for formulating or mastering strategic art.” Its purpose “rather is to emphasize that the search itself is important, permanent, and worth our best efforts and attention at a time when familiar landmarks have vanished and no new strategic vision has attracted a national consensus.”¹⁸ The need for deliberate development of Air Force strategic leaders was highlighted by General Ryan in chartering the Developing Aerospace Leaders initiative: “While our Air Force has revolutionized warfare and proven that aerospace power, when employed by a motivated and highly

skilled force, is an instrument of power to be reckoned with, we cannot be complacent. Because the leadership skills to forge the many aspects of aerospace into a coherent fighting force are critical to success, we must continue to attract, retain, and develop officers with the competencies to lead the Air Force in this dynamic, changing environment.”¹⁹ Strategic perspective and enhanced political-military competency are at the center of that developmental effort. Thus, the debate is worth the effort, and the time to decide how best to meet that end is now.

So it is clear that we need to build deep and broad political-military competencies toward the development of aerospace strategist-leaders. This was evident to a greater degree than at any earlier time in history at the height of the cold war, when every military action had profound political implications and potentially catastrophic consequences. It was even more evident in the late 1980s, when the provisions of Goldwater-Nichols placed the chairman of the JCS—and to only a slightly lesser degree, the regional CINCs—in direct political-military advisory roles to the National Command Authorities. And it is most evident today in the face of the dynamic ambiguities of the post-cold-war international-security environment, where some have seen the key to success as having commanders who are thinkers over doers. This analyst takes that a step further to claim that the requirement is for thinking doers—aerospace officers who are at once operationally expert and politically competent—as true strategic leaders. The nation requires informed military advice, and today it demands informed aerospace advice to best advance and defend the national interest. The Air Force must prepare its leaders to respond effectively. □

Notes

1. Gen Michael E. Ryan, “Developing Aerospace Leaders Charter,” 13 October 1999.

2. See, for example, the following security-environment forecasts: *Concept for Future Joint Operations: Expanding Joint Vision 2010* (Fort Monroe, Va.: Joint Warfighting Center, 1997), 8–10; William S. Cohen, *Report of the Quadrennial Defense Review* (Wash-

ington, D.C.: Department of Defense, May 1997), 3–5; *Transforming Defense: National Security in the 21st Century* (Arlington, Va.: National Defense Panel, December 1997), 5–17; Ronald R. Fogleman and Sheila E. Widnall, *Global Engagement: A Vision for the 21st Century Air Force* (Washington, D.C.: Department of the Air Force, 1996), 1–5; Robert H. Scales Jr., *America's Army: Preparing for To-*

morrow's Security Challenges, Army Issue Paper no. 2 (Carlisle Barracks, Pa.: US Army War College, November 1998), 1–6; and *New World Coming: American Security in the 21st Century* (Arlington, Va.: United States Commission on National Security/21st Century, 15 September 1999).

3. Aaron Wildavsky, "The Two Presidencies," in *Perspectives on the Presidency*, ed. Aaron Wildavsky (Boston: Little, Brown, 1975), 448–61. Subsequent studies traced a narrowing to little if any difference between foreign and domestic issues in the post-Vietnam era.

4. Randall B. Ripley and Grace A. Franklin, *Congress, the Bureaucracy, and Public Policy* (Homewood, Ill.: Dorsey Press, 1980).

5. Robert Jervis, "US Grand Strategy: Mission Impossible," *Naval War College Review* 51 (Summer 1998): 22–36.

6. "Damage Assessment: The Senate Rejection of the CTBT," *Arms Control Today*, September/October 1999, 14.

7. Ryan.

8. See Howard D. Belote, *Once in a Blue Moon: Airmen in Theater Command*, CADRE Paper no. 7 (Maxwell AFB, Ala.: Air University Press, June 2000), for a comprehensive discussion of the competencies required of the most senior joint military leaders today. He identifies three essential "baseline" CINC attributes as leadership, broad professional competence, and political-military awareness and ability. Similarly, see Maj Gen Richard A. Chilcoat, *Strategic Art: The New Discipline for 21st Century Leaders* (Carlisle, Pa.: Strategic Studies Institute, US Army War College, 10 October 1995), 3, for his development of the same three essential attributes developed as strategic leader, strategic practitioner, and strategic theorist.

9. Field Manual (FM) 100-20, *Command and Employment of Air Power*, 21 July 1943, 2.

10. Theodore J. Crackel, "On the Making of Lieutenants and Colonels," *The Public Interest* 76 (Summer 1984): 18.

11. Gen John R. Galvin, "What's the Matter with Being a Strategist?" *Parameters* 19, no. 1 (March 1989): 2 (reprinted in *Parameters* 25, no. 2 [Summer 1995]: 161–68). Subsequent references are to the 1989 version.

12. Ibid., 10. For a detailed discussion of precommissioning strategist education, see Daniel J. Kaufman, "Military Undergraduate Security Education for the New Millennium," in *Educating International Security Practitioners: Preparing to Face the Demands of the 21st Century International Security Environment*, Special Report, ed. James M. Smith (forthcoming).

13. See Robert H. "Robin" Dorff, "Professional Military Security Education: The View from a Senior Service College," and Linda P. Brady, "Professional Schools of International Affairs: Preparing National Security Practitioners for the 21st Century," both in Smith (forthcoming), for detailed discussions of senior PME and civilian graduate education, respectively, as these programs contribute to strategist preparation.

14. Almost all graduate programs are valuable experiences, but applied programs such as those offered by schools that subscribe to the Association of Professional Schools of International Affairs (APSIA) directly apply to military-strategist practice.

15. See James M. Smith, "Educating International Security Practitioners: The Role of Research Centers and Professional Outreach Programs," in Smith (forthcoming), for a detailed discussion of the linked roles of strategic research and outreach education in strategist development.

16. Galvin, 9–10.

17. Ibid., 6.

18. Chilcoat, 1.

19. Ryan.

The rebellions of the belly are the worst.

—Sir Francis Bacon, 1561