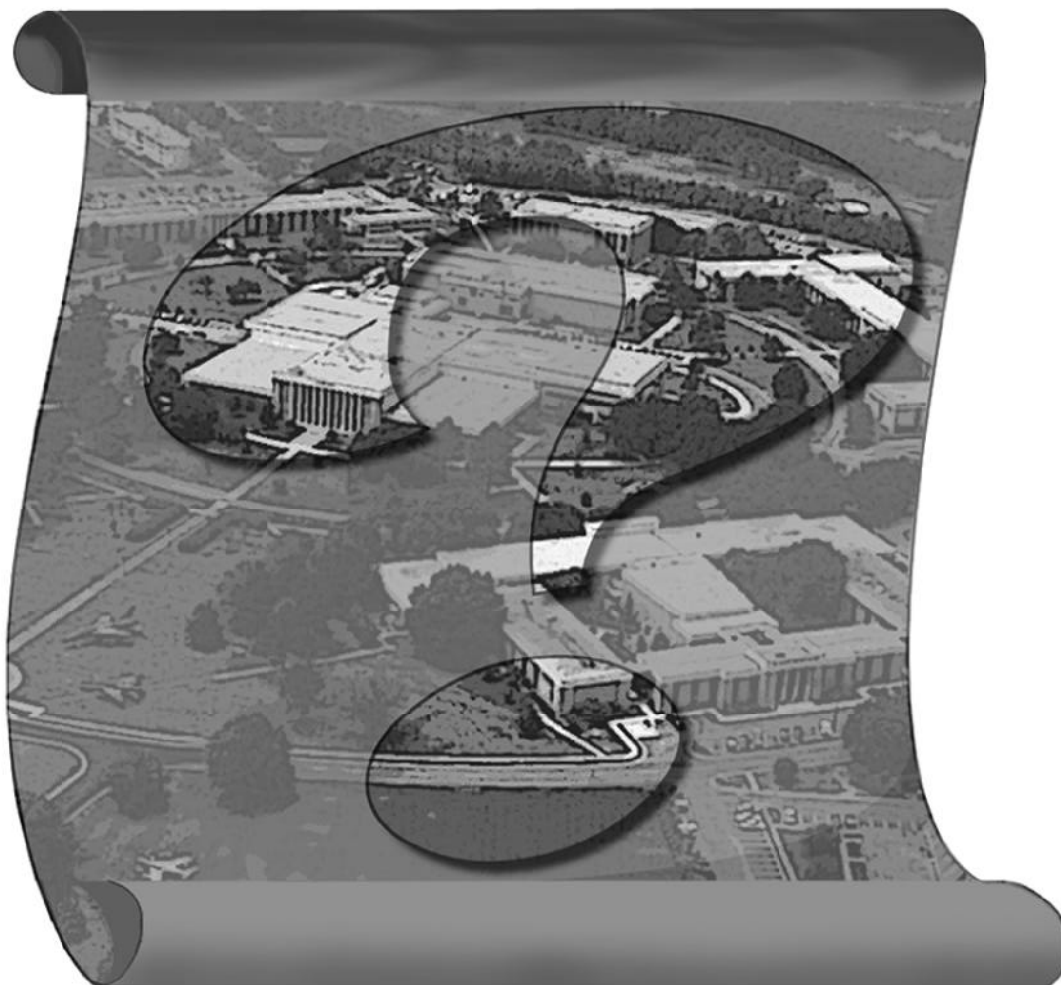


EDUCATING AIR FORCE OFFICERS



Observations after 20 Years at Air University

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Author's Note: The year 1997 marks the 50th anniversary of the US Air Force and my 20th continuous year at Air University both in and out of uniform. Such "round" anniversaries lead to the personal retrospection that was the genesis of this article.

FORMER Air Force chief of staff Gen Michael Dugan once commented to me that the Air Force is producing a generation of illiterate truck drivers. He worried that officers who aspire to senior leadership positions know a great deal about airplanes and precious little about airpower. They can skillfully talk with their hands about air tactics but are ill prepared to think with their heads about air strategy.

Hyperbole? Perhaps a bit, but there is more ground truth in General Dugan's statement than any of us would like to admit. For 20 years I have watched the crème de la crème of the Air Force officer corps come to Air University's Air Command and Staff College (ACSC) and Air War College (AWC). For the most part, these officers have been appallingly ignorant of the bedrock foundation of airpower thinking, virtually oblivious to airpower theory and its development, and without any appreciation of airpower history and its meaning.¹ These officers are products of an Air Force system that does not reward personal professional development, promotes irrelevant academic education, and thus places an insupportable burden on the formal professional military education (PME) system.

Before getting into the meat of this argument, it is worthwhile to consider why all of this is important, why General Dugan was so concerned, and why I share that concern. We should begin with the proposition that the next generation of Air Force leaders should be more capable than the current generation. If they are not, we will have failed in one of our most important duties—preparing those who will follow in our footsteps. We will have failed to pass along the accumulated wisdom of the past and our own contributions to that wisdom. Every generation

of Air Force leadership should be better than its predecessors.

In my judgment, the recipe that produces superior military leaders has three key ingredients—training, experience, and education. The need for training and experience is obvious. Training provides mental and physical skills and disciplines required to succeed in the face of great danger, uncertainty, and confusion. Experience develops maturity of judgment by testing and tempering both body and soul and by providing exposure to leadership role models both good and bad. But what about professional education? Why is it such a key element?

In a sense, education is concentrated experience that can broaden an individual's experience base. Our personal experience is always narrow, limited to those things we have actually done, places we have actually been, and people we have actually known. Professional education allows us to vicariously take part in the experiences of others in different times and far-off places. Understanding what Billy Mitchell went through trying to sell airpower to a hidebound Army, or how Ira Eaker coped with the disastrous losses of the Schweinfurt-Regensburg raids, or why Tooey Spaatz argued so vehemently with Dwight Eisenhower about the pre-D-Day use of heavy bombers—these and a thousand other subjects professional education should address—can create context, perspective, and insight for our narrow, personal experience.

Education provides the luxury of dissecting and analyzing experience without the exigencies of the event—and it is the analysis of experience that is critically important. As the Prussian soldier-philosopher-king Frederick the Great noted over two hundred years ago, it is the ability to analyze and learn from experience that separates those who will be great leaders from those who will be "occupied with trifling matters and rusted by gross ignorance."² Reasoned analysis fosters the ability to think broadly, deeply, and critically. It nurtures the drive to analyze honestly, fairly, and thoroughly. It demands logical yet creative synthesis.

Education for our officer corps comes in three varieties. First, there are informal, career-long, personal professional-development efforts—reading journals and books, attending conferences, and so forth—the kinds of personal-development activities that lie at the heart of all traditional “professions.” Second is formal academic education. An undergraduate degree has long been a prerequisite for receiving an Air Force officer’s commission, and graduate-level education is nearly a necessity for promotion to and above field-grade levels. Finally, there is formal PME, which for Air Force field-grade officers is centered at Air University’s ACSC and AWC.³ The remainder of this analysis will examine these three educational modes.

Air Force efforts to promote informal, personal, career-long professional development have been very limited and largely ineffective. There are no carrots, no special rewards or recognition for officers who independently pursue professional knowledge. Officer evaluation forms provide no block to check and no rating standard for officers who have read a good professional book. Promotion recommendation forms provide no recognition, nor does the Air Force give any special consideration to officers who have taken it upon themselves to study the art of war. It would be nice if we needed no carrots. In an ideal Air Force, officers would work hard to increase their knowledge simply because it is the professional thing to do. Unfortunately, downsized forces without downsized responsibilities, increased operating tempos in the New World Order, and other such temporal tyrannies require officers to weigh the costs and benefits of every competing demand for their time. Without any tangible carrots, personal professional development can easily drop off the priority screen.

Lack of carrots may explain the demise of Project Warrior, which was, in part, an innovative attempt to encourage airmen to study airpower theory and history. The program widely distributed a remarkable library of airpower-related books including reprints of

classic texts such as Giulio Douhet’s *The Command of the Air* and George C. Kenney’s *General Kenney Reports* as well as original works developed specifically for Project Warrior. The program began in the early 1980s with considerable fanfare and the support of then chief of staff Gen Lew Allen. It ended ignominiously in the early 1990s, suffering from lack of interest, lack of results and, ultimately, lack of money.

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Although there are no tangible carrots for informal professional-development efforts, the Air Force provides many rewards for those who obtain graduate degrees in formal academic-education programs. The most important of these carrots is that the Air Force records, graduate degrees on personnel records where they can be an important (some would argue crucial) consideration for promotion boards. With such an incentive, it is no wonder that about 50 percent of all active duty officers possess a graduate-level degree.⁴ Many, if not most, of those degrees have come through civilian university programs recruited by local education offices to provide a variety of graduate programs on nearly every Air Force installation around the world.

But what kinds of degrees? The most recent data available to me indicates that of the 322 on-base master’s-degree-granting programs at 133 Air Force locations, exactly two—let me repeat that—exactly two of those programs directly concern the art of war (one program in national security studies and one program in military history). Another group of 19 programs had tangential

relationships to the art of war (degrees in international relations and international policy). By far the most common degree programs offered on Air Force bases are business related (business administration, human resources management, etc.).⁵ Thus, the Air Force is in the paradoxical position of putting a high value on graduate-level education that is largely irrelevant to its raison d'être. The Air Force seems unable or unwilling to distinguish the value of a graduate degree in business from the value of a graduate degree in national security studies or military history. This is not to denigrate business administration degrees but to point out that some fields of study are more germane to the art of war. Perhaps we need to remind ourselves that our business is not business. Our business is war.

In my judgment, the recipe that produces superior military leaders has three key ingredients—training, experience, and education.

With no carrots for personal professional development and with academic education that is likely to be irrelevant, it is no wonder that students arrive at ACSC and AWC in a condition reminding General Dugan of illiterate truck drivers. By accident or by design, we have come to rely almost entirely on the formal PME system to teach the fundamentals of the art of aerial warfare. This is a very sad situation because even in ideal circumstances, there is no way that two 10-month visits to Air University can adequately replace career-long, personal professional development and relevant academic education. Unfortunately, circumstances at ACSC and AWC are not ideal. From the earliest days of Air University, ACSC and AWC have been beset by major interrelated problems. Among the most vexing of these problems are lack of consensus about curricula and rapid turnover of senior leadership.

Over the entire history of Air University, there has never been a broad, let alone lasting, consensus about the proper curricula for ACSC and AWC. Guidance and advice from the most senior command levels, congressional committees, boards of visitors, and special panels have often been nebulous, conflicting, or both. Lack of lasting consensus led ACSC and AWC to implement nine major shifts in curricula emphasis—on average a major shift every five years—from the time of their founding through the mid-1990s. Even more interesting, the shifts at ACSC and AWC did not mesh with each other, either in terms of timing or areas of emphasis. Such uncoordinated changes suggest curricula more influenced by current whim than by a well-thought-out educational doctrine.⁶ Frequent injection of “hot topics” (some would call them fads) into already crowded and rapidly changing curricula further complicates the situation.⁷

Although curricula often have changed, there have been identifiable trends. In broad terms, ACSC and AWC have divided their curricula (the proportions have varied) between those subjects most closely related to airpower employment (theory, doctrine, strategy, history, etc.) and those subjects more closely related to the management of a peacetime Air Force (planning, programming, budgeting, personnel management, etc.). Both areas are worthy of study, and each could profitably fill a rigorous, year-long curriculum. Taken together, however, the split curricula gave credence to the most oft-mentioned criticism of both schools (i.e., curricula a mile wide and an inch deep). There simply is not enough time to explore both areas in depth.

This observer has long championed war-fighting curricula for a very straightforward reason. Civilian schools can and do teach management, government operations, and the like. Only military schools can specialize in the art of war, and more specifically in the art of aerial warfare. My guess is that the American taxpayers did not found our PME institutions in order to mirror academic programs at civilian universities. The public

has a right to expect our PME schools to produce experts on warfare, not peacetime bureaucrats in uniform.

Some would argue that curricula focused on war fighting are well and good for those students whose specialties deal directly with operations (flyers, missileers, intelligence officers, maintenance officers, etc.) but are of little constructive consequence to officers toiling in support functions (personnel, finance, contracting, procurement, etc.). Nothing could be farther from the truth. It is time we recognize that one of the principal differences between a first- and second-class military force is the quality of the supporting infrastructure—how well we train, educate, motivate, pay, feed, and house the force. Those who will lead the infrastructure supporting our Air Force in the future must understand the connection between what they do and the ultimate mission of the Air Force. They must understand that much of what they do ultimately affects combat capability. Further, they must understand that circumstances might require their supporting function to operate in a difficult combat environment.

A classic example of the kind of disconnects that can develop between support and combat operations was illustrated in a study done more than a decade ago at the Airpower Research Institute. The study revealed that the automated and computerized military pay system, so efficient in a stateside environment, had, at that time, left the Air Force without the ability to handle even routine pay matters in hostile environments. With all good intentions and obvious ignorance of the real world of military operations, the system designers had focused on peacetime efficiency rather than wartime effectiveness. The result of the study was a multimillion-dollar effort to correct the situation.⁸ The point is that there must be a solid connection between the point and the shaft of the spear. Understanding aerial warfare is not just a necessity for the operators. Those who support airpower must also understand what it is they are supporting, what is required of them, and under what circum-

stances they must perform. PME curricula focused on war fighting is essential for the entire force, not just for the operators.

Turbulence, confusion, and lack of consensus in curricula have been accompanied by—or perhaps caused by—leadership turbulence in both ACSC and AWC. In the half century since their founding, ACSC has had 34 commandants and AWC 25. The average tenure for ACSC commandants has been only 18 months; at AWC, commandant tenure has been just slightly longer, averaging 24 months. My contacts in civilian academia tell me that it typically requires five years to diagnose what needs to be done, design and put programs in place, and then evaluate and fine-tune these programs. Even if one assumes that the hierarchical and highly disciplined nature of the military environment could drastically shorten the civilian “five year rule,” the tenure of a typical commandant at ACSC and AWC still would seem insufficient to complete the curricula change cycle.

Air Force efforts to promote informal, personal, career-long professional development have been very limited and largely ineffective.

The fact that virtually none of the commandants have had any experience in academia other than being a student exacerbates the short-tenure problem. I reviewed the backgrounds of all 21 of ACSC and AWC commandants who served during my 20 years at Air University and found only one with any real leadership experience in an academic environment. It strikes me as odd that although the Air Force would never put a nonflyer in command of a fighter or bomber squadron, it routinely places neophytes in command of the schools upon which it totally depends to educate its future senior leaders.

None of this is to say that these short-duration commandants have been ineffective. Quite the contrary, some of them have been responsible for considerable progress over the past 20 years, progress made all the more remarkable considering the tenure and experience handicaps under which they operated. Of particular importance have been efforts to significantly improve faculty academic qualifications and a gradual movement toward curricula focused on warfare at both colleges. Both of these trends are, in my opinion, very encouraging and important to the continued success of American airpower.

By far the most common degree programs offered on Air Force bases are business related. Thus the Air Force is in the paradoxical position of putting a high value on graduate-level education that is largely irrelevant to its raison d'être.

Progress during the past two decades has not always been smooth, and not all of the commandants have been enlightened. For example, over the years, two school commandants told me that highly qualified faculty members were unimportant because students teach themselves. Another wondered why his students needed to understand military and airpower history "since they had lived it for 15 years." Such troglodytic opinions from senior officers would seem to lend credence to what many have said over the years (i.e., the Air Force has an anti-intellectual bent). As far back as 1947, Col Noel Parrish noted in an *Air University Quarterly Review* article that "air activities have most often attracted men of active rather than literary leanings. . . . The Air Force has never boasted a high percentage of scholars."⁹

Perhaps Colonel Parrish was right. Perhaps the basic problem in educating Air

Force officers is cultural. Airmen are "doers," men and women of action rather than introspection. Flyers glory in the romantic tradition of scarves blowing in the prop wash, valiant knights of the air going forth to confront the enemy in mortal combat. Nonflyers tend to be technicians, consumed by the arcane complexities of their specialties. Both flyers and nonflyers worship more often at the altar of superior technology than at the shrine of superior strategy.

Activist and technocratic traditions often, but not always, served us well during times of plenty, when we operated from a position of great strength and relied on the superiority of our resources to overwhelm our enemies. Will such traditions serve us well during the lean times, when every sortie is critically important and we can ill afford to squander our rapidly dwindling resources? If you have "wall-to-wall" airpower, superior ideas about how to use it seem somehow less important. Outthinking the enemy becomes a necessity when you can no longer drown your adversary in a sea of military plenty.¹⁰

The dilemma is that we need to reshape our culture without destroying traditions that have served us well in the past. Somehow, we must make it culturally acceptable and professionally imperative to be air warriors well schooled in the theory, doctrine, and history of aerial warfare. Warriors must understand airpower as well as airplanes. We need to develop synergies between scarves in the prop wash and books in the classroom. Reshaping our culture without destroying our traditions is the key to making the next generation of Air Force leadership better than this generation.

How do we effect such a monumental cultural shift? In this observer's opinion, it must begin at the top, at the most senior levels of command. It must start with attitudes and policies that go beyond simply encouraging intellectual development. Being well schooled in the art of war must become a necessity, an absolute requirement for leadership positions at field-grade level and above. Personal professional-intellectual development must become a requirement for every officer.

What specific actions might we take? Consider the following possibilities:

1. Promote relevant graduate academic education. Instruct local education offices to recruit for their bases at least one graduate-level program directly related to the art of war.

2. Reemphasize career-long, personal professional development.

- Reconstruct the nonresident versions of PME into a continuous, career-long professional development system designed to provide a time-phased baseline of knowledge that all officers need. Incorporate a rigorous programmed professional reading program into the system.
- Document individual professional development on officer performance reports.
- Document how successfully supervisors and commanders encourage professional development on their officer performance reports.
- Require remarks attesting to professional development progress on promotion recommendation forms.
- Instruct promotion boards to give increased value to professional development.

3. Upgrade PME.

- Develop and implement a formal Air Force PME doctrine that, at a minimum, addresses curriculum guidelines and faculty quality.
- Use the reconstructed nonresident PME program as the basis for in-residence PME entrance requirements.
- Upgrade in-residence PME curricula to take advantage of standard minimum in-residence PME entrance expertise.

- Extend and stabilize the duty tours of ACSC and AWC commandants and other senior PME leaders.

Some of these actions would meet with great resistance. For example, within these suggestions there would be no nonresident equivalent to in-residence PME. Those not selected to attend ACSC and AWC in residence would argue that such a system would be unfair. I would counterargue that the equivalency of resident and nonresident programs has always been a convenient fiction.¹¹ Further, I would argue that fairness is irrelevant. The Air Force is not and must not become an egalitarian organization. Rather, it is and should be a meritocracy.

The public has a right to expect our PME schools to produce experts on warfare, not peacetime bureaucrats in uniform.

On the positive side of the equation, these actions would create a reasonable, sustainable, and organized approach to career-long personal professional development. They would ensure that efforts to become a smarter warrior would enhance one's career prospects, and they would provide top-down motivation for personal professional development. Such actions would also do wonders for the formal PME system. For example, a much higher baseline of knowledge among incoming students would allow our PME schools to tailor their curricula and teaching techniques to attain much higher levels of academic achievement.

Even if General Dugan is only partially correct about a generation of illiterate truck drivers, we must take strong, positive actions if we expect the next generation of Air Force leaders to be better than this generation. We cannot afford to tolerate an anti-intellectual culture among airmen. Our future leaders will have to be very smart and very well educated to fully exploit the al-

most limitless options airpower provides and to deal with the almost limitless demands on our dwindling airpower assets. Our future leaders will have to be both very smart and mentally disciplined to deal effectively with the uncertainties and demands airmen will face in the “new world disorder.” Our future leaders must understand airpower—not just airplanes. They must be

able to think critically, analyze thoroughly, and synthesize logically.

It will be no mean feat to produce the kinds of leaders we will need in the future. They will require stellar training and broad experience. Most importantly, they will require superior personal professional development, relevant academic education, and outstanding professional military education.

Notes

1. It is fair to ask what I mean by “for the most part.” My best estimates, based on years of observation, conversation, and teaching, are that 80 to 90 percent of the officers entering ACSC and 50 to 60 percent of the officers entering AWC are essentially ignorant of the intellectual foundations of their profession.

2. As an illustration that experience alone is not enough, Frederick said, “A mule who has carried a pack for ten campaigns . . . will be no better a tactician for it.” *Frederick the Great on the Art of War*, ed. and trans. Jay Luvaas (New York: Free Press, 1966), 47.

3. Squadron Officer School (SOS) is also considered to be PME, but the professional education of company-grade officers uses very different techniques to achieve the unique outcomes it seeks. Therefore, I will not focus on SOS in this article.

4. As of 30 September 1995, 49.5 percent of all active duty line officers possessed a master's degree, and another 1.43 percent possessed a doctoral degree. *Air Force Magazine*, May 1996, 40.

5. Air Force Pamphlet (AFP) 213-2, *Educational Opportunities on Air Force Bases*, 1 April 1987. Purportedly, there is an updated version of this manual, but it was unavailable to me. I strongly suspect that although the absolute numbers may change in an updated version of this pamphlet, the relative proportions would remain quite stable.

6. Lt Col Harvey J. Crawford et al., “CADRE Officer Professional Military Education Study,” Maxwell AFB, Ala.: Airpower Research Institute, Center for Aerospace Doctrine, Research, and Education, June 1988). This study remains unpublished, but several copies exist, including two copies in the author's possession. To my knowledge, it remains the only comprehensive study ever done on Air Force PME, and certainly the only study based almost entirely on primary-source documentation.

7. One of the most recent examples of what the author considers to be a “fad” is the insertion into ACSC and AWC curricula of an inordinate amount of instruction concerning the “quality” movement—the latest in a long line of civilian management techniques adopted by the military in spite of their often dubious relevance. Other examples of this genre stretching back to the early 1960s include Zero Defects, PRIDE, Zero Based Budgeting, and Management by Objectives.

8. Lt Col Bill D. Brogdon, *Support the Troops! Paying Our People in Hostile Forward Areas*, Report no. AU-ARI-88-5 (Maxwell AFB, Ala.: Air University Press, December 1988).

9. Col Noel F. Parrish, “New Responsibilities of Air Force Officers,” *Air University Quarterly Review*, Spring 1947, 29–42.

10. One can always find exceptions that test the rule. For example, the activist technocratic tradition did not serve us particularly well in Vietnam, where, for a variety of contentious reasons, we were unable to turn overwhelming materiel superiority into final victory. Conversely, in the Southwest Pacific during World War II, General Kenney demonstrated that American airmen can outsmart and defeat their adversaries even when operating on a logistical “shoestring.”

11. If one argues that nonresident PME programs are the equivalent of resident programs, then one must ask why we should have the much more expensive resident programs. At this juncture, I do not believe that anyone seriously thinks resident and nonresident programs are of equal educational value. Face-to-face interaction and idea exchange with skilled faculty, distinguished guest speakers, and student peers are central to higher levels of learning and thus crucial to quality, graduate-level education. They cannot, at this point, be duplicated in a nonresident format. However, the march of technology, particularly our ability to interconnect in real time, may mean that in the future, resident programs will have few if any advantages over nonresident programs.

Bureaucracy is a giant mechanism operated by pygmies.

—Honoré de Balzac

