

Testimony¹

House Armed Services Committee

Subcommittee on Professional Military Education

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Introduction

Mr. Chairman and members of the subcommittee. It is a distinct honor to be asked for a second time to address a subcommittee of the House Armed Services Committee on the subject of professional military education. The first time was nearly a quarter of a century ago. Unfortunately, I am afraid that most of my concerns at that time are as relevant now as they were then. Yet, in my opinion, professional military education is even more important to the future success of America's military forces than it was twenty-five years ago.

Let me begin with the nature of the strategic environment that the United States confronts, because it is that framework which will place great stress on America's political and military leaders in the twenty-first century. Then I will turn to the nature of professional military

education and the crucial role that it must play in preparing those forces and their leaders to deal with the emerging strategic environment. And finally, I will end with some points that need coherent attention in attempting to move professional military education forward.

The Emerging Strategic Environment

At present the United States confronts the most complex and perhaps the most difficult challenges to its security that it has faced in its history. For the first time since the collapse of the Soviet Union, an economic and political competitor, the People's Republic of China, is emerging on the strategic horizon. It is entirely likely that within the next several decades the PRC will become a significant regional competitor in East Asia with its military forces. The Middle East remains in as much turmoil as it has over the past half century. To an even greater extent than was true in the past, the global economy depends on that region for much of its oil and energy supplies. The strategic and political outcomes of the American interventions in Iraq and Afghanistan remain uncertain at present, as does their long-term impact on the region. Given its present economic problems and its pretensions Russia represents a power still capable of great mischief and fundamentally dissatisfied with its place in the international order. The Chavez regime as well as the dangerous rise in violence in Mexico's northern provinces suggests that Americans need to pay much greater attention to our southern neighbors. And finally, among other ills besetting the world, international terrorism casts its baleful gaze across the

¹ The opinions expressed in this paper are entirely those of the author and do not reflect those of any institutional affiliation he has had in the past or at present.

landscape.²

If the past is any indicator – and I certainly believe it is – the military forces of the United States will confront a diverse set of challenges in the future, ranging from the possibility of major conventional war to peacetime engagement and stabilization operations.³ The causes of conflict will vary from cold political calculation to uncontrolled passion.⁴ At the same time, enemy capabilities could range from relatively crude suicide bombers or other improvised explosive devices, to precision guided munitions and cyber attacks, and to the use of nuclear weapons and electromagnetic pulse weapons against U.S. forces or even the territory of the United States. It is impossible to predict precisely how such challenges might emerge, when they might occur, and what form they could take.

Above all, history suggests that however carefully Americans think about the future; however thorough their preparations; however thoughtful their concepts, training, and doctrine, *we will be surprised*. We will find ourselves caught out by radical changes in the political, economic, technological, strategic, and operational environments. We will find ourselves surprised by the nature and capabilities of our adversaries. In the end, it will only be our imagination and intellectual agility, or lack thereof, that will determine our success or failure in

² For the nature and extent of those threats see Joint Forces Command, *The Joint Operational Environment* (Norfolk, VA, 2008).

³ For a general examination of the possible challenges U.S. forces might confront in the future see Joint Forces Command, “The Joint Operational Environment,” November 2008,

⁴ See Clausewitz’s discussions of the nature of war and its relationship to political concerns in Book I of *On*

navigating an uncertain and dangerous future. Only an educational background that has prepared the senior military officers of the United States to understand the fundamental nature of war as well as the enormous variety of contexts within which it may take place can provide officers with the mental agility to adapt.

The challenge that will confront American military forces in the aftermath of the wars in Iraq and Afghanistan will be to prepare for missions across the spectrum of conflict, ranging from deterrence at the high end to peace keeping and peace enforcement at the low end. They will confront the certainty of commitment to conflicts which involve the vital interests of the United States. But where, against whom, and when they will find themselves committed will remain uncertain and ambiguous, perhaps almost until the moment of commitment. Who could have predicted in summer 2001 that U.S. military forces would find themselves engaged in a major campaign deep in Afghanistan within six months?

The Importance of Professional Military Education

The great British military historian Sir Michael Howard has argued persuasively that the military profession is the most demanding of all the professions not only physically, but intellectually as well. The latter preparation requires the most serious attention to the military art, past and present, in preparing officers, and particularly senior officers, for the next conflict. In a seminal lecture delivered at the Royal United Services Institute in the 1970s, Professor

Howard commented:

There are two great difficulties with which the professional soldier, sailor, or airman has to contend in equipping himself for command. First his profession is almost unique in that he may have to exercise it once in a lifetime... Second the complex problem of running a [military organization in peacetime] is liable to occupy his mind and skill so completely that it is very easy to forget what it is being run *for*.⁵

The cost of the wars in Iraq and Afghanistan suggests that the United States can no longer afford an approach resting on the comfortable assumption that commanders can acquire skills on the fly to deal with the new and different complexities that each conflict will bring in its wake. As General James Mattis suggested in an email to a professor at National War College, “We have been fighting on this planet for 5,000 years and we should take advantage of that experience. ‘Winging it’ and filling body bags as we sort out what works reminds us of the moral dictates and the cost of competence in our profession.” The depressing story of our flawed efforts to handle a burgeoning insurgency during the post-invasion period in Iraq suggests that too many senior officers had never studied the lessons of Vietnam, much less the experiences of the British in their efforts to defeat the 1920 insurgency in Iraq.

⁵ Sir Michael Howard’s lecture is in an easily accessible chapter in a collection of essays: Michael Howard, *The Causes of War and Other Essays*, 2nd ed. (Cambridge, MA, 1983).

Moreover, one of the fundamental lessons of military history is that military organizations almost invariably get the next war wrong. What separates effective militaries from those which fail is the speed with which the effective ones adapt to the actual conditions they confront rather than attempting to force reality to fit their preconceived notions.

A 2006 Marine Corps panel on professional military education put the importance of preparing the future leaders of the American military succinctly:

It appears likely that most of the wars and military interventions of the early [twenty-first] century will find the Marine Corps operating in many different parts of the world, among vastly different cultures and against a spectrum of threats. In some instances knowledge of local cultures and understanding of the cultural and religious motivations that animate the enemy will be essential in determining the success or failure of American efforts, especially in the era of omnipresent media and round-the-clock programming. American military leaders – from lieutenant to general – will have to appreciate not only their own cultural framework and history, but those of others as well.⁶

Only an intelligent and demanding program of professional military education can prepare America's future military leaders to meet the challenges of the future. It is well to

⁶ General Charles E. Wilhelm, USMC (ret.), chairman, "U.S. Marine Corps, Officer Professional Military Education, 2006 Study and Findings," Marine Corps University, Quantico, VA, 2006.

remember that the chairman of the joint chiefs of staffs, the service chiefs, and most of the general and flag officers of the 2030s are already on active duty today. Their education and preparation for higher command has already begun, and, if they are to be prepared in a fashion that the country will desperately need in that decade, then a serious reform of professional military education must begin today.

Above all, serious reform of professional military education absolutely depends on significant reform of the personnel and promotion systems to provide time for such education and to insure the promotion of the right officers. At present, the U.S. military possess an industrial age personnel system that rest for the most part on legislation drawn up in 1947 and 1954. Until that system is fundamentally reformed, major changes for the better in professional military education can only occur on the margins. Moreover, the service personnel systems taken individually tend to reinforce the lockstep approach of the legal framework rather than to take advantage of the exceptions that Congress has authorized or that are authorized.

The Purpose of PME

What should America's future military leaders study? The predecessors of your subcommittee in their extraordinarily intelligent report on professional military education were quite clear on what the place of professional military education should be:

Fundamental to the development of the U.S. officer corps is qualified professional

military education. The education that officers should receive should be broad enough to provide new academic horizons for those who have been narrowly focused, but deep enough to ensure scholarship and challenge and whet the intellectual curiosity of all officers capable of developing strategic vision. Professional military education should broaden officers' perspectives, as well as service parochialisms. Because education is an investment in our country's future, the services must be willing to sacrifice some near-term readiness for the long-term intellectual development of their officers.⁷

The very title of the major PME institutions makes clear what their focus must be: strategy and war. The Skelton panel was clear also on the need for a broad education for those officers who are eventually to hold positions at the highest levels. Future strategists, it noted, "must be *broadly educated*. Thinking strategically requires individuals who are generalists rather than specialists. Given the potential impact of many different subject areas on strategic thinking – trends in political, technological, economic, scientific, and social issues, both domestic and international – strategists must have the broadest educational base."⁸ The catch is that first the officers with such potential need to be identified. At present, we have not done a terribly good job at that.

Later on in their examination, the authors of the Skelton subcommittee commented:

⁷ Skelton Panel, p. 133.

The shift in focus for field grade officers, both in schools and units, is from skill training to education – improving officers’ analytic capabilities and teaching them how to deal with uncertainty and ambiguity. They must shed the rigidity learned in drills and exercises as junior officers and become more flexible in their thinking because ‘war eludes rules... and rewards the inventive mind... [and] ingenuity,’ as General Paul Gorman, USA (Ret.)... reminded the panel.⁹

Therein lies the heart of the problem of professional military education. Educating officers in stages has the consequence that producing a mind that is able to grasp the strategic level of war requires the transition to a broader understanding of conflict from their earlier conditioning. Not many manage that transition, which is why real strategists are so rare. Improving the analytic capabilities of officers and teaching them how to deal “with uncertainty and ambiguity” should begin before commissioning and be pursued concurrently with training throughout the whole professional development process.¹⁰

The Skelton subcommittee was also explicit in what it regarded as the essential elements in the educational processes aimed at preparing officers to handle the larger issues involved in the policy and strategic worlds and the progression from the specific of the tactical world to the

⁸ Ibid., pp. 27-28.

⁹ Ibid., p. 58.

¹⁰ I am indebted to General Anthony Zinni, USMC (Ret.) And Colonel Richard Sinnreich, USA (Ret.) For

complexities of higher command that officers must undergo as their careers develop:

The first educational building block in the development of a strategist is a *firm grasp of an officer's own services, sister services, and joint commands*. To the extent such expertise can be obtained through education, it must be found in PME schools. Furthermore, officers seeking to develop their capacity for strategic analysis must remain professionally current, that is, keep up with the rapid pace of technological change.... The panel firmly believes, however, that some officers are capable of becoming competent in their warfighting skills *and* of developing the competencies required of a true strategist. For that reason, the panel believes that it is especially important to identify such officers as early as possible in their careers.¹¹

The second educational building block for strategists is a *clear understanding of tactics and operational art*. Knowledge in the employment of combat forces is a prerequisite to the development of national *military* strategy....

The third educational building block is an *understanding of the relationship between the disciplines of history, international relations,...and economics*. Each of these disciplines is critical to the formulation of strategy.

History, or more specifically the lessons of history, provides insights into how nations have adapted their military and security strategies over time to deal with changing domestic and international environments. Strategy is, after all, dynamic. It must take into account changing realities and circumstances. Military history is particularly important. The history of combat operations, including why a commander chose a given alternative, is at the heart of education in strategy.[emphasis in the original]¹²

There clearly exists a cleft between the training and educating of officers at the O-4 level for the immediate staff tasks they will confront in the next stages of their careers and the educational preparation required to meet the challenges of higher command.¹³ Both approaches are necessary, but each requires different underlying philosophies of education. The first aims at training officers to perform the every-day, but important routine of staff work and procedures as well as the tactical world which their first years in the military have emphasized, while the second aims at preparing officers to handle the larger issues created by the nature of war – its uncertainty, its fog, and above all its frictions as well as the complexities and ambiguities involved in the interface between the demands of politics that drive conflict and the military necessities of the operational level.

¹¹ This is particularly difficult to do when the prevailing culture is hostile to “elitism.”

¹² Skelton Panel, p.

¹³ One commentator on a draft of this paper noted: “the institutionalization of the ‘cleft’ represents a considerable part of the problem.”

At the staff college level, if not earlier, schools must introduce officers to the problems and issues involved in strategy and grand strategy. Equally important, the initial schools of professional military education must develop the habits of inquiry and analysis. They must also encourage their officers to confront and understand history which essential to any understanding of the complexities and difficulties they will inevitably confront.¹⁴ In fact, the best approach to professional military education would aim at moving officers across the continuum from the straight-forward demands of training at the tactical level to the ambiguities and uncertainties of operations and strategy. Clausewitz suggests the inherent difficulties in the intellectual preparation of officers:

Given the nature of the subject, we must remind ourselves that it is simply not possible to construct a model for the art of war that can serve as a scaffolding on which the commander can rely for support at any time. Whenever he has to fall back on his innate talent, he will find himself outside the model and in conflict with it; no matter how versatile the code, the situation will always lead to the consequences we have already alluded to. *Talent and genius operate outside the rules, and theory conflicts with reality.*[Italics in the original]¹⁵

What then is the purpose of the professional study of the art of war? Here again,

¹⁴ Once again, I am indebted to Colonel Richard Sinnreich, USA ret., for this point.

¹⁵ Carl von Clausewitz, *On War*, trans. and ed. by Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press: 1976), p. 140.

Clausewitz is explicit in a passage that is as relevant to the education of officers in our own time as it was in the early years of the nineteenth century:

[The study of war represents] an analytic investigation leading to a close *acquaintance* with the subject; applied to experience – in our case military history – it leads to thorough *familiarity* with it. The closer it comes to that goal, the more it proceeds from the objective form of a science to the subjective form of a skill, the more effective it will prove in areas where the nature of the case admits no arbiter but talent... [Theoretical study] will have fulfilled its main task when it is used to analyze the constituent elements of war, to distinguish precisely what at first sight seems fused, to explain in full the properties of the means employed and to show their probable effects, to define clearly the ends in view, and to illuminate all phases of warfare in a thorough critical inquiry. [Theoretical study] then becomes a guide to anyone who wants to learn about war from books; it will light his way, ease his progress, train his judgment, and help him to avoid pitfalls.¹⁶

In those two brief quotations Clausewitz illuminates the basic problems and purposes of professional military education. The complexities of the present world and the issues U.S. military institutions confront only serves to underline the importance of his insights.

The Audience

Perhaps the most basic question confronting those who determine the future course of professional military education is that of whether professional military education should aim at the broad mass of officers, or at those who have already displayed the ability and interest in embarking on serious personal education. In other words is the purpose of PME to develop a general base of knowledge and understanding for the average officer or is it to develop the future George Marshalls, Dwight Eisenhowers, and Chester Nimitzes? The first approach limits the capacity for growth of the brightest officers, while the second will invariably lose the attention of those without intellectual curiosity about their profession.¹⁷ Unfortunately, there is also a third question which impinged on American PME throughout the Cold War through to the present and which remains largely unspoken, but still influential through to the present: Isn't the purpose of PME to provide officers a rest in their busy careers?¹⁸

For the Germans in the interwar period, the answer as to the purpose of professional military education was clear: they selected only a small group of officers early in their careers

¹⁶ Clausewitz, *On War*, p. 141.

¹⁷ In the larger sense, this defines the problem: as long as professional military education follows a cookie-cutter approach, it will devolve to the lowest common denominator. The alternative, however, is a much earlier sorting out process.

¹⁸ As late as the early 1990s the dean of the Army War College was quoted in the *Washington Times* as having said that he preferred his student colonels to be out on the golf course rather than in the library.

with the expectation that this cadre would provide most, if not all, of the army's future leaders.¹⁹ In every respect the German approach was elitist. Moreover, it created an army wide culture that valued the serious study of the profession and where its ultimate "muddy boots" soldier wrote books.²⁰ Yet, there was also a systemic weakness in the German approach. While the *Wehrmacht* produced brilliant officers at the highest levels for the conduct of operations, its showing in the two crucial supporting pillars of logistics and intelligence was dismal. Even more debilitating was the fact that few, if any, of Germany's senior officers displayed the slightest indication that they understood strategy. For those reasons, all resulting from a failure to educate the officer corps, especially the elite of the general staff, more broadly, the German military led their nation to catastrophe, not in one, but in two world wars.²¹

The American system has consistently rejected the German approach, although there have been exceptions, usually idiosyncratic and accidental. George Marshall's tenure as the assistant commandant at the Infantry School saw him deliberately select and educate officers, both among the students and on the faculty, whom in turn he would pick for the key positions to lead American forces during the Second World War. Nevertheless, whatever the educational philosophy, throughout the interwar period officers regarded attendance at the various staff and

¹⁹ During the course of World War II every single field marshal, with the exception of Irwin Rommel, would be a graduate of the *Kriegsakademie* and thus a member of the general staff.

²⁰ In this case, Irwin Rommel, whose memoirs of his experience as an infantry officer in World War I, *Infanterie Greift an (Infantry Attacks)* remains a classic study in leadership at the small unit level. For Rommel as an intellectual leader as well as a driving leader see General Sir David Fraser's brilliant study: *Knight's Cross, The Life of Irwin Rommel* (New York, 199).

²¹ The logistical and intelligence planning of Barbarossa, the German invasion of the Soviet Union in June

war colleges as critical to their performance in the Second World War.²²

In fact, there is no reason why professional military education writ large cannot achieve the larger goals of educating the broad mass of officers, while those who have the intellectual vigor and the prospect for higher command receive special attention.²³ To a certain extent that is already occurring. For example, Fort Leavenworth, Quantico Marine Base, and Maxwell Air Force Base are all serving a large student body of majors with a general curriculum, while at the same time teaching a select and self-selected group of majors in their second year in advanced schools. The Navy is the only service which at present does not possess a second-year school, nor has it been particularly eager to send its officers to the second-year schools that the other services have established. At the senior level, the Army War College has a generalized curriculum for the great majority of its students, while a select few attend the Advanced Strategic Arts Program (ASAP) aimed at creating strategic thinkers.²⁴ Significantly, the Naval War College still remains the premier academic institution for the study and teaching of strategy *in*

1941 explains why the German troops showed up in front of Moscow with no winter clothing, summer weight oils and fuels, and with no winter supply dumps.

²² It is clear that Dwight Eisenhower expended major effort to graduate first in his class, which he did, when he was a student at Leavenworth.

²³ The difficulty is that if we wait to decide whom to educate until we've decided who has the best career prospects, we'll always be too late. Raw talent and the desire to learn must be diagnosed long before we can be sure of an officer's future. That means being willing to see some advanced educational effort wasted.

²⁴ The ASAP program was created by the Army War College's Commandant at the time, Major General Robert Scales, who realized that a number of the best students at that institution were profoundly unhappy with the superficial nature of the curriculum.

*the world.*²⁵

The selection processes for PME attendance reveal some considerable anomalies. Throughout the Cold War, board selection determined attendance at the war and staff colleges, with the exception of the Navy, which more often than not simply sent whomever the detailers could find.²⁶ Clearly the students at SAMS, SAW, SAAS, and ASAP self select *and* confront rigorous application processes for attendance in those programs. In the case of the attendance at the regular staff and war colleges, there have been some considerable changes over the past decade. The Army in the late 1990s decided to send all of its majors to a shortened career course at Leavenworth: the combat arms officers then stay to complete a full year at the staff colleges, while the others attend courses specifically designed to meet the needs of their career fields. Attendance at the staff college at Quantico was for a short period of time at the start of this decade entirely a matter of who volunteered and who the detailers saw fit to send.

Nevertheless, none of the selection processes in the U.S. military – except of course the elite programs – possess a means to determine the academic and intellectual qualifications of the prospective students. However, in almost every other First-World Military organization today, entrance to the system of professional military education comes only through written and oral

²⁵ It has held that position since the early 1970s when Admiral Stansfield Turner fundamentally altered the curriculum and created a graduate level educational institution. Ironically, the other services, particularly the Marine Corps, have, for the most part, made better use of Newport's academic excellence in the education of their officers than has the Navy.

²⁶ In 1991-1992, the author was a Secretary of the Navy fellow at Newport. One of the two naval officers in his seminar was a senior captain with 29 years of distinguished service, while the other was a supply commander passed over for captain while attending the college.

examination in which the prospective students have to prove on paper their intellectual preparation and capabilities thus far in their military career for service at the higher levels of command. They are, of course, judged by their performance in the field as well for their suitability for attendance at their military's staff college. The one case where this is not true is the British Army, where class rankings at the junior staff college as well as officer efficiency reports determine who gains entrance into the Joint Service Staff College. In regards to the American military, Lieutenant General Don Holder, USA (Ret.) has suggested that the creation of an examination-based system for entrance into the staff college would fundamentally alter the anti-intellectual culture that exists among many of the Army's junior officers.²⁷

The Nature of the Curriculum and Educational Philosophy

The great difficulty that institutions of professional military education confront is that they have only eleven months to achieve the goals with which their institution is charged. That in turn limits what they can teach in any depth, a reality that few in the world of professional military education have been willing to recognize. Here again in its summary report, the Skelton Panel explicitly stated what it believed the purposes of professional military education should be:

The panel believes that the primary subject matter for PME schools and consequently, the underlying theme of the PME *framework*, should be the employment of combat forces, the conduct of war. The theme is the major reason

²⁷ Holder and Murray, "Prospects for Military Education."

for PME schools; their unique subject matter is the principal distinguishing element between the curricula of PME schools and civilian universities. Although other important subjects such as leadership, management, and executive fitness are taught at PME schools, they should be secondary to the study of war.²⁸

Matters have improved considerably since the late 1980s. The advanced courses at the staff colleges – The School of Advanced Military Studies (SAMS), the School of Advanced Warfighting (SAW), and the School of Advanced Airpower Studies (SAAS) – all are models for the deep and thorough examination of war. So too, the Naval War College has maintained its intellectual focus on war and strategy.²⁹ The Army War College’s Advanced Strategic Arts Program (ASAP), imbedded in the college, also provides an intellectual and rigorous approach to the study of the issues involved in strategy.³⁰ Nevertheless, it is available to only a selected few of the students who attend Carlisle – entrance gained only through competitive interviews.³¹

However, much of the rest of the landscape of professional military education displays

²⁸ Skelton Panel, p. 101.

²⁹ The Navy, not surprisingly, has no second year course and allows few of its officers to attend the second year courses that the other services offer.

³⁰ The ASAP course pulls its students out of the regular curriculum in November and thereafter gives them a truly intensive course in joint operations, strategy, and the policy making world. Throughout its course, ASAP uses historical case studies extensively.

³¹ What is interesting in terms of the hit and miss nature of the processes with which the Army selects brigade commanders is that in some years a significant number of members of each ASAP seminar are on the fast track to take over brigade, while in other years there are relatively few such officers.

less significant improvement in view of the Skelton Panel's criticisms.³² A faculty member at the National War College indicated to the author that his institution could not possibly teach Thucydides, the most complete examination of war and strategy ever written, because of its complexity and the need to teach so many other subjects. George Marshall might have expressed considerable surprise and even replied that one cannot afford "not to teach Thucydides, if one were interested in strategy."³³

In most cases, peripheral subjects, like management, leadership (of civilian corporations), international relations, and career and financial planning continue to dominate too large a portion of the curricula at staff and war colleges. Nevertheless, there is much to be learned from examining what is actually occurring in the PME institutions, since no coherent, broad evaluation has occurred since the Skelton Panel nearly two decades ago. Only a detailed examination of the syllabi of PME institutions could make clear the extent to which the focus on the fundamental issues that such institutions are supposed to address has been diluted.³⁴ Thus, I would urge the committee to make as detailed an examination of the staff and war colleges as its

³² Here the author must warn those who read this document that his comments on the general landscape of PME reflect discussions with a number of graduates of those institutions as well as some faculty members, but do not rest on a thorough examination of the curricula, reading and writing assignments, and course design of the staff and war colleges. Much work in this regard needs to be done in this regard, before one can render an honest and thorough report on the general state of professional military education.

³³ In an address given at Princeton University in March 1947, General Marshall noted that he doubted "whether a man can think with full wisdom and with conviction regarding certain of the basic issues today who has not reviewed in his mind the period of the Peloponnesian War and the fall of Athens." Quoted in W. Robert Conner, *Thucydides* (Princeton: Princeton University Press, 1984), p. 3.

³⁴ On occasion members of the Joint Staff have examined the curricula of the war and staff colleges for their "jointness," but in such cases, their emphasis has been entirely on useless criteria such as the number of hours devoted to subjects such as joint operations rather than the content of what is being taught.

predecessor did in the late 1980s.

Since the Turner reforms, the Naval War College has maintained a graduate level curriculum. But to do so, it has limited the focus of the curriculum to three subjects: strategy and policy; joint operations; and national security defense management. In doing so, it reflects an approach that recognizes the fundamental basis of graduate education for the study of subjects in the liberal arts such as strategic studies, military history, and international relations: there are only a limited number of subjects that an individual can absorb and understand in depth over the course of an academic year. The Naval War College still remains the premier institution of all the institutions devoted to professional military education. Its strategy and policy course best represents the approach that graduate schools should follow in teaching courses on the subjects of war and strategy.

I would also suggest that one the most important aspects of professional military education must lie in a willingness to send our most outstanding officers to the major graduate schools of military history, war studies, and strategic studies in the United States, Canada, and the United Kingdom. The intellectual excellence as well as outstanding operational performance of generals and admirals like Don Holder, James Stravidis, Dennis Blair, David Patreaus, and H.R. McMaster underlines the value of postgraduate education in forming the minds and perception of many of the most outstanding senior officers in the American military today.

It would seem that the services and their personnel systems should manifest a greater

willingness to provide such opportunities to their most outstanding officers. Admittedly, the pressures of ongoing operations and the many different gates, command, joint, training, etc., make it difficult for officers to seek and be selected for such educational assignments. Again, let me emphasize, a more effective system of professional education that allows such opportunities will require a fundamental rethinking and reform of a personnel system that rests on the philosophy of the industrial age legislation of 1947 and 1954. It would also demand some substantial changes in service cultures, because the present personnel laws do permit exceptions, which the services all too often are unwilling to utilize.

The Intrusion of the Real World

Let me end with several broad points on the problems that the education of America's officer corps confronts at present.

1) Above all Congress needs to fund a sufficient overage of officers at all grades to allow them sufficient time for serious study without penalty either to their careers or to operational requirements. It should also revisit mandatory retirement ages.

2) The enormous operational commitments of our military have created an enormous tension in the career progression that officers must follow. There are quite simply a plethora of hurdles that officers must follow that make it extremely difficult for officers to prepare themselves for the operational, much less the strategic and political challenges of the twenty-first

century. Congress needs to find mechanisms to allow the most outstanding officers greater and more demanding educational opportunities.

3) In many respects, the system of professional military is seriously underfunded. The schools need increases in funding to allow them to bring in a wider array of speakers and to insure the quality of faculty.

4) The presidents and commandants of the various schools need to be far more carefully selected than in the past. These academic leadership positions need to go to individuals with an outstanding background in operations and with serious educational and academic credentials. The situation that occurred a decade ago when a general officer with a doctorate in military history, extensive operational background, and three years as head of a war college was not selected to be the president of National Defense University is all too symptomatic of a system which regards the leadership of pme institutions as of little importance.

5) The services need to make professional military education integral to a greater extent than presently to each officer's career from pre-commissioning activities through to his or her last assignments.

6) The personnel systems as they are presently organized and run represent a major hurdle to the creation of an effective system of professional military education that allows some of the best officers in the American military to expand their intellectual horizons. The problems,

however, are often the result of service cultures rather than the legal framework. Here real reform cannot be legislated. Rather, it requires a real effort to change the prevailing culture within the American military.

7) In conclusion, I would urge that this committee carry out as thorough and complete an examination of the current systems of professional military education as Representative Ike Skelton's subcommittee executed in the late 1980s. And here you will have the advantage of possessing a first-class road map, the 1989 report, to examine what the services and the joint world have done, or not done in response to the report of that subcommittee.