

**EDUCATING INTERNATIONAL SECURITY PRACTITIONERS:
PREPARING TO FACE THE DEMANDS OF THE 21st CENTURY
INTERNATIONAL SECURITY ENVIRONMENT**

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Abstract The authors examine the challenges of the 21st century international security environment to which future strategic leaders and policy practitioners will need to respond. More specifically, they offer the reader insights into security studies and leadership development at their respective levels (military undergraduate, civilian undergraduate, traditional and nontraditional graduate, and senior military officer) and institutions (including research centers and professional outreach programs). The goal is to inform a broader audience about what is currently being done in the way of educating strategic practitioners at these various institutions, and what might need to be done differently or better.		
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FOREWORD

The end of the Cold War brought challenges not only for practitioners of national security policy and strategy but for those involved in the education and development of future strategic leaders and security policy practitioners. One of the primary contributors to this book, Professor James M. Smith of the U.S. Air Force Academy, launched this project in initial conversations in 1996-97 with Brigadier General Daniel J. Kaufman of the U.S. Military Academy, Dr. Robert L. Wendzel of the Air War College, and Colonel Jeffrey D. McCausland of the U.S. Army War College. All four shared a concern about the future of security studies generally, but especially about the education and development of military officers as future strategic leaders.

The contributors to this book who were teaching and conducting research at military institutions saw a requirement for more and better security and strategy education for senior leaders following the end of the Cold War. They also saw a general national decline in emphasis and resources outside DoD, and a new operational focus within DoD that threatened the delivery of that improved strategic focus. And they shared a vision of how their various levels and programs could come together to advance the continuing development of strategic leaders for the Army and the Air Force. They added a civilian perspective to expand the focus to strategic practitioners generally.

This book contains the results of their reflection and analysis. The authors examine, albeit generally, the challenges of the 21st century international security environment to which future strategic leaders and policy practitioners will need to respond. More specifically, they offer the reader insights into security studies and leadership development at their respective levels (military undergraduate, civilian undergraduate, traditional and nontraditional graduate, and senior military officer) and institutions (including research centers and professional outreach programs). The goal is to inform a broader audience about what is currently being done to educate strategic practitioners at these various institutions, and what might need to be done differently or better. The Strategic Studies Institute is pleased to offer this publication in the hope that it will stimulate others to think about how we can work toward the continual improvement of our educational initiatives to prepare the students of today (at all levels) to assume the strategic leadership roles of tomorrow.

DOUGLAS C. LOVELACE, JR.
Director
Strategic Studies Institute

CHAPTER 1

EDUCATING INTERNATIONAL SECURITY PRACTITIONERS: PREPARING TO FACE THE DEMANDS OF THE 21st CENTURY INTERNATIONAL SECURITY ENVIRONMENT

James M. Smith

In 1984 Theodore J. Crackel wrote, in an insightful article in the journal, *The Public Interest*,

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.¹

Crackel's point was made for the Cold War-era military, and its focus was couched 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 international security policy implementation and educating senior officers for their international security policy formulation and oversight roles are the "bookends" of the cross-career development of Commanders, Chiefs, Commanders-in-Chief (CINCs), and Chairmen. "Making lieutenants" includes establishing a solid foundation of knowledge and skills in international security upon which the officer can build across a career. And "making colonels" involves synthesizing their accumulated experiences and preparing them to take the next step up to active roles within the international security policy process.

General (Retired) John R. Galvin both underscored and expanded on that theme in his call for the creation of "strategists" within the U.S. military.²

We need strategists. In the Army and 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,³ and it (usually) takes the input of juniors to help a senior strategist arrive at his conclusions.

Lieutenant General Richard Chilcoat further defined the competencies required of Crackel's colonel, Galvin's senior strategist, by defining the requirements to become a "master of the strategic art." He defined strategic art as:

*The skillful formulation, coordination, and application of ends (objectives), ways (courses of action), and means (supporting resources) to promote and defend the national interests.*⁴ [emphasis added]

Mastery of that strategic art, then, requires the complete integration and combination of "the three roles performed by the complete strategist: *strategic leader, strategic practitioner, and*

strategic theorist."⁵ The strategic leader coordinates ends, ways, and means; the strategic practitioner applies ends, ways, and means; while the strategic theorist formulates ways, ends and means, all to fulfill the requirements of U.S. national security.

And Galvin reaffirms the requirement to begin the preparation of strategists from the very beginning of an officer's military career. He states:

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.⁶

So it is clear that we need to build deep and broad political-military competencies toward the development of strategists. This was true 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 truer in the late 1980s when the provisions of Goldwater-Nichols placed the Chairman of the Joint Chiefs of Staff, and to only a slightly lesser degree the regional CINCs, in direct political-military advisory roles to the National Command Authority. And it is most true 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 analysis might take that a step further to claim that the requirement is for thinking doers—officers who are at once operationally expert and politically competent—for true masters of strategy.

The following four chapters present a range of proposals, each addressing a specific level or dimension of preparing strategists. The monographs were chartered to address the coincidence of increasing requirements for international security practitioner competencies—particularly within the U.S. military officer corps—and a decline in both participation and emphasis in the civilian academic and research security studies sector. The monographs were presented at the annual meeting of the International Studies Association in Washington, DC, in 1999. Together they address the formal professional military education of lieutenants and colonels, and they also address the contributions to strategist preparation found in civilian security education programs and in security research and outreach education.

Brigadier General Daniel J. Kaufman, Professor and Head of West Point's Department of Social Sciences when he wrote this paper and now West Point's Dean, begins by addressing the strategist preparation of lieutenants and other junior to mid-ranking officers. He overviews foundational education in international security studies as providing the base for a lifetime of service ranging from lieutenant to lieutenant general. To build that foundation, West Point provides security education and experience to three target audiences: the entire graduating class of cadets each year who receive a broad grounding in security studies; the subset of cadets who choose to major in, or take elective courses in, subjects such as political science, regional studies, and economics—courses that all relate in depth to security studies; and, significantly, the group of mid-ranking faculty who return to the Army each year after completing a graduate degree in and gaining several years of advanced immersion in security affairs. This final group is ready to move into command or specialist positions

directly advising senior leadership. West Point, then, provides foundational security education very closely consistent with the Galvin model of strategist development.

Professor Robert "Robin" Dorff, U.S. Army War College Department of National Security and Strategy, addresses taking the experienced colonels the last few steps toward effective practice of strategy in the evolving international security environment. The senior service college provides specific preparation for senior leadership and staff security policy positions. Its primary focus is on transitioning these colonels from operational-level thinking to embrace the strategic perspective. It also adapts them to the new face of strategic security practice by exposing them in detail to joint and senior civilian practitioners. The focus of education here is directly modeled on the Chilcoat concept of strategic mastery, with specific courses on strategic leadership, strategy, and practice.

It is critical to prepare both lieutenants and colonels, but strategist preparation also requires less formal mentorship (Chilcoat's strategic theorist's required competencies include teaching and mentoring the strategic art), as well as self-study across an officer's entire military career. As 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."⁷ One fundamental requirement to such support and nurturing is the provision of opportunities and materials.

Professor Linda Brady, Director of The Sam Nunn School of International Affairs, Georgia Institute of Technology, outlines both the contributions that civilian education programs can make to helping prepare international security practitioners and the contributions the civilian academic sector can make to defining and developing the field of study. Programs such as hers are adapting their curriculum content to changes in the international security environment, adding emphasis on emerging international actors such as international organizations, emerging security issues such as economics and technology, and adding emphasis to nonmilitary instruments of strategy as these continue to gain prominence in post-Cold War practice. They are also adapting to new students, now increasingly from nontraditional sectors such as international business, from technical majors such as computers, and reaching both down into the undergraduate community and up into the professional seeking continuing and enrichment education in security studies. Such programs offer the military advanced graduate education for security specialists, access to continuing education in security studies—this study increasingly available in distance education presentation—and detailed instructional materials and applications in new areas of emphasis such as the nexus of security policy and technology, as well as the increasing place of economics within security strategy. These advances arise from continuing research into the changing nature of international security.

Finally, Professor James M. Smith, Director of the U.S. Air Force (USAF) Institute for National Security Studies, located at the USAF Academy where he also teaches military strategic studies and national security studies, addresses the contributions of international security research and outreach education to preparing practitioners to meet the challenges of today and tomorrow. Research and outreach programs must face three often distinct "worlds." They must identify and pull forward still-relevant lessons from the relatively more predictable Cold War past; they must address and seek to clarify the ambiguity of the transition we currently face; and they must seek to shed light on alternative paths into the

darkness of uncertainty the future holds before us. Together these worlds present a dynamic and steep agenda for research and education. Research contributes to security studies by clarifying ambiguity, updating definitions and conceptions of the components of security, creating and extending knowledge in both old and new arenas, and testing and refining theory as a guide into the unknown, all to continually inform security policy as it evolves. Outreach programs then disseminate the results of the research by educating direct participants, informing and energizing the security debate among the knowledgeable public. This dissemination can serve to shape broader support and consensus for security strategy, foster an active security policy community to keep key issues on the agenda, and identify areas for future research and education. The emphasis here is both on product—immediately useful research products and educational outcomes—and on process—fostering and mentoring the continuing development of strategists and strategic knowledge.

All the authors were asked to address, at their level and for their category of program, issues such as the need for international security education, their intended audience, the competencies required of those practitioners today—particularly as these are changed from traditional programs at their level—any new methodologies particularly suited to delivery of their product to their audience, and where their program fits into the larger field of strategist development. Both the continuity and the variety of the points raised in the different essays underscore the dynamic nature and importance of this effort.

It is clear that the full range of educational programs designed to prepare international security practitioners must adapt their programs to the changing demands of the emerging international security environment. Formal reviews such as the 1989 House Armed Services Committee's Skelton Panel and the 1997 Center for Strategic and International Studies Cheney Study have begun to address broad directions for future military education. These reviews have identified issues such as matching education programs to the demands of the new international security environment; preparing for the technological demands of 2010; adapting education to the Revolution in Military Affairs and emerging informational requirements; and adjusting to the increased emphasis on joint and coalition military operations and to military operations other than war. Civilian programs must address many of these same concerns as they seek to prepare their students for policy formulation and assessment roles in this future environment.

Those studies and the chapters presented here only begin to address these issues at the practitioner/program director level across the range of national security education programs. They are intended as a foundation for further investigation and analysis, to anchor debate toward continuing update and review of the preparation of strategic professionals for the U.S. military and government. To borrow a thought from Chilcoat, they are "not intended to provide a[n] . . . ideal process for formulating or mastering strategic art." Their 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.⁸

ENDNOTES - CHAPTER 1

1. Theodore J. Crackel, "On the Making of Lieutenants and Colonels," *The Public Interest*, No. 76, Summer 1984, p. 18.

2. General John R. Galvin, "What's the Matter with Being a Strategist?" *Parameters*, Vol. XIX, No. 1, March 1989, pp. 2-10; reprinted in the Summer 1995 edition, Vol. XXV, No. 2, pp. 161-168. Page cites here are to the 1989 publication.

3. Galvin, p. 2.

4. Major General Richard A. Chilcoat, *Strategic Art: The New Discipline for 21st Century Leaders*, Carlisle Barracks, PA: Strategic Studies Institute, October 10, 1995, p. 3.

5. Chilcoat, p. 6.

6. Galvin, p. 10.

7. *Ibid.*, pp. 9-10.

8. Chilcoat, p. 1.

CHAPTER 2

MILITARY UNDERGRADUATE SECURITY EDUCATION FOR THE NEW MILLENNIUM

Daniel J. Kaufman

Introduction.

Whatever one might think about the nature of the post-Cold War international environment, one conclusion seems certain: the demands placed on the leaders of the nation's military services have grown in scope and complexity. These demands extend well beyond the traditional service responsibilities for fielding well-trained and equipped forces to carry out combat or other types of operations. Today, service members are engaged in a host of activities that range from teaching military officers in the nations of the former Soviet Union the role of the military in a democracy to enforcing sanctions against Iraq.

The brief history of the post-Cold War period has reinforced the need for military officers who are not only technically and tactically proficient, but well-versed in strategy, culture, information systems, and decisionmaking as well. How will the military services acquire such leaders? What should newly-commissioned officers know about national security affairs? The purpose of this chapter is to examine the role and desired nature of national security undergraduate education, focusing on the programs of the three major service academies.

The military services of the United States acquire their newly-commissioned officers from one of three sources: Officer Candidate School (OCS), the Reserve Officer Training Corps (ROTC), or the service academies. (A very small number of officers—usually specialists such as doctors—receive a direct commission.) Officer Candidate Schools are 13- to 14-week programs designed primarily to fill shortfalls in the officer corps, particularly during mobilizations in response to a national emergency. ROTC consists of 2- to 4-year programs in military instruction designed to supplement the undergraduate curriculum in civilian colleges and universities. The majority of new officers that enter the services each year are commissioned through ROTC. The service academies—the U.S. Military Academy at West Point, New York; the U.S. Naval Academy at Annapolis, Maryland; and the U.S. Air Force Academy at Colorado Springs, Colorado—are 4-year undergraduate degree granting programs that also include an intense program of military training and professional development in addition to the academic curriculum. Each academy provides approximately 900-1000 commissioned officers to its respective service each year. The focus of this chapter is on the national security education programs at the service academies. Every ROTC program requires study of military science; however, curricular requirements and content, to include those in security studies, are determined by the individual school.

National Security Education at the Undergraduate Level: Purpose, Focus, and Scope.

It seems clear that a national security education program at the undergraduate level is necessary for all three services. In fact, one could make a compelling argument that such a program is one of the reasons why West Point and its sister academies should continue to exist. If any undergraduates, anywhere, should study national security, it is surely cadets and midshipman at the federally-funded service academies.

The United States retains interests throughout the world, and threats to those interests have not disappeared with the collapse of the Soviet Union. In some measure, traditional threats remain. There are still states that oppose U.S. national interests in important regions of the world. The proliferation of modern military weaponry and the possible spread of weapons of mass destruction (WMD) have raised the potential costs of regional conflict. On another level, threats have become more diffuse, harder to define, and much more difficult to protect the citizenry against than they were during the Cold War. The spectrum of conflict is broader today, the risks more immediate, if less destructive. Chances that the world will be destroyed because of a superpower nuclear exchange have diminished dramatically, but chances that a city in the United States may face attack by a nuclear, biological, or chemical weapon at the hands of a rogue state or a substate actor, domestic or foreign, have increased even more dramatically. Concern for the protection of human rights has led the United States into areas of admittedly less than vital national interest, and this "moral imperative," as well as the responsibilities of leadership, promise no early reprieve from such engagements.

The purpose of an undergraduate education in national security studies should then be clear: to prepare graduates of the service academies for positions of responsibility in both operational and policymaking assignments. Service academy graduates will oversee the implementation of U.S. national security policy, develop the future capabilities that the defense of the United States and its allies will require, and contribute to the formulation of national security policy. Consequently, it is imperative that newly-commissioned officers understand current U.S. national interests and those of our allies, the threats to those interests, and the constraints on our ability to meet those threats. Given all of those factors, officers must be able to contribute to the development of national security strategy, now and for the future.

Any security education program should ensure that young officers understand the history of U.S. national security policy and the principles that have driven U.S. strategic choices in the past. They should be able to derive the theories and principles that will form the foundation for the future national security policy of the United States. The scope of this education should, in the words of West Point's Olin Professor of National Security Studies General (Retired) George Joulwan, "prepare them for challenges facing officers from the rank of Lieutenant to Lieutenant General." Those are the responsibilities that they will confront, from graduation day to the day some few of them retire as senior members of the Department of Defense, other Executive Branch agencies, and even the United States Congress.

Educating Future Leaders.

Foundations for a Lifetime of Service. An officer is an expert with specialized knowledge and skill in the direction, operation, and control of an organization whose primary function is the application of violence. However, officer expertise is much broader and more comprehensive than the act of fighting itself, and it is fostered through a continuous process of development. Just as law at its border merges into history, politics, economics, sociology, and psychology, so also does military expertise. Beyond these borders, military knowledge has frontiers on the natural sciences of chemistry, physics, and biology. An officer must understand the profession's relationship to these many other fields. Therefore, professional military education must begin with a broad, liberal, cultural background, which for the American officer traditionally has been the baccalaureate degree.

Undergraduate education is necessarily foundational in many respects. The academic programs at the three service academies provide not only a broad liberal education, they also prepare graduates for the professional environments in which all of them will serve. They do so by combining an extensive core curriculum with a majors program that supports study in depth of a chosen discipline. While the details of the core curricula at the three academies differ slightly, the purpose is the same: to provide the intellectual foundation needed to carry out the responsibilities of a commissioned officer in the decades ahead. Curricular design must answer two critical questions: First, what do we need our officers to be able to do in the future? Second, how does our curriculum contribute to the development of officers who reflect those attributes we deem important? What follows is a discussion of the specifics of the academic program at the U.S. Military Academy at West Point. The objectives and programs at the Air Force and Naval academies are essentially similar in design and scope. The intellectual and professional development programs at all three academies are derived from the two focal questions noted above.

The Military Academy describes its academic program not by specific courses but by the educational objectives that identify competencies essential for successful development and service as a professional officer. What does West Point expect of its academic program? What are the key outcome goals of its intellectual development program? The general educational goal of the U.S. Military Academy is clearly stated:

To enable its graduates to anticipate and respond effectively to the uncertainties of a changing technological, social, political, and economic world.¹

From this concept for intellectual development, the Military Academy derives a set of nine specific Academic Program Goals that address specific Army needs and reflect the attributes the Academy seeks to develop in its graduates. These goals are listed in Table 1.²

National Security Education: Three Classes Each Year.

The teaching of national security at West Point encompasses more than just a specific course in national security affairs. Each year the Military Academy graduates three "classes" of national security students. The first "class" is the obvious one, that is, every graduating cadet, regardless of academic major. The second class is a subset of the first. These are the graduates who chose to major in a specific field with a clear link to some aspect of what is

commonly thought to be the study of national security. The third and often overlooked “class” is comprised of those officers assigned to the West Point faculty following graduate study who complete their assignments as instructors and return to service in the field Army.³

Think and act creatively.
Understand and apply the mathematical, physical, and computer sciences to reason scientifically, solve quantitative problems, and use technology.
Use the engineering thought process by which mathematical and scientific facts and principles are applied to serve the needs of society.
Draw on an appreciation of culture to understand in a global context human behavior, achievement, and ideas.
Draw on an appreciation of history to understand in a global context human behavior, achievement, and ideas.
Understand patterns of human behavior, particularly how individuals, organizations, and societies pursue social, political, and economic goals.
Communicate, especially in writing, in precise language, correct sentences, and concise, coherent paragraphs---each communication evincing clear, critical thinking.
Recognize moral issues and apply ethical considerations in decisionmaking.
Demonstrate the capability for and willingness to pursue progressive and continued educational development.

Table 1. Academic Program Goals.

Every Cadet A National Security Studies Student. The contemporary debate over the study of national security is based on how broadly or how narrowly to define the term. For some, security studies are focused on the use of force to secure, defend, and advance national interests. Others broaden the term to incorporate the range of threats to national survival, stability, and sovereignty to include environmental hazards, domestic crime, economic growth, and questions of social justice.

West Point’s curriculum reflects an understanding of the need for a broad undergraduate education that instills the attributes listed in Table 1 without rejecting or subordinating the traditional elements of national security studies. The Military Academy’s aim is to provide a baccalaureate degree that first and foremost prepares its graduates for the unique demands of their chosen profession. The same is obviously true for the other service academies as well.

As it has been throughout its history, the West Point academic program is based on an extensive core curriculum. At one level, the core curriculum is the common “major” for every

graduate. Taken together, the 31 courses in the core constitute the means by which the Military Academy seeks to instill in every graduate the attributes contained in the Academic Program Goals. The specific structure of the core curriculum is detailed in Figure 1. As the data in the figure indicate, every cadet, regardless of academic major, must take four semesters of mathematics, two of physics, two of chemistry, one of terrain analysis, one of computer science, and five from one of seven engineering sequences (civil, mechanical, electrical, nuclear, computer science, environmental, systems). In the humanities and public affairs, every cadet must take 4 semesters of history, 3 of social sciences, 3 of English, 2 of behavioral sciences, 1 of philosophy, 2 of a foreign language, and 1 of constitutional law. The three required social sciences courses consist of 1 semester of American Politics, 1 of economics, and 1 of international relations. In addition to the 31 academic courses in the core curriculum, cadets must take four courses in military science and four year-long courses in physical education.

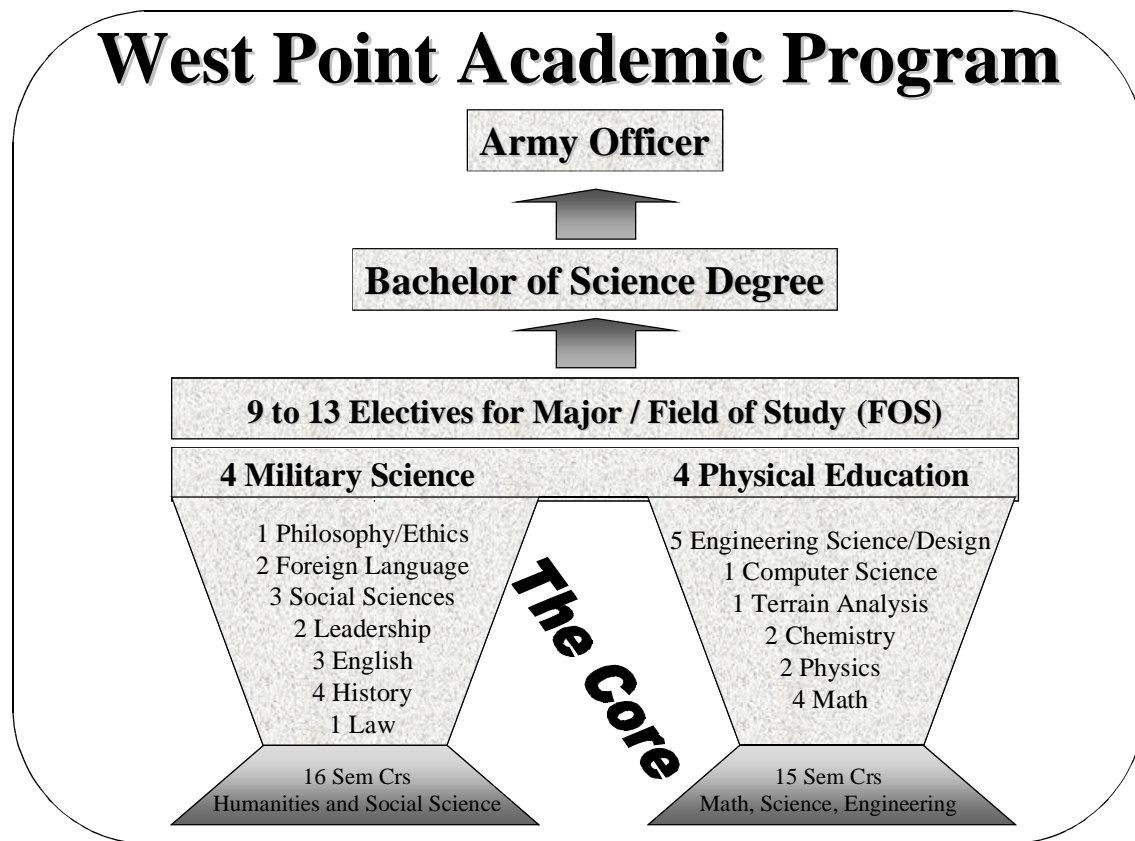


Figure 1.

The core curriculum is bound by belief in the importance of a truly common educational experience. Therefore, there are no special classes in physics for philosophy majors. Aeronautical engineers take the same core literature class as English majors. There is no “math for poets and lovers” at West Point. Cadets must master a range of common disciplines, all of which contribute to the goal of producing an educated citizen and a skilled public servant.

Many of the contributions of the core curriculum to national security education are obvious, while some are less so. The rigorous math, science, and engineering core curriculum ensures that graduates will be comfortable in the rapidly changing technological environment and that they will be proficient in the use of the modern weapons, communications, and logistical systems that will be an integral part of the U.S. military structure. Preparing for the technological demands of the next 20 years, accommodating the opportunities presented by information dominance, and adjusting to the operational imperatives of the revolution in military affairs require a level of technical education and competence that must be grounded in a solid foundation of undergraduate study in mathematics, science, and engineering.

The study of a foreign language results not only in the acquisition of a particular skill, but also in an appreciation for different cultures in general. History (American, world, and military) and behavioral sciences convey an appreciation for people and their development, as well as for the sources of conflict that seem an integral part of human society. Philosophy, English, and law provide a solid foundation in the philosophical roots of U.S. society and the unique constitutional responsibilities of commissioned officers in a democracy. The three core social sciences courses—American Politics, Economics, and International Relations—ensure that every cadet has a foundation in the study of national security issues and the processes involved in making both political and economic decisions concerning national security.

The American Politics course covers the philosophical roots of modern democracy, the Constitution, American political institutions, and the politics of making and implementing policy. Cadets address the most fundamental aspect of national security education, consideration of the processes by which this nation decides to use force to defend its interests. The core Economics course covers microeconomics, macroeconomics, and international economics. Cadets apply economic analysis to public policy issues and learn how the Department of Defense uses economic analysis to allocate scarce resources across competing demands.

The core course in International Relations focuses on two key questions: “Why do states do what they do?” and “How do international relations reflect cooperation and conflict?” Cadets consider these questions through classical realism and international systems explanations, as well from the perspectives of international political economy and the dynamics of internal, sub-systemic nation-state decisionmaking perspectives and processes. Cadets use these multiple theoretical “lenses” to improve their ability to analyze international events and to learn the importance and value of intellectual pluralism. Through the use of case studies, individual research and writing, and course exercises, cadets focus on questions of power, wealth, security, and stability. This course also serves as the capstone course for the Military Academy’s “cultural awareness” goal. In order to enhance cultural understanding, cadets choose and participate in a “mini-elective,” incorporated into the course, that focuses on a particular region of the world in which the cadet has an interest.

All cadets have the opportunity to apply what they have learned to real-world defense applications both in the classroom and in outside research programs. Classroom learning in

every discipline is supplemented with summertime Academic Individual Advanced Development (AIAD) opportunities.

Studying National Security in Depth. With 19 majors and an additional nine fields of study (normally interdisciplinary programs), West Point provides the opportunity for study in depth in a wide range of fields. Many, such as Strategic and International History or Military Art and Science clearly focus on important dimensions of national security. The regional studies program enables cadets to study the language, history, geography, and government and politics of areas such as Russia, Europe, Latin America, the Middle East, and China. Four majors programs—International Politics, Comparative Politics, American Politics, and Economics—are heavily oriented on the study of specific aspects of national security. The foundational courses in the core curriculum provide the basis for more advanced examinations of public policy, international relations, the economics of national security, and national and international security studies.

The majors in economics and the three political science stems are focused explicitly on questions of public policy, particularly as those questions relate to defense and national security affairs. For the political scientists, required courses in methodology, political theory, and comparative politics are followed by a wide range of electives. These include standard courses in legislative politics, bureaucratic politics, the presidency, regional studies courses, and international political economy. Economics majors must take courses in econometrics, microeconomics, macroeconomics, and international economics. Follow-on electives are available in a variety of subjects, ranging from finance and accounting to labor and manpower economics.

While the curriculum mirrors those of many other nationally recognized programs in some ways, there are two elements that distinguish it from others. First, all course work includes at least some consideration of national security issues as they relate to the specific course topic. This consideration does not come at the expense of the essential core material of the subject. It does, however, provide a focus for case studies and course research projects.

The second distinguishing characteristic of these programs is that they require every cadet to take at least one capstone course that explicitly deals with national security. Economics majors must take either the Economics of National Security course or the Defense Economics course taught by the Bernard Rogers Professor of the Economics of National Security. (The first endowed chair in the history of the Military Academy was created specifically for the study of defense economics). Political scientists can choose from Defense Politics, American Foreign Policy, International Security Studies, or the seminar taught by the John M. Olin Distinguished Professor of National Security Studies (currently General Barry McCaffrey, recently retired Director of the Office of National Drug Control Policy and former Commander-in-Chief of U.S. Southern Command). Additionally, every political science major at the Military Academy must take the senior-level course in National Security Studies. (Cadets in other courses of study may, and do, also take the course.)

Cadets focusing on national security issues also participate in summer AIAD experiences that complement their classroom learning. Cadets have the opportunity to serve abroad in U.S. embassies or with nongovernmental agencies throughout Africa, Asia, and nations of the former Soviet Union. Indeed, a cadet participating in the AIAD program was assigned to

the U.S. embassy in Nairobi, Kenya, when it was destroyed by a terrorist bomb. The cadet was decorated for her actions in the aftermath of that attack. Cadets also serve each summer in the Office of the Secretary of Defense, the Office of the Chairman of the Joint Chiefs of Staff, the Office of Management and Budget, and in various congressional offices, to name but a few. These experiences provide the basis for enhanced understanding of the dynamics at work in the international system, an environment in which they will be operating and leading after graduation.

By the time cadets reach their capstone courses, they should have a firm understanding of the liberal democratic values on which the United States was founded and in defense of which they will serve. They should then be ready to perform in-depth analyses of both the domestic and international environment in which security policy decisions must be made based on their knowledge of American strategic culture and the military's organizational cultures and the U.S. economic system. They will confront questions about the threats to U.S. interests in the present and in the foreseeable future, about U.S. membership in and interaction with alliances and international organizations, about the international economic system, and about the global impact of technology and the media on both the fragmentation and integration of states in the international system.

Knowledge of the dynamics of the U.S. national security decisionmaking process and of the system that produces national security policy will be put to the test when they evaluate the current state of readiness of the economic, diplomatic, and military tools of American national power to accomplish the objectives of state policy. They must be ready to evaluate and design both force structures and military strategies to put these tools of foreign policy to use in the interests of the common defense.

The conceptual framework for analyzing national security affairs employed at the Military Academy is contained in Figure 2. This framework supports the specific concepts that every cadet must understand upon completion of the program. The specific objectives for the national security studies program are as follows:

1. Understand the tension between U.S. interests and American values in national security policy.
2. Understand the principles of strategic thinking and the value of strategy for reconciling the challenges of the international environment with the constraints of the American political system.
3. Understand how to determine the degree of "vitalness" of national interests, recognizing the difficulties inherent in such endeavors.
4. Understand the various state and nonstate actors and global transformations that are causing both fragmentation and integration globally and presenting new types of security threats.
5. Understand the evolution of U.S. security strategy in the 20th century, focusing on lessons learned from instances of success and failure in past strategies.
6. Identify (using relevant criteria and analytical frameworks) future U.S. interests and the threats to those interests in various geographic regions.

7. Understand the role that political decision-making structures and processes play in affecting the development and implementation of national security policy.
8. Understand the capabilities and limitations of economic, diplomatic, and military instruments that contribute to national security.
9. Understand the role of force in the achievement of national political ends.
10. Understand how to integrate the instruments of U.S. power to most effectively address short- and long-term threats to U.S. national security.
11. Understand the implications of strategic alternatives to current force structure and doctrine.

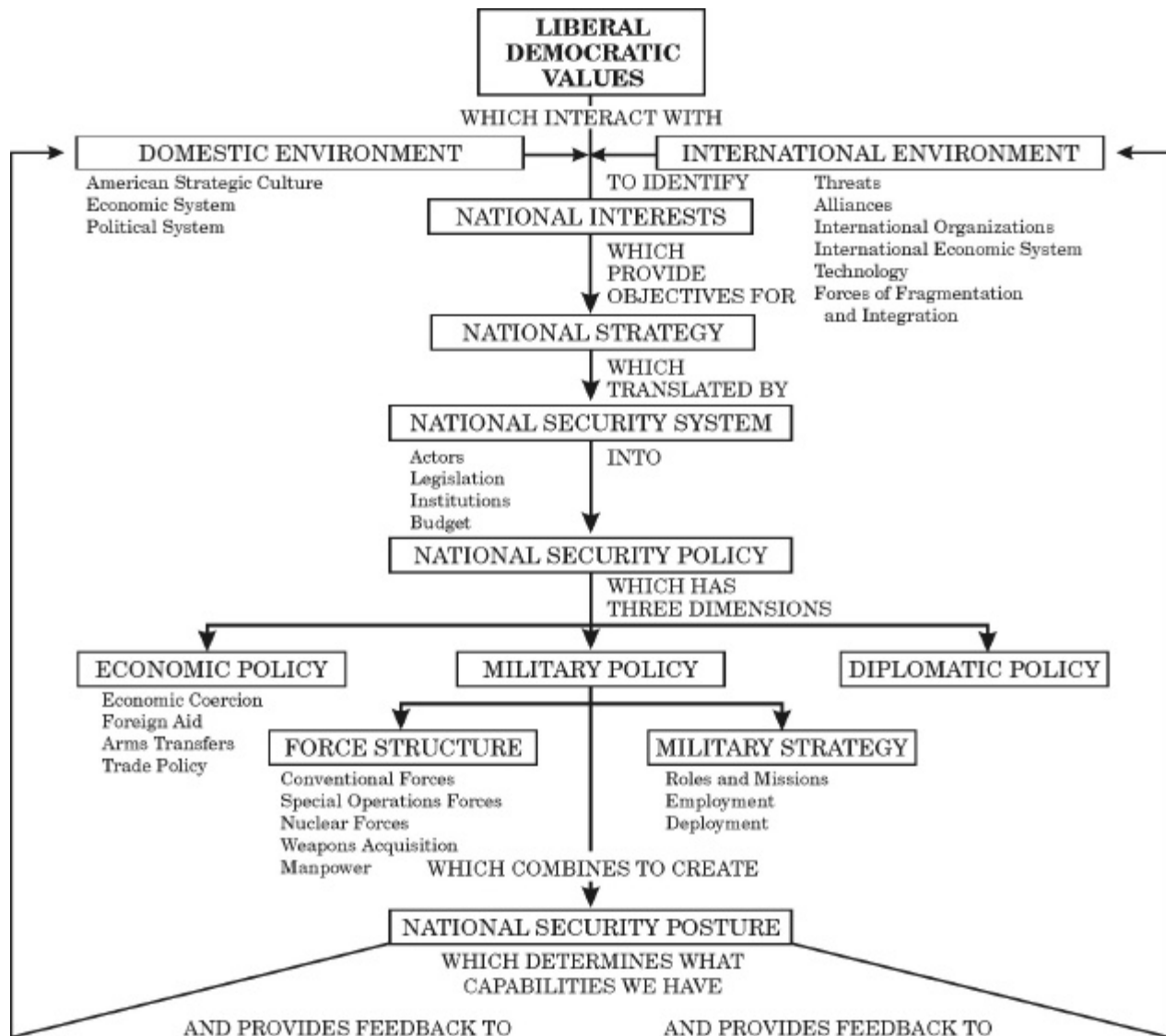


Figure 2. Framework for Analyzing National Security Policy.

Producing graduates able to meet the practical demands of national security policymaking and implementation will require a solid emphasis on all of these skill sets, but with a priority on the courses that require both oral and written analysis of current events through theoretical prisms and frameworks. Armed with these lenses with which to understand the world around them, those who focus on national security studies will be better prepared to contribute to the formulation of national security strategy.

Graduating Faculty. A third and often overlooked “class” that leaves the service academies each year is comprised of the junior military faculty members who are returning to their respective services after graduate school and a tour on the faculty. Normally, a junior officer selected to teach at a service academy spends 2 years at a top-flight graduate school (a few spend 3 years). Following graduate school in an appropriate discipline, they spend 3 years teaching, mentoring, counseling, and pursuing their own research agendas. Many use the tour to complete their doctoral dissertations, having achieved ABD status during their graduate school assignment. In addition to supporting cadet military instruction, faculty members have the opportunity to pursue their own professional development during the summer working in service headquarters in Washington or other relevant agencies throughout the country, or in some cases involving Foreign Area Officers, throughout the world. Junior faculty members also provide valuable research to service agencies on everything from weapons modernization to regional culture. The Institute for National Security Studies at the Air Force Academy sponsors research by faculty members at all three service academies. Research cells at West Point that include junior faculty members provide analysis and recommendations to the Army leadership on issues as varied as the use of artificial intelligence, resource allocation, and manpower recruiting and retention.

The combination of graduate school, teaching, and professional development activities ensures the continued and enhanced utility of junior faculty members for their services. Historical data support the conclusion that faculty members not only continue to contribute, but also that they enjoy a greater degree of professional success than do their peers. Many of the services’ senior leadership served as academy faculty members, and selection rates for promotion and key command assignments reflect the degree to which the services value the expertise that junior faculty members develop and nurture during and after an assignment to a service academy.⁴

Designing the Ideal Program in National Security Education Something Old, Something New . . . What would comprise an ideal program in national security education? How would it differ from the curricula of today? What part of that curriculum is traditional but retains relevance? What should we add that is new, and why is it needed?

An ideal program would build upon the foundation of the core curriculum to produce graduates who fully understand both their own country and the world in which it takes a leadership role. Thus, core courses in world and military history, political science, economics, international relations, English, foreign languages, and mathematics, science, and engineering retain great relevance for the future education of military officers. To this broad, liberal foundation, the ideal program would add required courses in:

- Comparative Politics
- Research Methodology

- International Relations Theories
- Terrorism*
- The Military in Politics
- U.S. Foreign Policy
- The Economics of U.S. National Security
- The Politics of Defense Policy
- International Organizations*
- U.S. National Security Studies
- Security in the Developing World
- Counterproliferation and Arms Control*
- Senior Thesis/Independent Research Project

*New Courses

Much of the list above is traditional, and courses in these subjects have been taught at the service academies for some time. As long as the primary mission of the U.S. Armed Forces remains to fight and win our nation's wars, and as long as interstate warfare remains a real threat in the international system, it is essential that the academic and professional development programs at the service academies prepare cadets and midshipmen for those possibilities. However, changes in the international security environment in the wake of the Cold War—most notably the increased U.S. involvement in multinational coalitions under the auspices of international organizations, the increased threat of terrorism against American citizens from both domestic and international actors, and the greatly increased threat of proliferation of weapons of mass destruction—would seem to necessitate the intellectual consideration of some new subject matter at the undergraduate level and the introduction of several new courses.

In light of the nature, variety, and location of the operations that the U.S. military services seem destined to conduct more or less routinely in the post-Cold War world, one of the most pressing needs of the armed services is for officers with an in-depth understanding of another region of the world. During the Cold War, the armed forces knew where the primary threat was and how to prepare; the disorder of the post-Cold War world means that the military services must be prepared to conduct operations ranging from humanitarian relief to theater-level war at any time, anywhere in the world. Thus, in addition to the courses listed above, cadets should take courses in both the language and politics of one of the following regions:

- Africa
- East Asia
- Russia and the Former Soviet Union
- Latin America

- Europe

Jointness. One of the areas that may well deserve increased emphasis in the precommissioning education of officers is that of joint operations. What should newly-commissioned officers know about joint operations? What are the most effective means by which to inculcate into young officers an appreciation for the fact that all U.S. military operations are likely to be joint and an understanding of the capabilities of their sister services?

The report of the Center for Strategic & International Studies (CSIS) Study Group on Professional Military Education (known as the Cheney Report, after the chair, former Secretary of Defense and now Vice President Dick Cheney) recommended that all precommissioning programs— ROTC, OCS, and the service academies—offer mandatory courses that introduce students to the operations and cultures of sister services.⁵ Some suggest that every cadet or midshipman spend at least one semester at another service academy. In fact, the service academies do have such an exchange program, although the number of participants is limited to about 20 in each class. The Air Force Academy has introduced a mandatory course in Joint Operations, and the subject is an integral part of the military science instruction at West Point and Annapolis. Summer military training programs also emphasize the joint nature of U.S. military operations, and include participation by representatives of other services where feasible.⁶ To date, there are no common standards for precommissioning education in joint operations. The adoption of such standards will require appropriate adjustments in the military science programs at the service academies and in ROTC.

Teaching Methodologies.

How can teachers best serve their audience and achieve the ends of our ideal curricula? West Point has long relied upon the Thayer Method of instruction: small classes, taught primarily by company-grade or junior field-grade officers who serve both as traditional college professors but also, and perhaps even more important, as role models for the young cadets they instruct. This approach should remain the foundation of instruction in national security studies. Small classrooms allow for one-on-one interaction between instructor and student, and among the students themselves. This opportunity for dialogue is especially important when debating questions for which there are no right answers; it encourages the development of the reasoning skills, analytic abilities, and proficiency in presentation that cadets will need when they are responsible for the formulation of policy in years to come. Cadets should continue to be held responsible for mastering the material in high-level seminars before class attendance; that time can then be put to use debating nuances and implications with peers and instructors. The educational value of requiring cadets to make presentations cannot be overemphasized; the sooner they learn to craft cogent presentations, the more effective they will be as staff officers and as policymakers and advisors.

Small seminars should be supplemented by lectures from experts in the field, invited to share their perspectives and experiences with cadets. These speakers serve as role models in a different way than do officer instructors; they can present a firsthand view of policy formulation at the highest levels, enlightening and encouraging those who will be responsible for carrying it out on the ground, at least early in their careers.

The proliferation of information technology raises interesting new possibilities in the classroom. Experience to date indicates that, while internet access is essential to national security education, it is possible to overuse technology in the classroom; the medium must not become the message. Only a few years ago, the “advanced technology classroom of the future” was perceived to be one where every student was wired to a computer and the internet, madly searching for and retrieving information from an endless variety of sources. Experience has taught that just the opposite is true; the information revolution has reinforced the critical role of the instructor in the classroom. Information searches can and must be done outside of class, but the classroom must be the site of critical thinking and analysis. Web sites, videos, and PowerPoint presentations that can be projected onto a screen allow for the rapid transfer of information and serve to maintain student interest. Nonetheless, human interaction is the core of the undergraduate learning experience. Debating policy issues in small groups is not only the best way to sharpen young minds, it is also the best possible preparation for their future roles as policy and decisionmakers. Simulations and role-playing, especially when supported by film clips of present or past national security issues, similarly help to develop the skills and the mindset that the service academies seek to inculcate in their graduates.

The “Locus” of Security Studies.

Where does the study of national and international security fit into current education programs at the undergraduate level? Should security studies be a separate interdisciplinary field, or is it more properly a subset of international relations, or a series of semi-connected courses under international relations, IPE (international political economy), etc.?

International Relations was created as a discipline to answer the question of “what causes war and how can we minimize the chances of war occurring and its destructiveness when it does?” Security studies, which answer if not those first-order questions then second-order questions derived from them, is clearly a subfield of international relations, and arguably the most important subfield of international relations. Although IPE has some important insights into both the causes of war and peace and proper and possible choices about national security policy, it is not fundamentally about power and war, the subjects of international relations—and of national security policy. While a complete discussion of the views on what properly constitutes security studies in the post-Cold War world is beyond the scope of this chapter, Richard Betts’ insightful essay on the importance of strategic studies supports the notion that security studies is appropriately thought of a sub-field of international relations.⁷ On the issue of the “content” of security studies, Betts posits a subfield of three concentric circles. At the core is *military science*, which is concerned with how technology, organization, and tactics combine to win battles. In the middle ring lies *strategic studies*, which focuses on how political ends and military means interact under social, economic, and other constraints. The outer, most inclusive ring is *security studies*, which considers everything that bears on the safety of a polity.⁸ In practice, of course, the dividing lines between the circles will never be clear, although the typology does impose some discipline on the considerations of what properly constitutes security studies, a field that could potentially be boundless.

In the end, commissioned officers who lead the nation's military services in the 21st century will need to be facile with technology and comfortable with uncertainty and change. They will need to be attuned to the role culture plays in determining the structure and dynamics of the international system. Finally, they will need to be accomplished players in the fragmented decisionmaking environment that defines American pluralism. The educational programs at the service academies are designed to produce just such leaders for the nation, now and in the future.

ENDNOTES - CHAPTER 2

1. *Educating Army Leaders for the 21st Century*, Office of the Dean, United States Military Academy, West Point, NY, 1998, p. 9.

2. *Ibid.*

3. For a more complete discussion of these issues, see Daniel J. Kaufman and Jay M. Parker, "Teaching National Security at West Point: More than Just One Course," *National Security Studies Quarterly*, Vol. III, Issue 4, Autumn 1997, pp. 25-38.

4. Former members of the West Point faculty include General Eric Shinseki, Chief of Staff of the Army; Lieutenant General Thomas Burnette, Deputy Commander-in-Chief, Joint Forces Command; Lieutenant General David Ohle, Deputy Chief of Staff of the Army for Personnel; Lieutenant General Paul Kern, Director of Army Research and Development; Lieutenant General (retired) Richard Chilcoat, former President, National Defense University; General (retired) Barry McCaffrey, Director of the Office of National Drug Control Policy; General (retired) Jack Galvin, former Commander-in-Chief, Southern Command and then Supreme Allied Commander, Europe; General (retired) George Joulwan, former Commander-in-Chief, Southern Command, and then Supreme Allied Commander, Europe; and General (retired) Wesley Clark, former Commander-in-Chief, Southern Command, and then Supreme Allied Commander, Europe; to name but a few.

5. Center for Strategic and International Studies, *Professional Military Education: An Asset for Peace and Progress*, March 1997, p. 37.

6. For instance, the author participated in an airmobile operation last summer in which West Point cadets were transported by U.S. Marine Corps helicopters. U.S. Navy ships dock at West Point routinely, where they are visited by cadets, who receive instruction on their operations and capabilities. The National Security Studies course visits the Navy base at New London, where cadets visit submarines and other naval vessels. There are 13 Air Force officers assigned to the staff and faculty at West Point, and a like number of Army officers are assigned to the Air Force Academy.

7. Richard K. Betts, "Should Strategic Studies Survive?" *World Politics*, Vol. 50, October 1997, p. 10.

8. *Ibid.*, p. 9.

CHAPTER 3

PROFESSIONAL MILITARY SECURITY EDUCATION: THE VIEW FROM A SENIOR SERVICE COLLEGE

Robert H. "Robin" Dorff

There is little doubt that the international security environment of the 21st century is significantly different from the Cold War environment that preceded it. Analysts and pundits alike have struggled mightily to identify the critical dimensions of that environment and their implications for U.S. national security policy. But this changing security environment has equally important implications for how we teach international security, especially when our students are primarily practitioners. For the tools and techniques we teach and study today may have a great deal of influence on how well those practitioners are able to deal with the challenges and opportunities of this still-emerging security environment. The fact that we do not yet have a convenient label for this new era highlights our inability to come to grips fundamentally with its defining characteristics. Simply calling it the "post-Cold War era" tells us only that it came "after" something, and begs the important questions of how it is both similar to and different from the era that preceded it.

But the purpose of this chapter is not to answer those important, and indeed fundamental, questions. Although I wish I had enduring answers to them, I do not. Consequently, I shall concentrate instead on raising and discussing some general questions about international security education. In the process, I will also point to what I think are some of the critical dimensions of the new security environment that reflect both continuity and change when compared to the era immediately preceding this one. But I shall do so only in the context of trying to highlight what it is that security studies need to focus on in order to prepare the practitioners of today for wrestling with the policy problems they are likely to face tomorrow. Moreover, I shall do so by focusing on the institution I know best because it is where I teach—the "Senior Service College" (SSC) generally and the United States Army War College (USAWC) specifically.

The Senior Service College.

The SSC represents the culminating point of the professional military education program for most military officers. Although courses offered at other institutions continue to provide opportunities for additional learning beyond the SSC level, very few military officers will have the opportunity to attend. For example, those selected for General Officer will attend CAPSTONE and some that go to the Joint Staff will attend the Program for Joint Education (JPE) Phase 2 course at Norfolk.¹ Consequently, for most students the SSC affords one last opportunity to pursue a broad and general education in national security affairs, leadership, and strategic-level theater operations prior to tackling their post-battalion command careers. While some of those students may in fact go on to command brigades, and some may even go to combat commands, most of the graduating officers finish out their military careers in high-level staff positions. The SSC experience is designed primarily to prepare them for those future assignments, not so much by training them for their next assignment as by

preparing them to learn and adapt along the way. In short, it is a curriculum designed to develop their skills in how to think, not what to think. In addition to the USAWC where I teach, the other SSCs are the Naval War College, the Air War College, the National War College, the Marine War College, and the Industrial College of the Armed Forces.² The remainder of my comments will focus on the USAWC, and, while many of the observations would hold true across all of the SSCs, I will not try to generalize beyond the immediate confines of the institution with which I am most familiar.

Another way of illustrating just where the SSC generally and the USAWC specifically fit in the overall education of the student draws on the familiar conceptual framework of the levels of war (Figure 3). The three levels of war are the tactical, the operational, and the strategic. One can view them as partially overlapping circles arranged vertically from the lowest level (tactical) to the highest level (strategic). Figure 3 shows these overlapping levels on the left, the primary foci associated with each level in the middle, and the relationship among the Army teaching institutions on the right. The primary responsibility for the tactical level lies with the "basic" and "advanced courses." The focus is primarily on "division through platoon engagements." At the high end of the tactical level and overlapping with the operational level is the "Combined Arms Services Staff School" where "Corps Battles" are the primary focus (illustrating something of the overlap between the tactical and the operational levels, as well as the overlap between the institutional teaching responsibilities). The "Command and General Staff College" carries the primary responsibility for the mid- to high operational and low-strategic levels. Here the focus is primarily on "subordinate campaign plans" and "joint, services and combined operations." The USAWC covers some of the high operational levels, but it is the primary institution for the strategic level. Here the focus shifts to the high operational (theater strategy and campaign plans) and the strategic (nature of war, national security and national military strategies) levels. The overall progression of professional education is therefore designed to take the student from the basic tactical level through the high strategic level by the time they finish the program at the USAWC.

Let us now turn our attention more specifically to the USAWC. First, we should consider the mission statement because it provides a succinct overview of how we see our role in the overall education of the professional practitioners who are our students. The mission of the USAWC is:

To prepare selected military, civilian, and international leaders to assume strategic responsibilities in military and national security organizations; to educate students about the employment of landpower as part of a unified, joint, or multinational force in support of the national military strategy; to research operational and strategic issues; and to conduct outreach programs that benefit the USAWC, the U.S. Army, and the Nation.

Although the research and outreach functions are closely intertwined with the education functions, they are somewhat more peripheral to the focus of this chapter. So I will concentrate on education, and begin by looking at the students.

There are two primary groups of students who study at the USAWC. The Resident Program consists of those students selected to complete a roughly 10-month program of study while physically residing in Carlisle and attending seminars, classes, and supplemental programs at the College. There is also a Distance Education Program, which

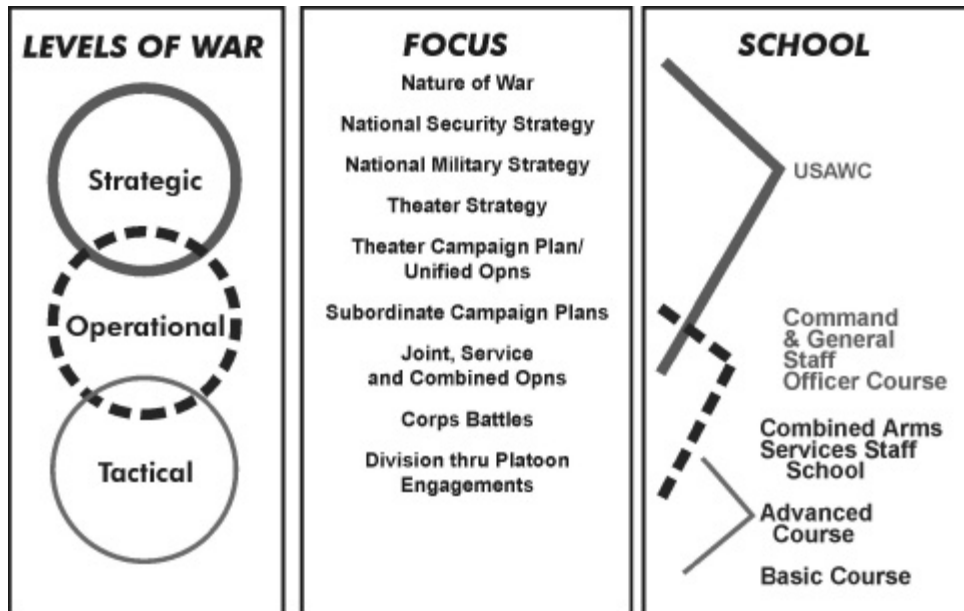


Figure 3. Army Leader Development.

has approximately 300 students in each class enrolled in a 2-year course that employs distance learning techniques and methods to fulfill the educational mission. The Distance Education Program also has a resident phase in each of the two summers, a feature that distinguishes it from the vast majority of distance education courses. Until recently this program was known as the Corresponding Studies Course. The USAWC has taken great care to ensure that the two groups of students receive fundamentally the same professional education. But obviously some differences exist because the teaching and learning techniques cannot be exactly the same. I shall therefore further limit my comments primarily to the Resident Program.

Each resident class consists of approximately 340 students. Of those, roughly 40 are military officers from foreign countries, 50 come from the sister services (Air Force, Navy, Marines, and Coast Guard), 35 come from the Reserve and Guard components, and 30 are civilians (Department of Army, Department of Defense, Department of State, Intelligence Community, etc.).³ Most of the students arrive as O-5s (Lieutenant Colonels). Some arrive as O-6s (Colonels), and a few of the foreign officers may have already attained the rank of General Officer. The civilian students are roughly equivalent in rank to their military counterparts, having attained similar levels of responsibility and authority in the civil service system.

In discussing the composition of the class, we encounter one of the ways in which the SSCs have already adapted to the new security environment—the student body itself reflects the changing environment in which the graduates will have to operate. Two characteristics of this environment show up in the class composition. The first is its increasingly joint composition, and the second is its increasingly civilian make-up. Prior to the 1986 Goldwater-Nichols Defense Department Reorganization Act most of the SSCs did not have the degree of jointness in their composition that we see today. And to some extent, the

individual curricula were geared more to the specific services.⁴ Today the students reflect the way in which most senior military leaders will have to work jointly with the other services and combined with our allies around the world. The fact that officers from other services and other nations attend the USAWC mirrors this important change. Moreover, an increasing number of our curriculum requirements come not from the Army *per se*, but from the Program for Joint Education (PJE). It no longer suffices to understand “how the Army runs” (a traditional service theme at the SSC); one must understand “how the Army runs in the joint and combined world.” In addition, the post-Cold War downsizing of the military and the changing nature of military operations (to include many more interfaces with civilian-run operations) virtually ensure that our military leaders must necessarily interact more often and across a wider spectrum of issues with their civilian counterparts. The demographics of the Resident class better reflect these realities of that changing security environment.

Many of our military students will soon hold leadership positions (command and/or staff) that require analysis, policy options, prescriptive recommendations, and program implementation for complex problems in a joint (service), combined (allies and partners), interagency (political-military), global environment. And most of our civilian students will soon hold leadership positions that will require regular and frequent contact with, and the ability to work effectively with, their military counterparts. We design our curriculum with these kinds of practitioners in mind. One personal experience serves perfectly to illustrate this point. On a recent visit to a foreign country, I was hosted by a former student who was then serving as the U.S. Consul General. He returned home one evening anxious to describe a specific event from that especially busy day. He had been called on by a German Brigadier General who was to head up NATO civil operations in Bosnia. The discussion not surprisingly had ranged over a wide variety of issues, including the military operational side as well as the humanitarian dimensions. From issues dealing with deployment to rules of engagement, and, of course, including the political-diplomatic dimensions of those issues, this former student had felt completely at home in his one-on-one discussion with the General. He observed that his year at USAWC had helped prepare him for just that kind of encounter.

Earlier we used the levels of war to illustrate the relationship among the various military educational institutions. Another contemporary example draws on this same framework and helps demonstrate yet another way in which the international security environment has changed, and the role that professional education plays in preparing practitioners to deal with it. Consider the young soldier guarding a bridge in Bosnia during the post-Dayton implementation phase. On the one hand, this is a “purely tactical” assignment—guarding the bridge—and this soldier knows his responsibilities and the procedures very well. Yet now consider that he must carry out this assignment with television lights glaring and the CNN cameras rolling. What at one time might have been a “purely tactical” operation now has the very real potential to influence not only the operational but also the strategic level. A mishandled checkpoint engagement, suddenly made visible to the entire world, might easily escalate tensions in another area of operations or even lead to failures in ongoing high-level negotiations. So in today’s complex security environment, we see an increasing blurring of the distinctions across these levels and dimensions. Combined with the significantly condensed time frames within which events take place and responses are required, this blurring has tremendous significance for how we educate our international security

practitioners. For one thing, the “compartmentalization of skills” so typical of earlier training and education (civilian as well as military) is less and less adequate for the roles and responsibilities today’s security practitioners and certainly senior military leaders must assume. Our curriculum and our teaching/learning techniques must adapt in order to address those kinds of changes. I believe they have, and that they will continue to adapt as we move further into this new century. I will come back to this shortly.

What the International Security Practitioner Needs.

Although I wish to keep this discussion pitched at a general level, we must consider at least briefly the kinds of skills, knowledge, and capabilities that the practitioner will need to have in order to operate successfully in the 21st century security environment. Drawing on a monograph published by a previous Commandant of the USAWC, let me suggest that what is needed generally is the ability to practice the “strategic art.”⁵ Major General Richard Chilcoat defines “strategic art” as “The skillful formulation, coordination and application of ends (objectives), ways (courses of action), and means (supporting resources) to promote and defend the national interests.”⁶ To practice the strategic art successfully further requires the integration of three related roles: strategic theorist, strategic leader, and strategic practitioner. At the risk of oversimplifying, these roles are associated with three core competencies or abilities. The first is the ability to think clearly and comprehensively about problems and issues for which there are rarely, if ever, obvious answers. In fact, most of the policy-relevant questions that arise in the contemporary strategic environment have far more than one answer. The second core competency is the ability to lead and manage in an organizational environment comprised of co-equals with significantly less hierarchy and “chain-of-command” than many of our leaders (civilian as well as military) have had in previously held positions. Leadership skills emphasizing vision and persuasion, effective small group organization, and the like take on added importance in such an environment. And finally, the third core competency is the ability to make things happen. This is especially important in the policy world perhaps best exemplified by the interagency process. Rarely does formal authority alone suffice for getting things done. Rather, success results from the skillful combination of the abilities to devise a sound and persuasive policy approach, to articulate the desirable qualities of that approach and convince others of it, and to usher that approach through the pitfalls and counterattacks of the highly pluralistic process. Our curriculum at the USAWC is designed to develop and draw out just these kinds of core competencies.⁷

The Curriculum.

Our core curriculum consists of four courses taught by faculty instructors from three departments. Generally speaking, the first course is about leadership, the second is about strategy,⁸ the third is about resourcing the strategy, and the fourth about fighting the strategy.⁸ The three departments are: the Department of Command, Leadership and Management (DCLM); the Department of National Security and Strategy (DNSS); and the Department of Military Strategy, Planning and Operations (DMSPPO). Given our earlier discussion, it should be apparent that DCLM is responsible for helping practitioners prepare for leadership roles in organizations that will increasingly require “peer leadership” skills (as opposed to command leadership in hierarchical organizations). Practitioners must also

understand the role of values and ethics in complex organizations, an enduring theme in the USAWC curriculum for which DCLM assumes the primary (though not exclusive) responsibility. DCLM also takes the lead role in teaching “how the Army runs in the joint world,” including the PPBS system. DNSS (the Department in which I teach) exposes students to strategy, international security studies, and the contemporary policy and policymaking environment. Finally, DMSPO provides the essential focus on strategic-level theater operations, with a strong emphasis on jointness. Time and space constraints do not allow for a detailed discussion of the entire curriculum, so I will concentrate instead on some of the significant changes in that curriculum that in turn reflect important changes in the national and international security environment. The challenges we face in adapting our curriculum to a changing environment can be illustrated by the following questions:

- 1) What is traditional course content but nonetheless retains relevance for the contemporary practitioner?
- 2) What is traditional course content that is no longer relevant and why?
- 3) What is new about the contemporary environment and why is it needed as course content?

The DCLM component of the curriculum has changed to reflect the changing nature of the command, leadership, and management environment noted earlier. This shows up most prominently in the attention given to the joint world and the increasing interaction with civilians. Because this is inherently a “peer leadership” world, one sees much more use of contemporary management and leadership techniques drawn from the civilian corporate world. Students at the USAWC today will study everything from creative and critical thinking techniques to personality-based, small group decisionmaking models. Studying how to provide effective leadership in today’s diverse and multicultural policy world is one area in which significant change in the curriculum has occurred. Similarly, the attention paid to jointness has increased substantially, just as the military world has become more joint. However, it is a mistake to think that jointness is simply presented as a given, with simple models for explaining how it works. Jointness at the USAWC is also raised for critical analysis, and serious questions arise as to how the promotion of jointness affects readiness, effectiveness, and the ability of the United States generally to apply its military instruments of power. A recurring theme in this regard is the issue of interservice rivalry, and its effects on budgets, procurement, and roles and missions (among other things). Obviously, the role of the Reserve and Guard components of our military services plays heavily in this discussion, too. Among the traditional course content that has remained largely the same is the continued emphasis on the historical study of strategic leaders, and the attempt to glean from that study the enduring principles of success and failure in that world.

The part of the curriculum I know best—the one that addresses U.S. national security strategy—is the one that has perhaps changed the most in response to the changing security environment brought about by the end of the Cold War. At the same time, because of its concentration on enduring issues and lessons drawn from the historical study of strategy and war, much of this piece of the curriculum reflects continuity with past approaches. So, the opening block of the DNSS core course may at first blush appear to have changed very little in the past several years. Students examine fundamental characteristics of international

relations and the behavior of nation-states and other actors in the international system. They look at what causes war, and why those causes may be more or less enduring. An examination of how one formulates strategy, and the application of a variety of instruments of national power to the pursuit of national objectives, rounds out this first block of study. For the most part, these issues and the lessons might be the same today as they were more than 15 years ago when the United States and the Soviet Union still confronted one another in a largely bipolar world. Yet subtle and important changes have occurred. Many of those changes derive from the fact that "strategic art" at the national level today requires the coordinated use of all the elements of national power, and perhaps somewhat less reliance on a single element such as the military. So, for example, we spend more time today examining the relative utility of military power as compared to economic power than we might have in the 1980s. We certainly have increased the attention paid to political economics, both domestic and international. We have also increased our focus on international institutions and non-state actors to reflect a significant enhancement of the roles played by these actors in the international security environment of the 21st century.

One obvious change is the significantly reduced time we spend studying strategic nuclear deterrence and U.S.-Soviet relations generally. While students still must wrestle with the logic (or illogic) of deterrence theory, we spend much less time focusing on the strategic balance between the two superpowers. Obviously, there are no longer two superpowers and much less interest in the balance *per se*. This is not to say that deterrence and nuclear weapons receive no attention; clearly they do. But what we emphasize is different. Today we are likely to examine the relevance of strategic deterrence for achieving conventional stability or for managing "rogue" nations and even terrorists, rather than viewing it as a way of simply keeping the Cold War "cold." Proliferation and the possible terrorist use of nuclear weapons receive significantly more attention today than do issues of the strategic nuclear balance.

Our attention to the domestic policymaking environment also retains elements of the traditional as well as the new. Surely one cannot understand U.S. national security policy without understanding the constitutional context, including the rules and the actors. That means studying the presidency and the Congress, and the constitutional "invitation to struggle" between those two preeminent branches of our federal government. But today it also means spending even more time trying to understand the vagaries of the interagency process, and the role and influence of the mass media on military matters specifically and national security policy generally.

One area that has on the surface changed very little is the amount of time in our curriculum devoted to the historical study of strategy. However, I would argue that in fact this surface-level view masks a greatly enhanced use and study of history in our curriculum. First, history is used much more throughout the year and across the curriculum than it might appear if one only adds up the individual lessons devoted specifically to history *per se*. Second, history has become even more relevant (if it were ever correct to say that it was less relevant) now that some of the unique qualities of the U.S.-Soviet confrontation have receded and the future starts to look more and more like the past (to paraphrase a popular but probably inaccurate contemporary shorthand). But it is certainly the case that we spend more time today exploring the classical writings on strategy, and examining the historical

cases of war (its causes, prosecution, and termination), than we did a relatively short time ago. The reasons lie largely in the way we try to place the current strategic period in an appropriate context, that is by pointing to the contemporary period as yet another example of a strategic pause. Arguably, we are in the midst of the third such major strategic transformation of the 20th century, with the periods following the end of the two world wars providing the first two. Given the uncertainties and profound implications for the future of such periods of change, it is hardly surprising that we spend more time today trying to push students to examine the past with even greater attention than in the recent past. Identifying and understanding critical elements of continuity and change are always the cornerstones of coming to grips with these periods of strategic pause, and the study of history helps us to do just that. Our military leaders are frequently (if not altogether accurately) accused of preparing to fight the past war again. Only through a careful examination of the past, with an emphasis on identifying enduring principles and themes, coupled with a serious study of the present, can we hope to avoid this pitfall.

Finally, it goes without saying that in the block devoted to the contemporary security environment we find the most change. But this is also a bit misleading on the surface. First, this block always changed the most because it focused on “current issues and events.” So in that sense, it really hasn’t changed all that much. If change is truly the only constant in our lives today, then this block has in fact remained quite constant. Second, the continuity exists in the fact that we look at the current national security strategy and national military strategy, and the relationship between the two. Although the two have changed considerably over the years, and especially so since the Cold War ended, the questions we raise endure. Do we have the proper objectives? Are the appropriate resources organized and applied in the most efficient ways to ensure success in the pursuit of those objectives? If not, why not? What is the appropriate role for the United States in the international system, and how should our national security strategy best reflect that role? It is no surprise that at this broadly strategic level the approach to educating our practitioners should remain quite continuous with past approaches.

I am much less qualified to address the elements of continuity and change in the way we teach the last course in our core curriculum except to reinforce the point made in more than one place earlier in this essay—the enhanced attention paid to jointness. The DMSPO course contains perhaps the most learning objectives and lesson requirements from the Program for Joint Education than any of the other three courses. From unity of effort and joint planning to joint support to the CINCs, this is a course that reflects significant adaptation to that important change in the security environment. Campaign planning also increasingly reflects the use of alliances and coalitions, and the requirements that come along with them. And of course, the burgeoning literature that is “Joint Doctrine” plays an important role in this part of the students’ core curriculum education. And yet perhaps the greatest change of all comes from the changing nature of military operations themselves, with an increasing number of “military operations other than war” now the rule rather than the exception. Students must understand the requirements for “major theater war” (MTW) as well as a variety of “small scale contingencies” (SSC).

And here we encounter what is increasingly a curriculum problem for all of us at the SSC level of professional education for the international security practitioner: the tension

between education and training. Most of us know the difference between the two, although we might not be able to offer neat and tidy little definitions that clearly lay out those differences. But education focuses on learning the enduring general principles that will inform good decisionmaking in a variety of contexts over long periods of time. It involves dialogue, analysis, and synthesis. Training, on the other hand, involves much more task-specific instruction on “how to” types of issues. Both are important, and each occupies an extremely valuable place in the world of the practitioner. But in a rapidly changing world such as the one in which we live today, the half-life of training is almost assuredly shrinking. To the extent that training competes with educating for scarce learning time, the tension grows and the potential opportunity costs increase. Finding the proper balance between the two is one of the greatest challenges we face at the SSC level. While senior military leaders still require training in the use of specific systems and organizational requirements, making room for that in the curriculum competes with the expanding coverage required in other areas. It is doubtful that the near future will see any easing in the tension inherent in this relationship.

Methods.

The primary teaching method we use at the USAWC is based on the adult learning model. In short, we learn from each other. We organize students into core seminar groups of 17. Two of those 17 students are officers from foreign countries. At least one of the students is a civilian. Each seminar has at least one air and sea component officer, and at least one Reserve or Guard officer. The remaining students are U.S. Army officers drawn from different branches in such a way as to create as much diversity as possible (combat arms, combat support, combat service support). Each seminar is diverse in other ways too, with at least one female and one minority student. The intent is clear: diversity in seminar composition enhances individual and group exposure to diverse views, opinions, and perspectives. The faculty members primarily serve as coordinators and facilitators of the learning process, not as sources of knowledge and wisdom *per se*. Active learning through discussion, dialogue, and debate characterize the approach, as opposed to more passive learning techniques such as lectures. While a considerable amount of attention is paid to theory and general principles, emphasis is almost always placed on the application of those theories and principles to practice (either historical or contemporary). Shared experience is a valued commodity in the typical seminar.

Of course, this kind of approach to education is not equally possible at all levels of learning. It is particularly well suited to our institution where the students on average are roughly 44 years of age, with 20 years of service behind them. All of them come here already having earned an undergraduate degree, and about 75 percent of them already have graduate degrees.¹⁰ Their age and years in service mean that they have a great deal to share and a wide range of experiences to draw on for applying “lessons learned.” They require significantly less structure and formality than many younger, less experienced students might. At the same time, many of them need to see the policy or job-related relevance of the subject matter before they will fully engage that subject matter. But a very high percentage of all the students are highly motivated self-starters, and hard chargers. Educating the international security practitioner at this stage of his or her career certainly has its challenges, but they are generally vastly outweighed by the enthusiasm and maturity that

the students bring to the seminar environment. In that sense, it is a truly unique teaching and learning environment, and general lessons and principles are hard to draw from our experiences to be applied at other levels of the educational process.

Conclusions.

Rather than summarizing what I have already covered in this chapter, let me conclude with some general remarks about where I think the SSC piece of the practitioner education process is headed. I begin with an observation: The quality of an individual's response in a crisis situation will be a function of the quality of the thinking conducted by that individual before the crisis ever arose. Training can help most in situations where specific steps and actions are replicated over and over again, and in that sense it can help our senior-level practitioners most in terms of processes (designing and implementing them). But training is of much less value when it comes to the thinking that must occur in the strategic-level practitioner's environment for which we are trying to prepare these individuals. Thinking is a function of experience—that which you have done before, or that which you have studied before. The broader the experiential base (direct and indirect), the greater the likelihood that good, sound analysis, planning, and action will occur. One does not necessarily get the right answers from having "been there and done that" or "been there and studied that," but one is much more likely to ask the right questions. And it is much easier to get to the "right" answers when one asks the right questions than when one fails in that first, all-important task.

Our role in educating international security practitioners at the SSC level is increasingly geared toward the "asking the right questions" approach to education. In effect, we are moving closer to what I would characterize as an "applied liberal arts graduate education model." In doing that, we are moving (and in my opinion should be moving) further away from a professional training model. Our graduates will only infrequently, if at all, be called upon to recite doctrine, procedures, and routines. Rather, they will be wrestling with issues and seeking answers for questions for which there are no clear solutions or answers, and indeed multiple and contending approaches and options. Moreover, the very process with which they will have to work will be similarly "ambiguous" in many ways (non-hierarchical, highly political, pluralistic, etc). What the curriculum needs to do is not prepare them for their next assignment, or even the "assignment-after-next." Instead it needs to prepare them to adapt, think on their feet, be flexible, and most of all, to think deeply and draw on a wide range of experience in order to sort out the best approaches, options, and processes for any given situation. In sum, we must prepare them to be strategic thinkers, leaders, and practitioners.

What does this imply in terms of international security as a field of study, at least from the SSC perspective? In my opinion international security is not and should not be a separate, interdisciplinary field of study. Rather, we should view it as the application of disciplinary thinking across disciplines to multidisciplinary challenges, problems, and issues. This is an important distinction. A separate interdisciplinary field of study would have its own literature, its own methods, and its own jargon. The successful practitioner of the "strategic art" who can simultaneously play the three roles we identified earlier will have grasped the fundamentals of the various disciplines that come into play (history, political science, military science, economics, and so on). Moreover, that successful practitioner will

have solid instincts about which dimensions are most important in a particular problem at a given point in time. I doubt that any two individuals so equipped would necessarily come at the same problem in the same way independently of each other. But I have every confidence that both would be able to work their way through the problem and have a high likelihood of succeeding because of the combination of education and experience they would bring to the process. In my view, that is the kind of “product” we should seek in our efforts to educate the international security practitioner of the 21st century.

Two leading scholars at Yale University made the following observation about the relationship between education and strategy today, and it serves to highlight the educational focus of the SSC curriculum:

The dominant trend within universities and the think tanks is toward ever-narrower specialization: a higher premium is placed on functioning deeply within a single field than broadly across several. And yet without some awareness of the whole—without some sense of how means converge to accomplish or to frustrate ends—there can be no strategy. And without strategy, there is only drift.¹¹

For senior leaders practicing the “strategic art” in the national security policy arena, such an “awareness of the whole” is essential. While no one curriculum or year of study can ensure that graduates will see the big picture, it can improve an individual’s ability to continue to learn and to ask the right questions. If we strive to improve how our students think, we just may be able to contribute to the quality of the future decisions they make and the advice they give. To the extent that this in turn contributes to the development of sound national strategy, our efforts to educate the international security practitioner of the 21st century will have been successful.

ENDNOTES – CHAPTER 3

1. A review of these courses and their content is beyond the scope of this essay.

2. There are two other programs closely related to the SSC, namely the War College Fellows and the Army Senior Fellows programs. Each year there are approximately 43 officers selected for the former program, which places the individuals in 1-year residency at leading universities in the United States and Canada. Students spend a year studying and conducting research on topics related to national security policy and strategy, and at the end of that year they receive the MEL-1 certification (just as the SSC graduates do). There are currently seven Army Senior Fellows placed in high-level “internships,” and they receive post-MEL-1 certification for their program.

3. The exact numbers vary each year, but they stay fairly close to these general numbers. For example, for AY2001 the total class size is 338. There are 42 foreign officers, 53 sister service officers, 37 Reserve and Guard officers (8 of whom are part of the sister services), and 31 civilians. There are 212 Army officers, of which 29 are Reserve or Guard.

4. ICAF and NDU are perhaps the exceptions, having in essence been highly “joint” from their inception.

5. See Richard A. Chilcoat, *Strategic Art: New Discipline for 21st Century Leaders*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1995.

6. *Ibid.*, p. iii.

7. Of course, that's much easier to say than do. I am only suggesting here that in our curriculum we strive to enhance those core competencies. How well we do is a matter of constant inquiry, evaluation, and adaptation.

8. Course 1 is entitled "Strategic Leadership." Course 2 is entitled "War, National Policy and Strategy." Course 3 is entitled "Joint Processes and Landpower Development." Course 4 is entitled "Implementing National Military Strategy." I hasten to point out, however, that all of the courses overlap in many respects, and the overall objective is to have the core competencies embedded in the entire curriculum and not simply taught as discrete topics.

9. This is also the same tension one sees today in undergraduate professional degree programs such as engineering and accounting. The professional societies that certify these programs continue to increase specific technical requirements (the "training" component), while the colleges and universities struggle to maintain some breadth in the undergraduate curriculum (such as humanities and social science electives or core courses). The result has often been a steady upward spiral in the number of hours required for graduation, with the net effect being that students can no longer realistically complete an undergraduate degree in these disciplines in a standard 4-year program.

10. In AY2001, 81 percent of the students arrived with graduate degrees.

11. Quoted in Thomas L. Friedman, *The Lexus and the Olive Tree*, New York: Farrar, Straus and Giroux, 1999, p. 21.

CHAPTER 4

PROFESSIONAL SCHOOLS OF INTERNATIONAL AFFAIRS: PREPARING NATIONAL SECURITY PRACTITIONERS FOR THE 21st CENTURY

Linda P. Brady

For the past decade, professional schools of international affairs have been in the process of reinventing international affairs education, in conjunction with a reexamination of the needs of business, government, and society for leaders and citizens who are prepared to deal with the challenges of the 21st century.¹ As we begin the new millennium, the international environment is characterized by the globalization of politics, economics, and communications, and the increasing dependence of each nation on developments and decisions made in others. These trends have influenced the direction of U.S. foreign and security policy and the rules and practices governing the interaction of nations, businesses, individuals, and transnational groups and organizations.²

Most professional schools of international affairs have reoriented their programs to address the growing needs of business and industry for leaders with an understanding of the global context of their enterprises. Many programs have incorporated techniques such as case studies that have been used routinely in other professional schools. Many also require or strongly recommend experiential education, primarily in the form of internships, to better prepare students for future careers. And most have revised their required coursework in response to the shift in the job market from a public sector to a private sector orientation.³

Reassessments of the field of national security studies have proceeded in parallel with the reexamination of international affairs education. The field has been in transition since the late 1980s, when the end of the Cold War and the breakup of the Soviet Union precipitated a reexamination of the field and questions about the continued relevance of curricula that had been developed during the Cold War.⁴ The field at that time was framed by a view of the world premised on the threat posed to Western interests by the Soviet Union, and the development of and reliance on nuclear weapons by both the United States and the Soviet Union, in defense of superpower interests.

The dissolution of the bipolar international system, the rise of nonstate actors and challenges to the sovereignty of the nation-state, the addition of nontraditional issues (such as the global environment, disease, and migration) to the security agenda, the information and communications revolution, and reliance on a broader repertoire of policy instruments all characterize the new international environment. These changes have important implications for the field of security studies. As I have indicated elsewhere, the proliferation of issues and actors, and questions surrounding the continued utility of military force, challenged the underpinnings of a field that had focused on a narrow range of actors, issues, and instruments during the Cold War.⁵

Some analysts have argued for a broader conception of security than that provided by the realist or neorealist perspectives on international affairs that dominated the field during the Cold War. This broader view would include threats posed by environmental problems, economic challenges, and migration along with traditional military threats to the security of nation-states. Others argue for a deeper agenda for the field, which would expand the focus on the security of nation-states to include individual or personal security and international or global security. What these challenges to the field have in common is a belief that the traditional focus on military threats to the security of the nation-state, originating outside of the country's borders, no longer captures the range of phenomena that demand explanation.⁶

An important dimension of this debate concerns the impact of the information and communications revolution on the field of national security studies. The role of CNN during the Persian Gulf War raised the media to the status of a major player in international affairs and a factor to be considered seriously in national security policymaking. The revolution in military affairs, which is tied closely to the information and communications revolution, has assumed a prominent place on the research agenda of national security scholars. The susceptibility of communications channels, including the Internet, to disruption by terrorist attack has increased attention devoted to the problem of cybersecurity. The latter issue has raised awareness in government and business circles about the vulnerability of America's information infrastructure to both external and internal threats and the necessity of joint public-private sector efforts to prevent and deter acts of "catastrophic terrorism."⁷

Reassessment of the field of national security studies is not limited to the unit or subject of analysis, but extends to analytical or theoretical approaches to understanding national security. The rational choice perspective which dominates much of the research in political science and international relations has been applied to the field of security studies. The use of formal models has been criticized by some scholars as having little practical value to policymakers, but has been demonstrated by others to have significant value in the policy world.⁸

Another approach to national security studies that has emerged since the end of the Cold War is described as "the new culturalism." This perspective assumes that national norms impact decisions made to acquire weapons systems and enter into alliance relationships, among other forms of strategic behavior.⁹ Critics point out the difficulty of defining and operationalizing cultural variables and the need to move beyond a focus on national culture.¹⁰

National security studies curricula have been adjusted to take into account many of these new international realities. At Georgetown University, for example, the National Security Studies Program of the Edmund A. Walsh School of Foreign Service has added courses on low-intensity conflict, conflict resolution and peacekeeping, transnational relations, and economic aspects of national security to the standard fare on defense and military policy. International communication and environmental policy are among the concentrations offered by the School of International Service at American University and the School of International and Public Affairs at Columbia University. Most of these programs strongly recommend or require internships to add a practical component to the coursework. And some—notably George Washington University's Elliott School of International Affairs and

Johns Hopkins' Paul H. Nitze School of Advanced International Studies—offer executive versions of their programs for working and/or mid-career professionals.

In summary, most national security studies programs have adapted their curricula to the changing international system and to the emergence of new theoretical and analytical perspectives on national security. Taking their lead from the broader international affairs programs within which most are embedded, the national security studies programs have expanded their course offerings to include a variety of actors, issues, and instruments. No longer focused strictly on American defense and military policy, many have added an explicitly comparative dimension to their offerings. Some have broadened their programs to include attention to nontraditional issues such as the environment, migration, and drug interdiction, but many remain focused on security more narrowly defined. A few programs have incorporated new theoretical and analytical perspectives into existing courses. Finally, some have also designed options that appeal to working professionals.

Are these curricula and program changes adequate responses to the needs of national security professionals in the 21st century? An answer to this question is linked to a changing conception of the national security professional and the knowledge, skills, and abilities these professionals will need to deal with the new national security challenges that are already upon us.

The New National Security Professionals.

During the 1960s, 1970s, and 1980s, most national security professionals were employed by governments, think tanks and research centers, and international governmental organizations. They tended to be white, overwhelmingly male, and educated in history, political science, or economics as undergraduates. Their careers were linear, and often self-contained in a single government agency. Most of those in government were employed by the federal government, rather than by state or local governments. With the exception of those in the foreign service, many were employed in the greater Washington, DC, area. Few moved between the public sector and the private sector in the course of their careers—with the exception of those who frequented the revolving door between think tanks and the federal government. Finally, few national security professionals returned to school for further education beyond the professional masters degree.

By the late 1990s, the nature, focus, and scope of work of national security practitioners was beginning to change in significant ways. While the majority of professionals in this field remain employed by governments, think tanks and research centers, and intergovernmental organizations, a growing number are employed by state or local governments and business and industry, including high-tech firms. Many are employed outside of the Washington, DC, area. A number are seeking further education, particularly at mid-career, to retool and adapt to the emerging security environment. Graduate students are being attracted to these programs from nontraditional undergraduate majors in management, engineering, computing, and the sciences. These changes have important implications for the kind of knowledge, skills, and abilities the new national security professionals will need in the 21st century, and for the content of the national security studies curriculum required to serve those needs.

Science, Technology, and the New National Security Curriculum.

Policy relevance traditionally has been central to the security studies community. This has been the case since the late 1940s and early 1950s, when the field of national security studies focused on the impact of nuclear weapons on security policy choices and international stability. In the 1960s, the literature on arms races, arms control, and crisis decisionmaking reflected the concern with policy relevance. The Vietnam War triggered greater emphasis on low-intensity conflict. By the 1980s, strategic defense and international terrorism had been added to the agenda. Drug interdiction, environmental security, and ethnic conflict emerged as major research foci by the mid-1990s. Students have always needed to engage a curriculum that is theoretically grounded, but that enables them, as working professionals, to offer insights on issues of grand strategy and current policy.¹¹

Technology has emerged as a significant consideration in the field of national security studies—as both subject matter and tool. As subject matter, technology permeates discussions of information warfare, information security, terrorism, and critical infrastructure protection. These issues demand the joint attention of policy analysts and technical experts, often linked through participation in interdisciplinary research centers.¹² As tool, technology offers new vehicles to deliver national security studies curricula, via distance learning and web-based programs. The latter serve the needs of place-bound students and facilitate mid-career executive and continuing education in this rapidly changing field.

Given the changing nature of the field of national security studies and the shifts in the identities of the new national security professionals noted above, what makes for a relevant national security education for the 21st century? What elements of traditional education in national security studies remain central to the new national security curriculum, and what new dimensions should be added?

The fundamental problems of conflict, crisis, and war remain central to the field, even though the conceptual framework within which these phenomena were understood during the Cold War was based on the superpower rivalry.¹³ Questions concerning the use of military force and the relationship between the military and civil society, particularly in an era characterized by the spread of democracy, also remain important components of the national security curriculum.

At the same time, there are ongoing debates within the field about the relevance of area studies or regional security studies. Several professional schools of international affairs have recently developed new degree programs that include national security or international security components, and do not require study of a foreign language.¹⁴ Some scholars have argued that a focus on problem solving and decisionmaking, with an emphasis on formal, game theoretic models, will provide a more policy relevant education for the future than one grounded in area or regional studies.¹⁵

National security studies programs should explore the relevance for their field of initiatives being undertaken by some professional schools of international affairs. Among the most innovative of these new programs are those that include science and technology as major components. For example, the Graduate School of International Relations and Pacific Studies at the University of California, San Diego, has designed a new Masters of

International Technology Management (MITM) that offers courses that address specific management and policy needs of scientists and engineers. Offered in cooperation with the UCSD School of Engineering, the program includes courses in science and engineering, as well as in decisionmaking, managerial economics, finance, accounting, entrepreneurship, and the politics of international economic relations.

Another example is the Global Innovation in Engineering Masters in Electrical Engineering program at Georgia Tech, which is a collaborative effort of the School of Electrical and Computer Engineering and the Sam Nunn School of International Affairs. Funded by the National Science Foundation, this pilot program includes courses in international and comparative politics, political economy, and science and technology policy, along with foreign language study and an overseas internship. The goal of this and similar initiatives is to educate the next generation of business executives and policymakers to deal with issues at the nexus of science, technology, and international affairs.

The new national security professionals may benefit from similar programs in national security studies in which science, technology, and policy are integrated into a curriculum that will prepare those professionals for security-related careers in both the private and public sectors. The strategy should be to embed an understanding of technology in the education of international affairs and national security studies students, and to embed an understanding of the comparative and international political, social, ethical, and economic dimensions of technology in the education of students in engineering, sciences, computing, and management.

Where the curriculum is based may vary, depending on the nature of the university and the primary thrust of the program. Professional schools of international affairs remain logical homes, particularly when linked with programs in engineering, science, computing, and management, but the alternative of locating national security programs in colleges of engineering, computing, or management should also be considered. The recruitment of students from nontraditional undergraduate programs in engineering, science, computing, and management may be facilitated through the development of joint degrees at the undergraduate level or 3-2 programs in which the B.S. in a technical or scientific field is combined with an M.A. or M.S. in international affairs or security studies.

The constant updating and retooling that is essential for national security professionals in today's world suggests the need for programs designed to support lifelong learning in this field. Many professional schools of international affairs currently offer executive, part-time, and/or evening versions of their programs, directed at mid-career professionals. For example, George Washington University's Elliott School of International Affairs offers a new 1-year mid-career masters program in International Policy and Practice. This program builds in the use of technology to enable students to network with other mid-career professionals around the globe. Courses are offered in the late afternoon and evening to accommodate working professionals in the Washington, DC, area. The growing need for mid-career professionals to expand their repertoire of analytical, technology-related, and modeling and simulation skills suggests an expanding market for these kinds of programs and for the use of technology as a means of delivery.

Conclusion.

We need to think creatively about both the content of the new national security curriculum and the means of delivery. Students clearly need exposure to an interdisciplinary academic curriculum focused on understanding the global context of technology that will prepare them to address national security concerns at the nexus of science, technology, and policy. They need to learn how to work in problem-solving teams, and to understand the perspectives brought to problems from different disciplines and professions. Achieving these goals requires that we build crosswalks between the worlds of science and technology, on the one hand, and the worlds of the social and policy sciences, on the other, and that we encourage students and faculty to walk these paths—in both directions. Finally, we should practice what we preach and incorporate technology more effectively into the delivery of national security studies programs.

ENDNOTES - CHAPTER 4

1. For information about the 22 member institutions and 14 affiliates of the Association of Professional Schools of International Affairs, see the APSIA web site at: <http://www.apsia.org>.

2. *Preparing Global Professionals for the New Century: Issues, Curricula and Strategies for International Affairs Education*, Michele Cisco Titi, ed., Washington, DC: Association of Professional Schools of International Affairs, November 1998.

3. *Ibid.*

4. Linda P. Brady, "On Paradigms and Policy Relevance: Reflections on the Future of Security Studies," *National Security Studies Quarterly*, Vol. III, Issue 4, Autumn 1997, pp. 2-3.

5. *Ibid.*, p. 203.

6. Keith Krause and Michael C. Williams, "Broadening the Agenda of Security Studies: Politics and Methods," *Mershon International Studies Review*, Vol. 40, October 1996, p. 230.

7. Ashton Carter, John Deutsch, and Philip Zelikow, "Combating Catastrophic Terrorism," *Foreign Affairs*, Vol. 77, No. 6, November/December 1998, pp. 80-94. Information security was the topic of the 1998 Sam Nunn Nations Bank Policy Forum held at Georgia Tech in Spring 1998. See the executive summary of that program titled "Information Security: Risks, Opportunities and the Bottom Line," available from the Sam Nunn School of International Affairs at Georgia Tech.

8. For an extended debate about the utility of this approach, see the collection of articles on "Formal Methods, Formal Complaints: Debating the Role of Rational Choice in Security Studies" in the Fall 1999 issue of *International Security*.

9. Examples of this approach include Peter J. Katzenstein, *Cultural Norms and National Security*, Ithaca, NY: Cornell University Press, 1996; and Colin S. Gray, "Strategic Culture as Context," *Review of International Studies*, Vol. 25, January 1999, pp. 49-69.

10. See Michael C. Desch, "Culture Clash: Assessing the Importance of Ideas in Security Studies," *International Security*, Vol. 23, Summer 1998, pp. 141-170, as an example of the critics of this approach.

11. Stephen M. Walt, "The Renaissance of Security Studies," *International Studies Quarterly*, Vol. 35, June 1991, pp. 211-239.

12. An example of this mechanism is the Georgia Tech Information Security Center, a collaborative effort of the Sam Nunn School of International Affairs, the College of Computing, the Georgia Tech Research Institute, and the Georgia Center for Advanced Telecommunications Technology.

13. Lawrence Freedman, "International Security: Changing Targets," *Foreign Policy*, Issue 110, Spring 1998, p. 57.

14. See, for example, programs offered by the Graduate School of International Relations and Pacific Studies at the University of California, San Diego.

15. Bruce Bueno de Mesquita, "Making Security Studies Relevant to Policymakers," *National Security Studies Quarterly*, Vol III, Issue 4, Autumn 1997, pp. 13-24.

CHAPTER 5

EDUCATING INTERNATIONAL SECURITY PRACTITIONERS: THE ROLE OF RESEARCH CENTERS AND PROFESSIONAL OUTREACH PROGRAMS

James M. Smith

International Security in a Time of Transition.

The world has changed! And so must our concepts and mechanisms of international security. Already we have witnessed decreasing national security allocations and emphasis—political, economic, and military—accompanied by significant force downsizing. We see international security practitioners refocusing to address a wider range of issues and conflicts in dozens of countries, many of which we had never paid any detailed attention to before. Combining these reduced resources and the widened plate of challenges, we see practitioners taking on roles of greatly increased responsibility, often at an age and experience level much lower than in at least the recent past.

As a result, the importance of education, research, and outreach—always important—has increased greatly. We must begin to understand and address the multitude of ambiguities and asymmetries if we are to outthink, as opposed to being forced solely to attempt to outgun, our rivals and adversaries. At base, if we are truly to shape this changing environment, to respond to its current and emerging difficulties, and prepare for its future challenges, we—meaning all of the wide range of international security practitioners within and outside of government—must first understand it. Thus, research must define the questions and find and chart the answers. And outreach education must share the results of that research across the entire network of interested parties.

This chapter, then, lays out the details of those roles for international security research and outreach education today and into the near- to mid-term future. It begins with a brief description of the three worlds, past, present, and future, in which research and outreach education must today reside. Then it details traditional roles of research and outreach education, emphasizing how they continue to apply or how they must be adapted for today's era of transition. It offers some current examples of ongoing security research and outreach within the Department of Defense. And, finally, it offers some recommendations for international security research and outreach education as we step forward onto this uncharted path.

Today's Three Worlds of International Security.

International security research and outreach today live in three worlds; the past, the present, and the future. Each must be addressed in designing and conducting research and outreach education programs. Which aspects of the past international security environment and of our policy, strategy, and organizational and force structures remain relevant and necessary today? How must or should they be modified to fit the current and projected worlds? What is new, different, and demanding of new forms and norms of strategy and

structure? And who is and will be central players in the emerging international security arena? With what skills, knowledge, and capabilities to address the emerging insecurities? These are all questions that must be asked and answered as we prepare for evolving and emerging roles as practitioners within this transitioning environment. We step into the unknown and uncomfortable arena grounded in all three worlds; past, present, and future.

The recent past, the Cold War, had become almost comfortable, at least in retrospect, with its foundation in “knowns” and its resulting air of general predictability. The central threat was well-known, and it emanated from a single source with a fairly predictable scope. Our response strategy was continuous for almost half a century under the umbrella of containment. Our response structure—military, political, and economic—evolved within the bounds of containment and the Soviet threat. And our national and alliance organizations that managed the U.S. and NATO dimensions of the response were established and became experienced upon the dictates of late 1940s structural guidelines. In short, the Cold War could be characterized by words such as continuity, evolution, and structure. But that chain has now been broken.

The current era is one of transition, and transitions are, by their very nature, characterized by uncertainty, searching, and a heightened level of danger from possible misinterpretations and miscalculations of an as yet not fully defined, diverse world. This is indeed the era of “new world disorder.” The threat today has multiple faces; it spans the entire threat spectrum from “sling shots to nukes,” and its center of gravity has shifted down that spectrum at least to some significant degree. This raises very real questions as to the efficacy of strategic hallmarks such as the triad deterrent force, the applicability of nuclear deterrence itself to a range of threats—limited nuclear and non-nuclear—and from a range of sources, including states, failed states, and non states. All of this raises crosscutting pressures for the proper balance of response tools—economic, political, military, and informational—and for the preferred balance of capabilities within the military itself. Do we continue to develop and procure high-end systems for a real but less likely strategic threat or do we instead put our effort into forces and capabilities best suited to “operations other than war?” And who best to make these decisions and adjustments: the Cold War national and NATO decision structure, or a reformed cast of players with a new agenda? In a few words, then, today’s international security environment is one characterized by the terms disorder, ambiguity, and tension.

If today’s environment is one of disorder and ambiguity, the future has been characterized as projecting that condition forward into dynamic uncertainty. International security researchers and policymakers have already made several attempts to capture the trends and foreseeable outputs of the transition at various future periods. For example, the Joint Chiefs of Staff, as an extension of their *Joint Vision* process, outlined trends in the international security environment and their military implications for the year 2010 in their *Concept for Future Joint Operations*;¹ the *Report of the Quadrennial Defense Review (QDR)* projects those global trends and military implications forward to 2015;² the National Defense Panel (NDP) projects the security environment and its implications forward to 2020;³ and both the Air Force and the Army have made projections of the 2025 security environment.⁴ The subsequent Commission on National Security (CNS) comprehensive strategy and

organization review is forecasting the international security environment also to 2025.⁵ Key findings of the QDR, NDP, and CNS projections are depicted at Figures 4 and 5.

	QDR 2015	NDP 2020	CNS 2025
Population Growth		X	X
Migration to Resources	X	X	X
Economic Unrest		X	X
Ethnic Unrest		X	X
Regional Unrest	X	X	X
Interdependence		X	X
Economic Blocs Form		Possible	X
Non-State Actors Rise		X	X
Failed States	X		X
Regional Peer Emerges	X		Possible
Global Peer Emerges	Perhaps after 2025		Unlikely by 2025
Regional Blocs Emerge	Possible		Possible

Figure 4. Projections of the International Security Environment.

	QDR 2015	NDP 2020	CNS 2025
Technology Advances	X	X	X
Proliferation of Weapons	X	X	X
Proliferation of Delivery	X		X
Proliferation of Information	X	X	X
Asymmetrical Threats	X	X	X
Homeland Threats	X	X	X
Mountain, Jungle, Urban		X	
Operations from CONUS		X	X
Importance of Info/Space		X	X
Essence of War Unchanged			X

Figure 5. Military Characteristics, 2015-2025.

These forecasts predict an international security environment characterized by population growth and migration to critical resources, all in a continuing arena of economic and ethnic unrest that could well be exacerbated by this migration. This foretells continuing

regional unrest in the developing world. Another characteristic of world regions is likely to be continuing and increasing economic interdependence, creating powerful economic blocs as supranational international security actors. Potential threats and potential coalition partners both could arise from the following four categories of primary security players: non-state actors, failed and failing states, regionally powerful states (with one or two perhaps aspiring to the status of global peer competitor to the United States), and regional blocs of greater or lesser power and cohesion. Finally, the forecasts emphasize that advances in technologies and proliferation of those technologies—weapons, delivery systems, and information—will likely lead adversaries to respond to continuing U.S. military superiority via asymmetrical responses, including weapons of mass destruction attacks on our forward-deployed forces or on the U.S. homeland. Besides the potential for fighting attacks at home, the forecasts see increasing security operations in mountains, jungles, or urban environments, and with the increasing requirement for operations from continental United States (CONUS) bases. Both space and the infosphere are also seen as increasing realms of security activities.

As is evident from these projections, then, 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. Just as the threats remain hazy, only thin threads of a response strategy—one with changed concepts of deterrence and compellence, for instance—appear. Without a clear strategy to face an uncertain range of threats, no firm structure can be decided. What we can do today is prepare general capabilities in a range of functional areas, old and new, all against significant resource limitations. And just as the threat and response are unclear, also elusive is a clear concept of a decision structure to address them—and this in an era when the experience base in the whole range of security is shrinking both within the government and the public. The future, then, offers up a whole slate of questions and requirements, and sets a steep agenda for international security research and outreach education.

International Security Research and Outreach for a Time of Transition.

Against the backdrop of these three worlds and within the transition between them, international security research and professional outreach education have several roles to play. These roles relate to interpreting any continuing relevance of the past, fostering realistic understanding of today's international security environment, and informing efforts to shape its future development. This chapter briefly traces several roles of research and outreach, and then fits them to the three worlds they must each address.

Research Roles.

Clarify ambiguity. The forecasts reviewed above all represent efforts to at least structure future uncertainty. Research must challenge such forecasts, their assumptions, methodologies, and predictions to validate or to refute, even replace, their findings before we go too far along the paths they might indicate. This effort, to the extent that it produces a forecast in which there is confidence, also provides a basis for extending forecast efforts more deeply and broadly into the future. Conversely, as none of the existing forecasts are

"complete" beyond the comfortably foreseeable, the effort spawns multiple follow-on efforts to either expand the scope or the time projection of the existing forecasts.

Define security dimensions/components. Validating and extending forecasts of the international security environment requires the identification, definition, and examination of new or additional environmental characteristics. In some cases this entails expanding the context of our conception of the environment to incorporate aspects whose today and future security roles we had previously undervalued. In others it entails defining security roles and impacts of components of the international environment that had previously not been seen as having security implications. Many of these emerging security components have little or no Cold War security foundations, so research is vital to understanding their contemporary and future play as contributors to international security.

For example, we have become fairly comfortable with at least recognizing that there are economic and environmental dimensions to security.⁶ However, we have yet to fully integrate these dimensions, and we have not yet fully sorted out the potentially central roles that international governmental organizations (IGOs) and nongovernmental organizations (NGOs) play in these and other security realms, nor have we even really begun to address the real and potential impact of international criminal organizations (ICOs) and international terrorist organizations (ITOs).⁷

Create and extend knowledge. Research has always sought to create new understanding or extend known elements into new realms. Today's research, as it addresses the uncertainty of the present and seeks to clarify at least the context of the future, can and must be even more attuned to pushing us "outside the box" of the known and comfortable and into the discomfort of ambiguity. Again, the key mechanisms here are clarifying, extending the context, and testing, refining theory as a guide.

An example; we in the military have become fairly knowledgeable about nuclear weapons and can extend much of that knowledge to new nuclear actors and possible uses. However, we are not as knowledgeable about chemical and biological weapons, agents, dispersal systems, or the transportation and detection of these components. We need to fully define their threat and shape our response based on realistic scientific and strategic knowledge.

Develop, test, extend, adapt theory to reinforce, refute, or refine it. A central role of research is always to challenge and apply theory toward greater explanatory powers. Today, however, this role is crucial. It may be, in fact, dangerous to blindly extend Cold War theory to today and to the future international security environment without this testing and validation. We must demonstrate the continuing applicability of past theory before extending it into the present and future. And we must seek to adapt, develop, and begin to validate new threads of theory to help us navigate the foggy paths into uncertainty.

Examples here must begin with deterrence: we think that we understood the deterrent relationship between the United States and the Soviet Union, but does that even begin to extend to states holding much smaller nuclear arsenals? What about rogue states without "rational" regard for norms of interstate behavior? Further, is there any relevance at all for non-state holders of nuclear weapons? And ultimately, regardless of actor, does nuclear deterrence extend to deter attacks employing chemical or biological or other mass destruction weapons? These are but a few of the issues concerning deterrence that remain to

be resolved. And deterrence is only one arena of security theory that demands reevaluation today.

Inform policy. Research is seldom conducted solely for its own sake. Particularly in the realm of international security affairs, research has traditionally sought to inform, critique, or direct policy. This role too is reinforced today. Policy can either muddle into the mist, or it can proceed on a more certain course directed by expanded theory and knowledge. Research cannot be purely academic here—the tasks are too immense, the stakes too high, and the international security research community too small to allow such a “luxury.” Academics can (and must) adapt their designs to incorporate the related and legitimate questions of policymakers to help shape a more secure future.

Research agencies need to institute innovative, cross-disciplinary collaboration networks to address the full scope and range of new and altered, often expanded, challenges. This mixing of expertise and perspectives can provide a better foundation for the development of policy options and for eventual policy decisions. And it can adapt those more theoretical or academic approaches to the new set of problems and issues toward practical policy relevance.

Fit to three worlds. International security research, then, must today reach back to understand the details, dynamics, and mechanisms of Cold War security to determine whether and how those characteristics translate into today's environment. It must detail the present to identify, define, and relate all of today's relevant players and components—to map as much of the present environment as possible as a guide into uncertainty. And it must project the past and present into the future as a framework upon which to hang developments as they occur—to allow us to flesh out the context and content of unfolding events toward greater understanding and more rational policy action. Research must help us address the *what, why, how, and so what* questions of the now and future international security environment. And professional outreach education must pass on the results of that research, the answers to those questions and the new, expanded questions that are raised, to the critical *who* involved in international security policy practice today.

Outreach Roles.

Educate direct participants. Professional outreach education is vital today as a means of informing and educating direct participants in the international security policymaking process. The top priority is to fully support the education of participants as addressed in the companion chapters here. Behind that task, many of today's participants, even a majority in key branches and offices, have little or no prior experience in security fields. For example, according to the Retired Officer's Association only 31 percent of the elected members of the House of Representatives in the 106th Congress that assumed office in January 1999 had served in the Armed Forces, active or reserve. Only 25 percent of the House freshman had any military experience. Even in the 106th Senate, only 43 percent had ever worn a uniform, and not one of the 1999 freshman class of the Senate had any military experience. As recently as the 103rd Congress, 41 percent of the House and 60 percent of the Senate had military experience. As the post-draft, post-Vietnam generation rises to prominence in government, the trend is clear. Further, very few of the congressional staffers who develop the policy options and recommend policy decisions to the elected members have direct

military or other security experience. Well-founded security policy demands active outreach and education efforts here.

Inform/educate interested/knowledgeable public. The situation addressed for elected officials is at least equally problematic within even the most engaged, otherwise knowledgeable segments of the population outside of government. Since the 1972 end of the draft, the number of Americans with direct security experience and detailed knowledge has steadily declined. Active policy players must be educated just as is the case for elected officials, otherwise they will engage in the policy debate with only the most superficial knowledge of the substance of the international security environment, that perhaps from a brief skim of the front page of the daily newspaper.

Outreach efforts must include publication and dissemination of, particularly, the results of the new research directions outlined above. One possible innovation here is to provide educational materials for both outreach and more traditional education programs by packaging related research results into texts that focus on the new, expanded security environment. Another idea would be to replace the traditional security conference—of which there are many both within government and within the broader academic and consultant/business communities each year—and conference report, normally sent only to conference participants, with book conferences designed to package more finished papers into texts and outreach materials. The interested public is a ready audience, but they need authoritative materials.

Shape government/public support/consensus. The outreach education efforts covered above are central not just to educating direct and peripheral policy participants, but also to forging wider understanding, consensus, and support for government security policy. This is indeed a steep challenge when few in the wider public could even identify Bosnia or Kosovo on a world map, let alone intelligently discuss the complexity of the situations there. Yet wider knowledge and consensus support are absolutely essential to the types of long-term, sophisticated policy efforts that such situations dictate, and policy without consensus backing is problematic at best. International security practitioners must, then, deliberately reach out to inform as a vehicle toward understanding and eventual consensus.

Toward this end, the texts and educational materials cited above should be disseminated as widely as possible both inside and outside the knowledgeable and interested community. Copies should be distributed to research libraries and made available to civilian educational institutions. And today, these materials, as well as the screened and cleared results of security research, should be posted on the internet. A Cold War era senior government official recently stated at a security forum that nothing of value would be found on the internet since the “good” materials were all classified. I do not believe that today this is or necessarily should be true—encouraging innovative thinking in nontraditional arenas and encouraging outreach and understanding across communities requires communication. The internet is becoming a, if not the, primary means of communication to many segments of society, and prudent dissemination of security information via the internet should be part of the outreach effort.

Network (foster policy community). A critical component of security policymaking across the Cold War era was an active, effective, interbranch and trans-societal policy community.

This network of specialists was able to remain engaged on policy debate and development regardless of the personalities or parties in power in the executive and congressional branches of government. With the decline in security experience in the government today, and with the shrinkage of the non-governmental security sector, security practitioners must consciously work to foster what remains of the old policy community. They must simultaneously reach out to extend the network's reach to new agencies and individuals, particularly those from the sectors representing the new dimensions of security policy. This, like the effort to build public consensus and support, is a legitimate educational challenge to security practitioners, for only with knowledge can come effective policy debate.

Invigorating this network requires active and targeted outreach, focusing around the new and expanded players both within government and within the interdisciplinary civilian communities where needed expertise lies. It must be active outreach to foster involvement and contribution. It must also engage a new generation of rising security specialists to ensure the continued vitality of the community. Internships and research assistantships and mentoring, faculty workshops to inform and engage, and development of seminar materials as outlined above are all ways to revitalize and extend this community.

Identify areas for further research. Finally, as the circle of interested and able participants grows to include a full representation of the emerging security community, and as the debate widens and deepens, new questions will be raised, existing beliefs and actions subjected to new challenges. This full debate will strengthen policy while it also raises new questions and poses new requirements for the international security research community.

What is needed is true workshops, aimed at exploring new and innovative approaches, to replace a singular reliance on formal conferences and theoretical paper presentations. We must realize that the audience is as important as those at the front table, and that in this uncertain world none of us has a monopoly on truth or even superior knowledge. For example, the young graduate student who is fully comfortable with a new set of technologies can bring fresh light on unseen solution sets in many cases. We cannot afford to overlook this potential contribution—indeed, we must actively seek it out and provide arenas conducive to wider interaction.

Fit to three worlds. As with research, professional security outreach efforts must first identify and engage those individuals and sectors from the Cold War policy community that remain central to today's security policy debate. They must also identify, inform, and engage new players and the representatives of new agencies and sectors—the newly identified security components—to energize today's policy debate toward policy consensus and action. This is a true challenge given the few current "practitioners" with requisite experience in international security issues or policy. And this effort to extend knowledge, widen and deepen debate, and energize a true security issue network is a key component to effective security understanding and policy formulation into the future.

This, then, completes the circle. Research clarifies ambiguity, identifies and defines new security components, and challenges theory to inform policy debate and decisionmaking. Security practitioners then disseminate the results of that research via professional outreach education aimed at informing, fostering, rebuilding, and extending the policy community. This engaged community, through informed debate, then identifies new areas

and raises new questions for research. The circle continues to turn, and both policy and the degree of security it seeks are advanced. International security research and professional outreach education represent a continuing and vital requirement for today and tomorrow.

International Security Research and Outreach at the Turn of the Century.

Several international security research and outreach education centers and programs reflect one or more of the directions outlined above. The one that I know best is the U.S. Air Force (USAF) Institute for National Security Studies (INSS),⁸ established in 1992 by the Air Staff Nuclear and Counterproliferation Directorate as a joint effort with, and located at, the Air Force Academy in Colorado Springs. Today that initial support has grown to include several other USAF, Army, Unified Command, Department of Defense, and intelligence community sponsors. INSS is targeted directly at the research and outreach outlined here as it seeks to fulfill its mission "To promote national security research for the Department of Defense within the military academic community and to support the Air Force national security education program." INSS research and outreach education efforts today focus on arms control, counter-proliferation, regional security, Air Force planning, environmental security, conflict in the information age, and military space policy.

INSS is not built on the traditional research center model of in-house researchers dedicated to real-time research problems. It is a virtual research management agency with a total full-time staff of three people—a director, a deputy director, and an administrative and budget assistant—two of whom are also teaching faculty at the Academy. It accomplishes its mission by recruiting and employing researchers from across the military academic community. These talented people bring energy, enthusiasm, talent, operational experience, policy orientation, and a wide mix of disciplinary backgrounds to their effort. As students and faculty in military undergraduate, graduate, and professional military education programs, they have research skills, support, and materials readily available to them. Further, their research product can usually fulfill both the needs of INSS and their academic program requirements. This "virtual" research management approach allows INSS to leverage scarce research dollars to maximum effect. On the plus side, INSS can recruit or match interdisciplinary research teams to bring a creative mix of perspectives and expertise to complex security issues. It can also facilitate communication between individual researchers or teams who are investigating related topics, often looking at an issue from several different directions.

Advantages, then, center on the relatively low cost and operational, policy-relevant focus of the INSS research product. Beyond that product, and perhaps even more important, INSS research experience creates interest, increased disciplinary knowledge, and security issue expertise within a new generation of military officers and defense civilians. This creates a base for recruiting future policy action officers for all levels of military command and staff. It also fosters issue networks across the INSS security issue areas, with capable people from across the services and schools connected for policy communication and cooperation. These last two advantages are linked, as by only its 7th year INSS was already seeing its initial cadre of researchers begin to move into policy management positions at the Pentagon and Unified Commands in the areas they earlier researched for INSS. Further, we are finding policy collaboration among these senior leaders and colleagues that they met through their

research efforts, and outreach efforts have already extended this security “family” into the civilian academic and policy community as well.

On the minus side, INSS researchers adhere to academic timetables and meet academic requirements beyond their singular research project. This means that they cannot drop everything to meet the deadlines imposed by a hot tasking that lands in a policymaker’s in-box. INSS holds a research topic development conference each May in Washington where representatives from across the selected military policy community of the seven areas of INSS research propose topics that they would like to see researched with a product delivery date approximately 12-18 months, or 1 academic year, in the future. These topics, then, are of mid- to long-range focus. But that is not all negative as the military faculty and student population is able to look into the future from outside the ring of direct influence of that in-box. They can push the limits of the box or get outside its constraining walls.

On balance, INSS has been a highly successful endeavor. In its first 9 years of existence the Institute sponsored 635 research projects involving 928 researchers representing over 30 schools and military education programs—all for a total cost of only \$2,000,000 or roughly \$3,000 per completed project. In 2000, the last year of that period, INSS sponsored 71 researchers working on 87 projects. The Institute also participated in outreach efforts to help sponsor 9 conferences and workshops that year. At last count, over 30 of the approximately 80 project reports from 2000 had been published as journal articles, occasional papers, or book chapters. INSS currently has published 39 of its own occasional papers and is planning to continue that practice at the rate of approximately six per year. Normally one INSS project paper is also published in each edition of *Aerospace Power Journal*, the professional journal of the U.S. Air Force. Further, in addition to conference reports and proceedings, INSS has published four books internally and four books externally.⁹ Finally, INSS has also assisted in editing and publishing products for the Air Staff, the Air Force Academy, and the Defense Threat Reduction Agency. INSS is leveraging scarce research and outreach dollars very effectively.

INSS is not alone among innovative post-Cold War international security research and outreach education efforts. U.S. military education institutions at all levels are establishing research and outreach programs and organizations to address new dimensions of the international security environment. Just two examples are the U.S. Army Peacekeeping Institute established at the Army War College and the U.S. Air Force Counterproliferation Center established at the Air War College. These centers are involved in innovative programs as well. For an additional example in the area of proliferation, the National Defense University Center for Counterproliferation Research has teamed with the Lawrence Livermore National Laboratory’s Center for Global Security Research, the Defense Threat Reduction Agency, and the Tufts University Fletcher School’s Institute for Foreign Policy Analysis to sponsor a Weapons of Mass Destruction Curricular Working Group to facilitate and coordinate military and civilian education programs on non and counterproliferation. To address the policy side of the effort against nuclear, chemical, and biological proliferation, INSS has teamed with Lawrence Livermore National Laboratory, the Federal Bureau of Investigation, the U.S. Customs Service, and several other agencies in a series of Fissile Materials Workshops. Finally, beyond the direct proliferation focus of these examples, the Defense Threat Reduction Agency and its auxiliary Threat Reduction Advisory Council have

teamed to form a Nuclear Deterrence Studies Group to coordinate multi-agency research in post-Cold War deterrence and to engage a new generation of researchers with interest and expertise in deterrence issues. The new international security environment has indeed spurred new and innovative research and outreach.

International Security Research and Outreach into the Early 21st Century.

Is there then a continuing need for international security research and professional outreach efforts into the post-Cold War era? The clear answer is that international security research and outreach are perhaps more important today than they were even at the height of the Cold War. The stakes, in the presence of widely available destructive capabilities and in the absence of effective systemic checks to the threat or even use of those capabilities, remain extremely high. And the true extent and nature of the threat beyond weapons of mass destruction has become more complex, varied, and ambiguous. So security research must also widen and deepen to provide a map into the fog and friction of potential war and "other than war." Further, security outreach education must transmit the results of that research to inform policy efforts to shape and respond within this insecure world.

To whom should these efforts be directed? The efforts must target a wider range of practitioners as the scope of what we consider "security" continues to broaden. It must attract and recruit researchers with greater interdisciplinary capabilities and focus from a shrinking pool of ready participants, and it must disseminate the results of the new research via active outreach to extend and inform an engaged policy community. The participants and observers require active outreach as their direct security experience continues to decline, and building understanding and consensus behind security policy efforts takes on ever greater importance.

What skills are appropriate to the now and future practitioners in the field of international security? The skills required of today's and tomorrow's international security practitioners are technical, informational, and human, and represent an expanded set of disciplines and dimensions. As the range of technical components of security expands, the technical requirements of research and outreach also increase. Further, as the security world becomes more tied to the infosphere, informational skills and focus take on greater salience. But we must never lose sight of the fact that security remains, at base, a human pursuit in a human world. It has already been noted that the widening scope of security involves an expanded scope of practitioners, and it involves them directly and in significant ways earlier in their experience. Some would say that what is needed is a cadre of critical thinking technocrats, those with detailed expertise yet also with the ability to face undefined decisions quickly and wisely. Security policy and strategy are more complex, and the skill set of practitioners in this realm must enable them to face that challenge.

And what should be the focus of international security research and professional outreach efforts? The resultant focus, scope, content of the research and outreach effort must then be broader, deeper, and more interdisciplinary than it was in the past. It must address a wider range of technical areas in new and ill-defined ways, and it must provide a basis for understanding among an uniformed, inexperienced audience. Nuclear physics, chemistry, biology, sociology, psychology, agriculture, environmental engineering, economics, history,

international law, and a range of languages and regional studies are only a few of the areas indicated for expanded roles in security research today.

What methodologies are appropriate to this international security research and outreach effort? Again, this new and changing world requires methods and theories both from the past and from emerging disciplines and areas. The old must be challenged and validated, and the new demonstrated to apply. Security today is a field open to innovative and imaginative approaches, and traditional practitioners must keep an open mind to these new approaches. The range of disciplines involved in today's security research itself indicates a wide range and unique mix of methods of inquiry, and the interdisciplinary, technical content of security policy demands a mix and emphasis on multiple means of presenting and disseminating information to the policy community.

Finally, what is the place of international security research and professional outreach education in academia today? Even as academe continues to retreat from the field of international security in the post-Cold War era, the field demands full participation in security research and outreach. The "new world disorder" presents a true challenge to the academic community to engage this field as a legitimate research arena—one that offers a real opportunity to contribute meaningfully to policy and security now and into the future. Outreach must include a deliberate effort to bridge government and academia, to link inquiry and policy in addressing the uncertainties and complexities we all face.

International security research and professional outreach education then must link past, present, and future, bridge disciplines and communities in an expanded inquiry into wider fields of ambiguity, and inform less experienced practitioners toward active debate and policymaking. It must provide a validated context to the security environment and policy efforts to address it. It must establish a framework to at least structure uncertainty so that we can navigate the future with some level of confidence, asking more of the right questions and adding knowledge to steer our way across dangerous shoals. In short, it must identify and inform the many possibilities, pitfalls, and options as we embark into a dim and foggy future. That is the challenge today: to engage, explain, shape, and respond, together as a government, academic, and citizen team, in the face of uncertainty and danger.

ENDNOTES - CHAPTER 5

1. *Concept for Future Joint Operations*, Washington, DC: Joint Chiefs of Staff, 1997, pp. 8-10.

2. *Report of the Quadrennial Defense Review*, Washington, DC: Office of the Secretary of Defense, May 1997, pp. 3-5.

3. *Transforming Defense: National Security in the 21st Century*, Washington, DC: National Defense Panel, December 1997, pp. 5-17.

4. Ronald R. Fogleman and Sheila E. Widnall, *Global Engagement*, Washington, DC: Department of the Air Force, 1996, pp. 1-5; Robert H. Scales, Jr., *America's Army: Preparing for Tomorrow's Security Challenges*, Issue Paper No. 2, Carlisle, PA: U.S. Army War College, Strategic Studies Institute, November 1998, pp. 1-6.

5. *New World Coming: American Security in the 21st Century*, Washington, DC: United States Commission on National Security/21st Century, September 15, 1999. This initial report forecasts the environment, while subsequent reports consider organization and strategy to address that environment.

6. President Bush called economic security coequal to military security and included environmental security as a significant component of that economic dimension in his 1991 national security strategy statement. The Clinton national security strategy statements maintain the emphasis on economic security while elevating environmental security to an individual component having both economic and military dimensions. See James M. Smith, "U.S. National Security Strategy and National Military Strategy in the Post-Cold War World: Continuity and Change," in *Introduction to Joint and Multilateral Operations*, James E. Schlagheck and James M. Smith, eds., New York: American Heritage, 1998, for a broader discussion of the evolution of the national security strategy statements.

7. IGOs are intergovernmental organizations (the United Nations); NGOs are nongovernmental organizations (the Red Cross); ICOs are international criminal organizations (drug cartels); and ITOs are international terrorist organizations (Osama bin Laden's followers).

8. Not to be confused with the "other INSS," the Institute for National Strategic Studies located at the National Defense University in Washington, DC.

9. Internally, INSS has published Jeffrey A. Larsen and Thomas D. Miller, eds., *Arms Control in the Asia-Pacific Region*, August 1999; and James M. Smith, ed., *Searching for National Security in an NBC World*, July 2000; James M. Smith, ed., *Nuclear Deterrence and Defense: Strategic Considerations* (INSS, February 2001); and James M. Smith and William C. Thomas, eds., *The Terrorism Threat and U.S. Government Response: Operational and Organizational Factors* (INSS, March 2001). The INSS books published externally are Jeffrey A. Larsen and Gregory J. Rattray, eds., *Arms Control Toward the Twenty-First Century*, Boulder: Lynne Rienner, 1996; Peter L. Hays, Brenda J. Vallance, and Alan R. Van Tassel, eds., *American Defense Policy* 7th Edition, Baltimore: Johns Hopkins, 1997; Peter L. Hays, Vincent J. Jodoin, and Alan R. Van Tassel, eds., *Countering the Proliferation and Use of Weapons of Mass Destruction*, New York: McGraw Hill, 1998; and Peter L. Hays, James M. Smith, Alan R. Van Tassel, and Guy M. Walsh, eds., *Spacepower for a New Millennium: Space and U.S. National Security*, New York: McGraw Hill, 2000.

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