NATIONAL DEFENSE INTO THE 21st CENTURY: 
DEFINING THE ISSUES

A Special Report from the Strategic Studies Institute

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FOREWORD

The current Quadrennial Defense Review (QDR) and the recommendations to be made by the members of recently established National Defense Panel (NDP) are of tremendous importance to the U.S. Army as well as to the other armed services. This is a difficult and challenging time, filled with the kind of tensions that can foster, compel and exacerbate inter-service rivalries. It is also a time of opportunity, if we can put aside more parochial interests to address those vital defense issues that will face the nation in the coming years.

The timing of the QDR comes at a watershed point in the history of our nation and its defense establishment. Rather than facing a single and symmetrical threat from a known enemy, as was the case from 1946 until the end of the Cold War, the nation now faces a range of multidimensional and asymmetrical threats. We do so at a time of constrained budgets and ever more constrained resources, as the nation and its Congress seek to balance the budget by 2002. Simultaneously, the pace of development in military technology is not only expanding more rapidly, but the sophisticated weapons and the technology necessary to employ those weapons are becoming more readily available to a range of potential foes.

In March 1996, Colonel Jim Blundell of the Association of the United States Army's Institute for Land Warfare and Dr. Earl H. Tilford, Jr., of the U. S. Army War College's Strategic Studies Institute envisioned a symposium that would bring all the services together for an open and honest meeting aimed at defining the complex issues that will face the services individually and the Department of Defense corporately during the Joint Strategy Review and Quadrennial Defense Review process. It was a bold and innovative idea, one that ran against the conventional propensity to defend service prerogatives while pushing for a maximum benefit for the individual service. General Andrew Goodpastor of the Atlantic Council and Dr. Robert Wood of the Naval War College agreed that a joint effort to reach for a higher order of discussion would be beneficial. Their organizations became cosponsors. The Air War College was unable to join as a cosponsor, but a representative of the U.S. Air Force Air Command and Staff College's School for Advanced Airpower Studies and a former Air Force Chief of Staff made compelling presentations on an airpower panel organized by Dr. Tilford.

The symposium, held February 24-25, 1997, in Arlington, Virginia, was a resounding success. Soldiers, sailors, marines, and airmen joined government officials, policymakers, civilian academics, and the media for two days of forthright discussions. What follows are summaries of the presentations and papers. To be
sure, individual service positions were stated and restated. But there was a distinct spirit of jointness expressed by virtually every speaker as each acknowledged the absolute need to train and fight together. At the conclusion of the symposium, there was a general acknowledgement that the better interests of the nation had, indeed, been served. The AUSA's Institute for Land Warfare and the Strategic Studies Institute are pleased to present the following SSI Special Report, "National Defense into the 21st Century: Defining the Issues."

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Introduction.

The U.S. Army War College, in cooperation with the Association of the United States Army (AUSA), the U.S. Naval War College, and the Atlantic Council of the United States, cosponsored a symposium in late February 1997 to examine the topic, "National Defense into the 21st Century: Defining the Issues." The purpose of this symposium was to relate the national interests of the United States to its long-term military requirements and to define those challenges which will face the Department of Defense, as well as those issues most pertinent to each of the military services. This symposium was a sincere effort by individuals from the various services, the Army's and the Navy's premier professional military education institutions, AUSA, and the Atlantic Council to search for a common understanding of the difficult issues facing all the services jointly and each of them individually.

Over a period of two days, through four panels and three special addresses, the presenters and more than 100 attendees engaged in an enlightening and productive exchange of ideas and points of view. What follows is a report on the four individual panels and the comments of the Honorable John D. White, the Deputy Secretary of Defense; Major General Mark R. Hamilton, U.S. Army, Vice Director for Force Structure, Resources, and Assessment on the Joint Staff; and retired U.S. Army General Andrew J. Goodpaster, Chairman of the Atlantic Council of the United States. General Jack N. Merritt, U.S. Army, Retired, opened the symposium by describing its goals and agenda.
PANEL I

Setting the Framework: U.S. Security Requirements and Policy Realities for the Next Millennium

Dr. William T. Johnsen
Strategic Studies Institute
"The Future Roles of U.S. Military Power and Their Implications"

The Honorable Frederick L. Frostic
Deputy Assistant Secretary of Defense for Requirements and Plans
"Jointness and Service Priorities: Reconciling Differences for a Common Defense"

Dr. Gordon Adams
Associate Director for National Security and International Security Affairs
Office of Management and Budget
"Matching Our National Security Strategy to Budgetary Resources"

The panel was charged with providing the strategic context for the subsequent service-oriented panels and discussions. This was no small task, involving as it did an overview of the strategic environment, an assessment of the political landscape, and the very harsh fiscal realities that will shape and determine the national security environment in the first quarter of the 21st century.

Dr. William T. Johnsen, Associate Research Professor of National Security Affairs at the U.S. Army War College's Strategic Studies Institute, in his paper, "The Future Roles of U.S. Military Power and Their Implications," began the conference by stating that military power will continue to protect U.S. national interests through deterrence, compellence, reassurance, and support to the nation. These roles, Dr. Johnsen maintained, will change both subtly and substantively as conventional deterrence replaces nuclear deterrence as the foundation of U.S. deterrent strategy. Compellence, more traditionally known as the ability "to fight and win the nation's wars," will take on a broader connotation, one requiring improved synchronization of military power with other instruments of national power. Simultaneously, the armed forces will be called upon to reassure allies and friends around the world while providing important--but expensive--support and services involved with relieving natural and man-made disasters at home and abroad. According to Dr. Johnsen, the recently articulated concept of preventive defense will assume a much larger role, moving the United States
to a three-tiered strategy of preventing threats from emerging, deterring risks that arise, and compelling adversaries as necessary. It will expand the use of military power to include promoting, as well as protecting, national interests. While preventive defense is not without its risks, the United States cannot afford to pass up this historic opportunity to shape the international security environment.

The Department of Defense (DoD) will lead in implementing preventive defense. Because the Army is best structured to carry out this role, it has been and will be the primary agent for doing so within the DoD. At the same time, the Army provides the nation tremendous utility in the roles of deterrence, compellence, reassurance, and support to the nation. Moreover, Dr. Johnsen asserted, the Army is particularly well-suited for countering asymmetric responses to U.S. military capabilities, especially those devised to obviate our advantages in precision strike.

Balancing the demands of preventive defense with the continuing requirements of deterrence, compellence, and support to the nation will have considerable consequences for the Army at the national military and national strategy levels. For example, at the national strategy level, leaders must forge consensus on the U.S. international role, improve the interagency process, and institutionalize close synchronization of the instruments of national power, while avoiding excessive use of the military instrument. At the national military level, officials must be better prepared to participate in multinational efforts and to coordinate their actions with international and nongovernmental relief organizations. They have to examine whether to optimize forces and force structures for warfighting or to prepare forces for operations across the full range of military operations. The de facto DoD budget allocation paradigm may require revision to support greater emphasis on preventive defense.

Within the Army, the implications are many, but force structure and the allocation of tasks within the Total Army are the most important. Dr. Johnsen offered three possible options for addressing these issues:

• Option 1: Maintain an evolutionary course. This alternative continues to support current force structure and mix, but works on the margins to reduce the stress on OPTEMPO/PERSTEMPO.

• Option 2: The Active Component of the armed forces retains primary responsibility for deterrence and, if necessary, fighting and winning in two major theaters of war (MTWs). The Reserve Components would have primary responsibility for preventive defense missions.
• Option 3: The Active Component would retain primary responsibility for deterrence, for fighting and winning one MTW, and for conducting preventive defense tasks. The Reserve Components would have primary responsibility for deterring and, if necessary, fighting and winning in a second theater of war, should it develop.

Dr. Johnsen ended by stating that no single alternative is ideal, and that each has its pitfalls. It is quite likely that any of these options would cause short-term but very sharp pain for the Army. But the long-term gain for the nation of settling on the best alternative could be significant.

The Honorable Frederick L. Frostic, Deputy Assistant Secretary of Defense for Strategy and Requirements, then spoke on "Jointness and Service Priorities: Reconciling Differences for a Common Defense." Mr. Frostic began with an overview of the world situation which, he said, has fostered new national security requirements. The Cold War forced the United States to develop the finest military establishment the world has ever known, and the Army of today is a direct result of that experience. No sane individual, or nation led by rational leaders, would challenge the United States on this nation's terms; which means that the armed forces must be prepared to counter asymmetrical strategies. The old style of deterrence simply will not work in this complex world.

Mr. Frostic then turned to some of the challenges facing the United States. Unexpected contingencies are expensive. For instance, moving U.S. forces back into Kuwait in October 1994 to counter what appeared to be the aggressive intentions of the Iraqis cost the Department of Defense $2 billion. These kinds of contingencies, both larger and smaller, need to be addressed with a better orchestration of all the elements of national power: diplomatic as well as military. Furthermore, the United States, as the world's only superpower, will not be intimidated by the kind of terrorism that forced a withdrawal from Beirut in 1983 and that manifested itself in the Khobar Towers bombing last year.

The United States is, however, vulnerable to some forms of asymmetric warfare. While it is popular to talk about being the world leader in information warfare, this is an area of vulnerability. For example, most Americans are unaware of the role that foreign nationals play in manufacturing computer software in this country.

Mr. Frostic concluded by pointing out some challenges that need to be addressed. He stated that the Army and the Air Force
are at two or three times their normal PERSTEMPO. The services have to better integrate their reserve components into ongoing operations to relieve some of that pressure. There must be a better link between intelligence and command and control in power projection operations. Finally, the logistics tail is too cumbersome. Outsourcing may be a way to address that.

Dr. Gordon Adams, the Associate Director for National Security and International Affairs at the Office of Management and Budget, was the final speaker on the first panel. He began his presentation, "Matching Our National Security Strategy to Budgetary Resources," by stating that it is difficult to plan the Defense budget in this era of uncertainty in the international arena. The lack of a definable threat combines with the nation's immense public debt to make the planning environment quite difficult.

Although the national debt is forcing the DoD to make difficult choices, the defense budget as a percentage of Gross Domestic Product has been declining since the late 1980s. However, since the defense budget accounts for over 50 percent of discretionary spending, it will continue to be singled out for scrutiny.

Post-Cold War restructuring is complete, and DoD is nearing the end of the painful process of personnel reductions. While we did a good job of staying ready throughout this period, the Army, Navy, Marine Corps, and Air Force of today are not what they have to be in the 21st century.

Dr. Adams addressed current and future defense budgets. The good news is that further reductions are unlikely and that a very slow growth at just above the annual rate of inflation is probable. The bad news is that it is hard to fund contingencies. Currently, these are funded out of Operations and Maintenance (O&M) funds and, even when Congress votes supplemental funds to cover the costs of unexpected contingencies, the O&M opportunities have been lost. A proposal to fund a special contingency account is currently being considered by Congress.

Defense procurement has declined 53 percent since 1990. The plan is to increase the procurement account by 47 percent by 2002. This increase has been delayed because O&M shortfalls are currently funded out of the procurement account. From Dr. Adams' perspective, the Quadrennial Defense Review (QDR) has to deal with readiness, PERSTEMPO, infrastructure, modernization, and outsourcing.

Dr. Adams' conclusion was that today there is closer coordination between the military and political components of
national security than ever before. An example of this is the pressure brought on General Raoul Cedras of Haiti when he was told that the 82nd Airborne Division was enroute to his country and that it was time for him to yield to Washington's demands. To maintain that kind of awesome capability, both the diplomatic and military components have to be adequately funded now and in the future.
KEYNOTE ADDRESS

The Honorable John T. White
Assistant Secretary of Defense
"An Update on the Quadrennial Defense Review"

At the conclusion of the first panel, the Deputy Secretary of Defense, the Honorable John P. White, made the following remarks.

I appreciate the opportunity to speak to you today because this is a critical moment for the Department of Defense, our defense policy, and the armed forces we maintain to protect and defend us. We are going to be counting on organizations like yours for support as we make the tough but critical decisions about our future.

We are at a pivot point in history, as the Cold War recedes into the past and a new century rushes toward us. We have prepared well for this point, having spent the past 4 years building a national security strategy and the military forces necessary to meet today's challenges. We also know we cannot stand still. The chief characteristic of this world is rapid change. To protect American security, we must stay ahead of change--indeed, we must shape and direct that change.

If we are to shape the future, we have to resist the natural impulse to be nearsighted--to focus our defense strategies, resources, and choices mainly on the world as we know it. During the Cold War when the threat forecast was relatively constant and the adversaries were well-identified, our principal security challenges were clear. But in today's world, when the threat forecast is more blurry and changeable, we must focus a greater share of our attention on the strategy and requirements for meeting the unknown challenges of the long term.

In short, we need to strike a better balance between the present and the future. That is one of our chief goals in the QDR as we take a hard look at the world ahead, identify the challenges that confront us, and determine the best and most affordable way to meet those challenges.

Today I want to talk about how we are using the QDR to help us make the key decisions that will guide our national defense into the coming century. Some of our choices will be hard. They will involve difficult trade-offs, and they will be controversial. But unless we are willing to make them, we run the risk of entering the next century unprepared for the challenges we will face. Our strategy for the 21st century must drive our choices in the QDR, but we must make these choices within the resource constraints we face. This is the central challenge for
the QDR and the basic reason we have undertaken it: to develop a new strategy and new capabilities for a new era with limited resources.

First, let me tell you a little about the QDR. It is a collaborative effort involving the Office of the Secretary of Defense, the Joint Staff, the Commanders in Chief (CINCs), and the services. At a general level, the review is being conducted by seven panels, each with its own subject area--strategy, force structure, modernization, readiness, infrastructure, human resources, and information operations and intelligence.

At more senior levels, this work is reviewed and integrated, options are developed, and choices are framed for decision by the Secretary. As we proceed, we will work closely with the National Defense Panel, which is now established and prepared to review our progress and to make recommendations for consideration by the Department. We will present our final report to Congress by May 15, 1997, but will be consulting with them throughout the process.

Our overarching goal in the QDR is a fundamental reassessment of America's defense. It is about assessing and balancing risk, developing an appropriate strategy, and making tough choices about the capabilities we need to carry out that strategy. As the Secretary has stressed, we are examining everything: strategic assumptions, warfighting plans, force size and disposition, investment programs, and supporting infrastructure.

I want to emphasize four broad ideas about the QDR that I hope to leave with you today:

• It is strategy-driven; that is, we will make choices based on how best to meet the perceived threats and challenges of the future.

• It is realistic. Therefore, we are taking into account the resource constraints we face. We want our choices to be executable. To ignore the resource constraints would be to produce a work of no practical value.

• It is analytic and professional. We are engaged in a serious analytic process to determine what we need, how we structure our forces, and how we develop our program--always informed by professional military judgments.

• Finally, at the end of the day, choices in the QDR are about balancing risks. We must assess a changing world (knowing our forecasts will often be wrong), and then evaluate the trade-offs between present and future capabilities realistically, among
competing alternatives to accomplish the same mission, and among
the threats and challenges we may face and for which we must
prepare. Risks are unavoidable, so what is the correct balance?

A fundamental problem we must address in the QDR concerns
the overall balance of our defense program, specifically the
necessity of modernizing our force while maintaining highly ready
forces today for the broad range of missions our strategy
demands. If we continue as we have over the past few years, we
will be unable to modernize the force sufficiently. You are all
familiar with the call for increasing our funding for
procurement to a level of approximately $60 billion per year.
This is the level estimated to be required to replace our aging
equipment and to maintain our technological edge. We have not
been able to meet this goal in our past few budgets.

Let me illustrate this dilemma: Last year, we planned to put
$45.5 billion in the FY98 budget for procurement. But in the
budget we submitted to Congress this month, we actually asked for
only $42.5 billion—$3 billion less. As those of you who follow
the budget carefully know, this phenomenon has bedeviled us for
the past several years, although we have made improvements year
to year. There are three basic reasons why we have had this
problem.

First of all, we had to offset the costs of contingency
operations that were not provided for in last year's budget. This
is a chronic problem that often forces us to dip into our
readiness and modernization funds.

Second, every year we face a cost-forecasting problem. When
the services put together their budget plans, they are often too
optimistic about the cost of operations and support, such as
running military installations or conducting depot maintenance.
Consequently, in each budget year, they may have to spend more
money on operations and support than originally planned, and they
typically spend it out of procurement. It can really add up. We
had to shift $2.9 billion from the modernization account to pay
for these underestimated costs in the FY98 budget.

But, the problem is more complicated. Between 1990 and 1997,
our spending on procurement dropped about 53 percent. That was
appropriate during the post-Cold War drawdown, because we could
keep our forces modern by weeding out the older equipment.

Over the past 4 years, we took on an array of new
responsibilities and activities. We not only needed to size our
capabilities to deal with two nearly simultaneous major
contingencies, but we also faced a dramatic increase in other
activities, running the gamut from humanitarian and relief
operations in the Third World to the major deployment in Bosnia.
This was a new world for all of us and we needed to evolve and adjust with it.

A new world with new challenges required us to focus resources on the here and now. That was appropriate. We needed to be successful in meeting these new challenges, and we have been. Our current defense strategy and force structure have kept us relatively safe in this uncertain, dynamic world. Indeed, we have helped to make the world a less dangerous place. We have deterred aggression in the Arabian Gulf. We have restored democracy to Haiti. We have stopped the war in Bosnia and prevented it from spreading throughout the heart of Europe. We have maintained peace on the Korean peninsula. Meanwhile, we have helped to reduce the former Soviet nuclear arsenals, heal the Cold War fault lines in Europe, advance cooperation and stability in our own hemisphere, and strengthen our alliance with Japan as we advanced security in the Pacific. In short, we have made the world a safer place and, yes a better place. And the key to all of this has been American engagement in the world. The focus on the present has come at the expense of investment for the future. We cannot continue this practice of ignoring future needs while we operate in the present. We need to strike the proper balance between these competing demands. This year we are beginning the transition to a new era. As part of that transition, we need a completely fresh examination of how we balance current and future capabilities.

Some might challenge this assertion. Today we have the world's most capable military, a powerful and flexible force second to none. Our forces are ready, our people are of the highest quality, and we continue to maintain our technological edge and to modernize the force. We have strong alliances, a global presence, and the ability to meet any potential challenge on today's battlefield. Why the call for reviewing our defense strategy, making hard choices, reshaping the force?

The fundamental reason is the one I have already mentioned: We cannot stand idle while the world changes around us. We must actively shape events, revise our strategies as necessary, and adapt to the changing environment.

In addition, as I have said, we must be assured that we have struck the correct balance between present and future, and across the array of risks that must be faced.

To do this right, the QDR will work through four levels of analysis, beginning with a close examination of the challenges we face and our objectives in meeting those challenges. Essentially, this is a threat analysis, taking into account the potential changes in the world over the coming years and the anticipated challenges to our interests. It is also an attempt to identify
the opportunities available to us to shape the future in ways favorable to our interests.

We must maintain our ability to meet today's challenges while we position ourselves to prevent future threats from emerging and to be able to defeat them if they do emerge.

With this view of the desirable future, we then must develop a strategy to help achieve that world. This is the second level of analysis. The core principles of that strategy have been identified, even though we are still exploring many specific means of implementation.

- First, we want to shape the international environment, to promote regional stability, to prevent or reduce conflict and threats, and to deter aggression and coercion.

- Second, we want our forces to be able to respond to a full spectrum of challenges—from deterring aggression and coercion in crises, to conducting a wide range of contingency operations, including fighting and winning theater wars.

These first two principles require the United States to remain engaged in the world, to lead, and to work to influence the actions of others—who can affect our national well-being.

- The third principle is that we must prepare now for the challenges of an uncertain future. We must exploit the revolution in military affairs, introduce best business practices into the Department, and remain flexible to deal with unlikely but potentially significant threats.

The third level in the QDR analysis is to translate the strategy into specific elements of our overall defense posture—what missions will our forces be equipped to undertake, what range of capabilities will we need, how many forces are required, and how should they be structured?

From that analysis will flow specific decisions—numbers and kinds of forces, infrastructure, modernization of systems, R&D programs, and so on. Only when we have made the decisions at the other levels can we address the specific allocation of resources. This is the fourth level. But once we have reached that level, we must keep the decision process integrated, because a decision in one area will affect what we should do in other areas.

For example, decisions about lift can affect both strategic options—how we might choose to deal with a potential conflict—and options for weapons systems in individual services. If we alter a large modernization program because the threat has changed, it can necessitate changes in force structure.
Conversely, changes in force structure can cause changes in modernization programs and support infrastructure. In addition, changes in one modernization program can affect others. Only by making the connections and their implications clear can we have a crisp and coherent debate over fundamental decisions.

Recognizing all these complexities and interdependencies still begs the question of whether there is a need for hard choices. The answer is clearly yes. There is a temptation to assume—or hope—that the choices we face will not be as difficult because we will find relief from budgetary pressures. I believe this is wishful thinking. Given the pressures for deficit reduction and a balanced budget by 2002, I do not believe we can assume that the resources available for defense will be greater than those available today. Will the current allocation of resources allow us to do all we need to do? No. We have demonstrated the shortfall in our ability to meet our modernization goals. But it is worse than that. We need to consider other requirements, including chronic underfunding of real property maintenance and other infrastructure needs, unknown contingencies, expanded ballistic missile and cruise missile defense programs, and new initiatives to deal with the threats from weapons of mass destruction and terrorism.

Can we fund these shortfalls by reducing our support costs? Yes, to some extent. We probably need to consider further base closing and realignment. I don't have to tell you how politically difficult that will be, but when weighed against other choices that option may begin to look more attractive. Moreover, it would be unrealistic to expect that infrastructure reductions alone could produce the investment funds we need in the short term. Base Realignment and Closure (BRAC), for example, has significant up-front costs. We must continue to push acquisition reform, and we will. We need to expand our outsourcing, and we will—aggressively. But I want to assure you that these savings, even at their most optimistic, will not be enough. The need is too large. We must look to other areas for savings: operations, modernization, force structure, and end strength. Unless we make tough choices in these areas, we will not achieve the objectives of the QDR.

The Department is taking the QDR very seriously. The entire senior leadership of the Department is fully engaged. In my judgment, a successful QDR is the only way we will be able to achieve the necessary balance between meeting current needs, investing for the future, and shaping that future in ways favorable to our interests. We have the obligation to the country to do just that.

Let me conclude by noting for you what I think constitute the elements of a successful QDR. We must look across all
elements of the Department, questioning and evaluating the reasons we are doing things the way we are. As the Secretary has stated, everything is on the table. We must ask whether the tempo of current operations is having an impact on the readiness of selected units, and we must do something about it if that is the case. We must ask whether the high state of readiness we maintain across the board is appropriate given our strategy. We must ask whether the current generation of planned modernization programs are the right ones, and whether the quantities budgeted are properly sized. And we must ask whether we are operating as efficiently as possible in our business and management practices.

We must not shrink from these choices. The QDR will be successful if it makes clear the connections and balances the risks among choices at different levels—between threat analysis and strategy, between strategy and program elements, and between choices of alternative systems. If we have made those connections clear, balanced the risks, made the tough choices, and reallocated the resources to implement a sound program, then the QDR will be a success.

One of the qualities that has made America the world's sole superpower and undisputed leader of the free world is that we do not shrink from making tough choices. Arthur Miller once said, "What is paradise, but the absence of the need to choose?" Building a strong force for an uncertain future under tight fiscal constraints is certainly no paradise. It will involve some hellish choices. But we cannot afford not to make them.

If we do the QDR right, it should touch off a national debate over how to defend our country in the 21st century. This debate is healthy, the timing is exactly right, and I am optimistic that the end result will be a strong, sensible, and affordable defense, and a secure nation. But that optimistic outcome will occur only if we make honest choices. The only sacred cow is a strong defense.

To succeed, we will need your support. I urge all of you who have supported a strong defense all these years to stand with us as we make the hard choices necessary to keep our forces strong and our nation secure.
PANEL II

Landpower in the 21st Century

Dr. Don Snider
Olin Distinguished Professor of National Security Studies
The U.S. Military Academy
"The Non-Revolution in Military Affairs"

General David M. Maddox, USA, Ret.
"Beyond Force XXI: Envisioning the Army After Next"

Lieutenant General Jay M. Garner, USA
Assistant Vice Chief of Staff, U.S. Army
"The Army, Joint Operations and the Quadrennial Defense Review"

On the afternoon of February 24, the first of the service specific panels, "Landpower in the 21st Century," convened. In his paper, "The Non-Revolution in Military Affairs," Dr. Don Snider stated that many of the service positions being developed during the QDR have been predicated on the notion that there has been a revolution in military affairs (RMA). To some, the RMA is technologically driven: "going from metal benders to electron chasers," as Dr. Snider put it. While many in the military intellectual and academic communities may truly believe we are in the midst of an RMA, Dr. Snider's position is that one is not occurring and will not occur. An exception is in the field of special opera-tions where the change began after the Vietnam War.

Past RMAs, such as the ones that occurred in the German military in the interwar period, involved a change in culture that is not evident today. Those revolutions in military affairs involved technological advance, but, more to the point, they involved putting together ideas, concepts, and doctrines with technologies, and doing so in innovative ways. Education programs for military elites helped to effect the changes and senior leadership was generally supportive.

Today there are new technologies, but other conditions that fostered earlier RMAs are not present. While the world situation has changed, the strategic challenges facing the nation are not being addressed very differently from the Cold War. Compellence, deterrence, and support are not new. Furthermore, current military leaders, while giving verbal support to the RMA, are not fostering or supporting revolutionary change.

General David M. Maddox, in his presentation, "Beyond Force XXI: Envisioning the Army After Next," suggested that the distinctions are blurred between today's Army and Force XXI, and that the lines between Army XXI and the Army After Next (AAN)
will be just as indistinct. The Army must remain ready to fight and win, even though there is a continuing debate over why we even need a highly trained and capable military. Too many interpret "no peer threat" to mean "no threat" rather than understanding that the United States, while it faces many threats, is not in danger of finding its armed forces technologically overmatched by any potential adversary.

But while the armed forces of the United States are not likely to be engaged in conflict with forces as technologically advanced, there are nations that can field formidable forces. While the U.S. Air Force is the world's most technologically advanced and second only to China's in size, and the U.S. Navy is the world's best and largest seagoing force, the Army, although qualitatively superior to any other land force, is also only the world's eighth largest army. Iraq, Iran, and North Korea could field large numbers of troops, and ground warfare in these MTWs—even with complete air superiority and dominance of the contiguous seas—would be far from easy.

If a future foe understands the Cold War capabilities inherent in the U.S. armed forces of today, they can develop asymmetric counters. A future foe does not need to be a "peer competitor" to achieve technological superiority in specific, perhaps in narrow, areas that could prove pivotal in a given situation. For instance, a challenger might counter portions of our information technologies. They might use medium range ballistic missiles topped with nuclear or chemical and biological warheads to preclude the establishment of bases. Selective terrorist attacks mounted against stateside targets could be a part of an effort to sap our national will.

Today's world is not at peace and, according to General Maddox, the United States must stay actively engaged to shape the international environment. The daily interaction fostered by forward presence builds relationships that work to minimize misunderstanding. Part of shaping the environment is being ready to respond anywhere on the globe when human or natural disaster strikes. In addition to disaster relief, we shape the environment by responding to the full spectrum of missions to include humanitarian assistance, peacekeeping, peacemaking, and assisting in the transition from war to peace, as we are doing in Bosnia today. While the objective of these missions may be to preclude or end conflict, most of them contain the possibility of transitioning into conflict. Therefore, our soldiers have to be disciplined and trained for not only a variety of nontraditional missions, but also for going to war when necessary.

How then is the Army going to go beyond Force XXI to envision the Army After Next? Force XXI is already leveraging information technologies into today's forces. It is more of a
process than a "force" in that the incorporation of information technologies opens the door to new and innovative ways to perform military tasks. To be sure, our thought processes and the tempo of operations are changing and forces are becoming more agile.

Even as we are developing Force XXI, readiness demands remain higher than ever. The Army, as a whole, must be manned, equipped, and trained to accomplish a variety of missions. The Reserve Components must share in this greater range of missions. Light forces have to leverage more combat power while heavy forces need to increase their deployability. With total situational awareness, lighter forces can disperse over a greater area and control that expanse by calling for responsive precision fires when needed. The Army After Next will be significantly different but, when the mission involves interacting with, controlling, or influencing people, ground forces will have to play a dominant role.

The Assistant Vice Chief of Staff of the Army, Lieutenant General Jay M. Garner, provided two visions of the future. The first, "Looking Back From 2012: The 1996 QDR Process in Retrospect," posited a hypothetical assessment of the U.S. military in the first decade of the 21st century. In this assessment, the armed forces of the United States are mostly irrelevant, often impotent, and constantly in turmoil.

According to this scenario, forced by an overarching guidance from the National Command Authority to reduce the size of the budget, the United States relied too much on precision engagement and reduced the size of its land forces. Technology was supposed to make our smaller forces more effective while treaty agreements were supposed to reduce the proliferation of weapons of mass destruction (WMD). The Army became smaller and put its second MTW responsibilities in the Reserve Component while the Navy procured arsenal ships and upgraded information age F-18s, and the Air Force procured F-22s and additional B-2s by reducing its airlift forces, which were not needed given the smaller land force projection requirements.

Meanwhile, the international environment deteriorated and U.S. advantages in technologically sophisticated hardware were thwarted by the evolution of asymmetric and niche warfare. A number of potential enemies developed the Terrestrial Reconnaissance Strike Complex, which involved coupling unmanned aerial vehicles with long-range missiles. Targeting data was made available from commercial satellite imagery and accuracy was enhanced by the GPS. In-theater airfields became untenable, and carrier battle groups were driven beyond the attack radius of even the F-18E/Fs.
The enemies of the future chose to fight in cities, thus obviating the effectiveness of our precision weapons. They located their command and control centers around hospitals and schools. They used civilians as human shields along their lines of communications. They allowed CNN to televise these actions to take advantage of a perceived aversion to bloodshed among many Americans. Threats to use biological, chemical, and nuclear weapons on our allies diminished the support from coalition partners. Meanwhile, terrorist attacks carried out across the United States forced a public outcry for protection, and large portions of the National Guard and Reserves had to be used for domestic policing and security. The United States lost the war of 2012 to a non-peer competitor who took advantage of every weakness we created by the flawed assumptions resulting from the Quadrennial Defense Review initiated in 1996 and the subsequent actions of the first National Defense Panel.

Then, Lieutenant General Garner presented his more optimistic second vision for the world of tomorrow, "1997-2010: The Way Ahead and Beyond." Using our knowledge of history, we assumed in 1997 that conflict between peoples and nations would persist. The United States would continue to ask its armed force to engage in a range of missions in addition to being ready to fight and win the nation's wars. And we undertook to plan for what is likely to occur rather than for a world as we would like it to be.

Indeed, the world continued to be a dangerous place. Religious and ethnic conflict persisted while rogue nations, organized crime, and transnational extremist groups threatened global stability and domestic security. The proliferation of weapons of mass destruction (WMD) threatened emerging democracies and the stability of the world economy.

In this turbulent world, the U.S. military provided stability. It was able to do so because the services remained capable of fighting and winning the nation's wars. That deterred many would-be aggressors. The armed forces were also able to respond to natural disasters at home and abroad, conduct humanitarian assistance operations, and shape the world environment through its continuing contact with peoples all over the world. It was a force for peace-keeping, peacemaking and nation building.

Land forces proved to be a key element in the nation's continued preeminence as a world power. The Army was, indeed, able to exercise direct, continuing, and comprehensive control over land, its resources, and its people. A robust Army was able to make permanent the otherwise transitory advantages achieved by air and naval forces. Time and again the deployment of land forces was shown to be the gravest response that could have been
made, short of war, to demonstrate the national will to prevent conflict.

Furthermore, the Army conducted a range of military options short of war. It was used for preventive defense and peacetime engagement activities like military-to-military contacts, nation building endeavors, and humanitarian assistance operations. All of this kept potential dangers from becoming full-blown threats. The Army demonstrated its suitability for implementing the National Military Strategy through engagement and preventive defense activities. American soldiers on the ground, 24 hours a day, engaged in the kind of person-to-person contact that fostered cooperation and good will. In places like Bosnia, land forces, in conjunction with our NATO allies, and with major contributions from air and naval forces, finally brought peace. In the dynamic and unpredictable geostrategic environment of the 21st century, it was land forces that provided a full range of choices to the nation and a hedge against uncertainty.

In summary, the United States needs to retain a full-spectrum capability to ensure full-spectrum dominance. It is essential that we balance the acquisition of high technology systems with the development of leaders, with new doctrine, and with readiness. We need to balance our precision warfare capabilities with decisive maneuver. There has to be a balance between support to the nation and global engagement, and lethality must be balanced with preventive defense. Above all, as George Bernard Shaw put it, "Peace is not only better than war, it is infinitely more arduous."
The second day of the symposium began with a look at seapower in the 21st century. Major General John E. Rhodes, not unlike the Army's Assistant Vice Chief of Staff, believes that asymmetrical threats await the nation's armed forces in the 21st century. General Rhodes, however, is convinced that the role of naval forces will prove to be a critical component in countering these threats. The goal of this particular presentation was to link naval forces to three documents: The National Military Strategy, Joint Vision 2010, and the Joint Strategy Review.

According to General Rhodes, the enduring truth is that the United States is a maritime nation with worldwide interests, and, of the world's 265 countries, 222 border the sea. Some 75 percent of the world's people and 80 percent of its capitals are within 200 miles of the sea. Only three world capitals are more than 600 miles from the sea.

General Rhodes stated that according to Joint Vision 2010, dominant maneuver, precision engagement, focused logistics, and full dimensional protection together produce full-spectrum dominance. Logistics is the key and logistical support is based on sea transport. Furthermore, seabased logistics lessens the footprint ashore, thereby contributing to force protection. He then stated that the Joint Strategy Review concluded by underscoring the need for peacetime engagement and overseas presence. From his perspective, naval forces provide both.

The National Military Strategy, according to General Rhodes, called for shaping the international strategic environment in a way that would be advantageous to the United States. He pointed out that naval forces do not need overflight permission, basing agreements, or visas. They can operate virtually anywhere and be within range of 75 percent of the world's population. In 1996,
for instance, vessels of the U.S. Navy visited 79 countries and engaged in 106 major exercises with naval forces from 64 countries. The National Military Strategy is directed at responding to threats, and naval forces are often nearby and ready to engage.

The Joint Strategy Review also called for the kind of capabilities that can be provided best by naval forces. The JSR concluded that peacetime engagement is crucial to shaping the environment and will remain manpower intensive. Overseas presence remains a valid concept and, according to the JSR, the nation will face even greater challenges to its access to global lines of communication. From 1991 to 1996, the Naval Operating Forces have engaged in 51 operations from Operation DESERT SHIELD/STORM to oil cleanups in Alaska. In March 1996, it was the U.S. Navy that rushed two carrier battle groups to the Taiwan Straits in response to the People's Republic of China's missile tests and maneuvers.

In his conclusion, General Rhodes stated that some missions, like launching satellites, are not appropriate for the Marine Corps. He sees a joint requirement to operate across the full spectrum of operations, from fighting wildfires and providing assistance to flood and earthquake victims in the United States, to peacetime engagement, nation building, and crisis response overseas. Together with the Air Force and Army, the U.S. Navy and Marine Corps must be ready to join with our allies in joint warfighting operations should they be necessary. His closing statement was,

The unique ability of Naval Forces to operate across the entire continuum of operations--from visible presence off the coast, to crisis response or peacekeeping missions, to all out war--will continue to serve the Nation well in a Joint environment aimed at achieving the objectives of Joint Vision 2010, the Joint Strategy Review, and the National Military Strategy.

Vice Admiral Conrad C. Lautenbacher, Director of the Office of Program Appraisal, U.S. Navy, then presented "The Naval Philosophy for the QDR." Admiral Lautenbacher began by stating the necessity for periodically reassessing the nation's defense posture. Some of the decisions made before the Gulf War as a result of the Base Force Review are still with us. The Bottom-Up Review was spawned by a national debate over the kind of defense we needed in the post-Cold War world. The Quadrennial Defense Review and the actions to be taken by the National Defense Panel are driven by the need to balance the budget. In budgetary terms, the QDR is concerned with insuring an adequate procurement
Admiral Lautenbacher then turned his attention to the wide variety of capabilities that the Navy and Marine Corps team brings to the national security arena. Innovation is apparent in the Navy's initiatives to move from being primarily a blue water navy of the Cold War to one positioned for joint warfare in the littorals. Naval strategy is in harmony with both the QDR strategy and Joint Vision 2010.

The Navy and the Marine Corps are embracing the revolution in military affairs. The Arsenal Ship, a truly "smart" ship, will be manned and armed in revolutionary ways. The CVX, a follow-on carrier, a new attack submarine, and the LPD-17, a new amphibious assault ship, are all being designed to take the Navy well into the 21st century. But even today's programs are being enhanced by the RMA. The Navy is looking at ways to put its submarines under the control of UAVs. It is studying organic mine counter-measures and netted, integrated air defense systems. The admiral believes wars of the future will be won by C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance.)

The Navy and Marine Corps are committed to joint warfare. They have engaged in more than 75 joint operations since 1991. In 1996 the Navy and Marine Corps participated in 22 joint operations from the Western Hemisphere to Europe and Africa to East Asia and the Far East.

Although committed to jointness, the Navy brings some unique service capabilities to warfighting. On an average day about half its ships, 175 or so, are underway. About 100 ships and 70,000 sailors and marines will be forward deployed and engaged in dozens of exercises with friends and allies. When the nation needs to respond to a crisis the naval option is paid for since ships on station do not require additional deployment funds and the cost of moving the equipment has already been allocated. Naval forces are usually nearby whenever a crisis develops.

Finally, the Navy is a good investment. Ship life can be 40 to 50 years. The aircraft carrier, USS Midway, for instance, was launched in 1943 and served in every conflict from World War II to the Persian Gulf War before being decommissioned in 1993. Likewise, the USS Saratoga, a carrier launched in 1955, served 40 years before being decommissioned in 1995. But beyond longevity, aircraft carriers, with their embarked air wings, can conduct enforcement, deny flight, surveillance, and strike missions without the encumbrance of complex overseas basing or having to negotiate overflight agreements.

In closing, Admiral Lautenbacher said that the QDR must
achieve the correct balance between operations and modernization. He called for all the services to approach the QDR together since we are on the same team when it comes to national defense and applying our forces to the National Military Strategy.

Dr. David A. Rosenberg, a professor at the National War College, then discussed "Naval Forces and the RMA: Fact or Fiction?" He began with the very interesting assertion that while navies do engage in revolutions in military affairs, change is neither quick nor dramatic given the long life of ships. Warships are, and for a long time have been, systems and systems of systems.

According to Dr. Rosenberg there have been five naval revolutions in the 20th century. The first was a failed attempt by British Admiral Sir Jackie Fisher who tried to provide the Royal Navy with a balanced fleet of battle cruisers and destroyer flotillas, but got a fleet dominated by the dreadnoughts. The second revolution was fostered by the German U-boat during World War I. The third naval RMA was multifaceted and took place during the interwar years. It involved aviation, amphibious warfare, underway replenishment, and the introduction of long-range submarines. The fourth RMA was the nuclear revolution which included the emergence of ballistic missile firing submarines. The fifth and last RMA has been the intelligence revolution that has featured ocean surveillance and has provided the U.S. Navy with the ability to track any adversary constantly.

Dr. Rosenberg pointed to the interwar period as one that closely parallels today. During the 1920s and 1930s, arms limitations agreements provided a controlled environment and the temporal stability needed to effect change. Great Britain, Japan, and the United States had time to experiment with aircraft carriers and naval aviation. It was also a period of organizational innovation when industry, science, and the Navy were able to establish working relationships. Furthermore, the U.S. Navy was not absorbed by deployments since fleets were already based overseas. Education was important, and, although graduate education did not prove feasible, many senior officers attended the Naval War College twice; once for an operational and tactical education useful to captains, and later for a more strategically oriented course for flag officers. Finally, the interwar period was one of shipbuilding and innovation. President Franklin Roosevelt was an enthusiastic supporter of the U.S. Navy.

Today the Navy is not as well-configured for innovation, although innovation is taking place. The Navy is more absorbed with deployments, and overseas basing is not as prevalent. On the other hand, today's Navy has a greater appreciation for graduate
education than did the Navy of the interwar period. Another
difference is that during the interwar period the Navy focused on
War Plan Orange, a war in the Pacific. Today we have no such
single war plan. Rather, the Navy's missions are many and varied.

Dr. Rosenberg closed by saying that there will be a
revolution from the sea only if it occurs on, over and under the
surface. The naval officer in the RMA must be capable of
commanding land, sea and air forces in a joint arena.
LUNCHEON ADDRESS

Major General Mark R. Hamilton, USA
Vice Director for Force Structure,
Resources and Assessments, J-8,
The Joint Staff
"The Quadrennial Defense Review: A Joint Perspective"

General Hamilton began by saying his mission was to provide a joint perspective on the Quadrennial Defense Review (QDR). While it is becoming trite to say that the world is different, in truth it is very different. The QDR is focused on getting the best defense possible for the nation as it faces this new world.

For over 40 years the United States built a military force to contend with any failure in its strategy of deterrence and containment. The armed forces were like life insurance in that they were designed for use only in the most extreme eventuality. The purpose of the QDR is to restructure the force so that the new strategy of engagement and enlargement can succeed.

A major assumption of the Bottom Up Review (BUR) was that if the forces we possessed could execute two major regional conflicts, smaller tasks could be handled because they were included in the MRCs. The reality has been that the lesser included tasks have become the dominant ones.

Also, during the Cold War the military had a clear accountability to the country. To be successful, we had to deter war with the Soviet Union and contain the expansion of communism. Since the end of the Cold War the measure of what constitutes strategic success is not so easily defined.

The process for analysis in the QDR is quite different from that of the BUR. The QDR is much more open where the BUR was a closed process. There is a lot of consternation and pain associated with the QDR because a great deal is at stake. What we have yet to do is to assess today's force against today's demonstrated requirements. What we have today is a force that is doing something and doing it rather well, but what it is doing it was not designed to do.

Pedagogically, we are in the category of "unconscious competence." There are four of these categories or states of awareness. Unconscious incompetence is a situation where you do not know what you are doing, and you don't know that you are doing the wrong thing. Conscious incompetence is when you are aware that what you are doing is wrong. The state of conscious competence is to know what you are doing and to know that it is the right thing to do and that you are doing it correctly. We are in the state of unconscious competence where we don't know
exactly what we are doing, but we know we are doing it well. We need to move to a state of conscious competence.
PANEL IV

Air Power in the 21st Century

Dr. Caroline F. Ziemke
Institute for Defense Analyses
"The Changing Nature of Air Power"

General Larry D. Welch, USAF, Ret.
Institute for Defense Analyses
"The USAF into the 21st Century"

Major Mark J. Conversino
School for Advanced Airpower Studies
"The Changing Dynamic of Strategic Attack"

The Air War College was invited to participate in this symposium as a cosponsor but was unable to do so. Of all the panels, perhaps because an official service position was not presented, this was the most ecumenical.

Dr. Caroline Ziemke led the presentations with "The Changing Nature of Air Power." She began by challenging the notion that the end of the Cold War marks the close of a half-century of unprecedented strategic engagement by the United States. The watershed change in America's strategic vision came at the close of the 19th century when the nation moved from being a continental hegemon to take its place among the world powers. The irreversible step toward becoming an involved world power was taken in 1898 and not in 1941 or 1945. The American strategic personality has not changed with the end of the Cold War any more than it changed during the 1920s and 1930s when we were in an aberrant period of pseudo-isolationism. America is fundamentally a strategic and international extrovert and will remain so during the 21st century.

Early in the 20th century the United States adopted a consistently realist, if not always realistic, military strategy based on the assumption that the nation's economic and political well-being could only be ensured by a preponderance of military power. The most consistent element of Joint Vision 2010 is that the nation must maintain full-spectrum dominance; not parity, not advantage--but dominance. It is American air power, more than any other aspect of the nation's considerable military might, that impresses and intimidates those who might challenge that dominance. Air power will continue to play a pivotal role in future military operations.

Dr. Ziemke then challenged the assumption that the American people are unwilling to accept casualties. She argued that it is
the political leadership, not the American people, who have an aversion to casualties. What the American people want are clear and honest explanations of the strategic rationale behind military intervention and a statement of objectives. Historically, public opinion has turned against military operations when the price in blood exceeds the apparent progress toward achieving reasonable and stated objectives. That was the case in the American Civil War in 1862, in Korea, and it was especially apparent when the Vietnam War seemingly became an escalating stalemate, particularly after the Tet Offensive of 1968.

The problem is that the military technical revolution has put the concept of "bloodless war" tantalizingly, if chimerically, within reach. One of the most attractive advantages of air power is, at least from the perspective of the national political leadership, that it offers the illusion of bloodless war. As Eliot Cohen put it, "Air power is an unusually seductive form of military strength, in part because, like modern courtship, it appears to offer gratification without commitment." But "appears" is the operative word. There are limits to the supposed bloodlessness of air power enhanced by precision guided munitions. First, the ability to achieve pinpoint accuracy has created the expectation of pinpoint accuracy. But worldwide urbanization and the increasing integration of civilian and military infrastructures point to a future in which air operations have to be conducted in urban environments both rich in targets and full of civilians. Second, warfare remains bloody by nature. The neo-Douhetans, led by retired Air Force Colonel John A. Warden, III, who claimed air power had for the first time in history defeated a ground army, were premature in their assessments. Neither the Persian Gulf War, nor anything that has happened since, indicates that the fundamental Clausewitzian dictum has been nullified: the key to military victory remains seizing and holding territory and defeating the enemy's army on the ground. Ground warfare is, and will remain, an inherently bloody endeavor.

"So," Dr. Ziemke asked, "whither air power?" The National Military Strategy (NMS), combined with our inherent commitment to an idealistically-based foreign policy, guarantees a future for American air power. From deterring and defeating aggression in major regional contingencies to maintaining overseas presence and countering the proliferation of weapons of mass destruction, air power offers unique and necessary capabilities that are essential to fulfilling the NMS. Strategic air campaigns, gaining and maintaining air superiority, air surveillance, precision strike, strategic airlift, and the ability to evacuate innocents from crisis areas are all unique capabilities of air power writ large: USAF, USN, USMC, Army, Coast Guard, and civilian contracted aviation. Finally, the extension of the U.S. national frontier
into space has profound implications for space forces that may have an effect on the future structure and missions of the U.S. Air Force.

Former Air Force Chief of Staff **General Larry D. Welch** then addressed the topic, "The USAF into the 21st Century." General Welch stated that the overarching vision provided in the Chairman's *Joint Vision 2010* is full-spectrum dominance, at any level, from peacekeeping and peace enforcement to major war. The ingredients to achieve full-spectrum dominance are dominant maneuver, precision engagement, focused logistics, and full-dimension protection, each enhanced and focused by information superiority. The key concept is dominance—not marginal superiority, but dominance.

Full-spectrum dominance comes from dominant capabilities in joint air, land and sea forces, with the mix depending on the specific situation. Only effectively integrated joint land, sea, and air forces can achieve full-spectrum dominance. Everyone recognizes the importance of air power, joint Army, Navy, Marine Corps, and USAF air power, and how it contributes to full-spectrum dominance.

A useful way to think about the future, according to General Welch, is to examine relevant lessons from the past. Our success with air power in the Gulf War resulted from an objective examination of the failures of air power in Vietnam. Now we need to ensure that the lessons of the Gulf War contribute to success in what might be a very different 21st century. To do that, it is useful to track five important lessons from Vietnam through the Gulf War and on to the future.

- We have to trust the commanders on the scene with the enormously complex business of conducting joint operations in subordination to clearly defined objectives and constraints set by the civilian political leadership.

- The need to conduct a coherent, integrated air campaign focused on the joint force commander's objectives is vital.

- We must have dominant battlespace awareness.

- To dominate the battlespace, we must have the finest air power technology available.

- Our air crews must be trained and ready to fight on the first combat mission.

The contrast between how the United States used air power in the Gulf War and how we misused it in Vietnam is clear and
instructive. Still, the value of history comes from the relevant application of its lessons to future operations. In the 21st century, U.S. air power will make a powerful, sometimes leading, contribution to the battlespace dominance sought by U.S. or joint coalition forces. When that is done, air power will have realized its long touted but previously unrealized potential. True advocates of air power are not those wild-blue yonder, go-it-alone enthusiasts. Rather, they are the staunch advocates of integrated air-land-and-sea power; a joint team fighting together to achieve full-spectrum dominance.

Major Mark J. Conversino, a professor at the School of Advanced Airpower Studies, then addressed "The Changing Dynamic of Strategic Attack." Major Conversino began by stating that "strategic bombing," known today as strategic attack, remains the single most controversial of all air power missions. The extreme air power advocates continue to claim, as did the early theorists like Italian Marshal Giulio Douhet, that the enemy's will can be shattered and decisive victory achieved through aerial attack alone. These claims have never been realized. Yet, in assessing the experience gained from the strategic bombing campaigns of World War II through the strategic air campaign of the Persian Gulf War of 1991, advocates and skeptics alike bog down in arguments that are, at best, tangential to the issue at hand: the actual military effectiveness of strategic attack.

Conversino argued that it is time to leave Douhet, his like-minded contemporaries, and their prophecies to the historians. Those arguments are dated and irrelevant in part because radical changes in technology and the shift in the nature of modern warfare away from the all-out exchange of nuclear weapons between major world powers have combined to alter the very meaning and nature of strategic attack.

To understand modern strategic attack, one has to understand what modern strategic attack is not. First, it is not necessarily a nuclear attack. Many cannot separate the mission from the weapon, and nuclear weapons always had tactical as well as strategic uses, at least theoretically. The term "strategic bombing" has lost its utility in this regard, and, with the changed realities of what constitutes strategic attack, the term "strategic bombing," based largely on World War II-era experiences, should be relegated to history books.

Second, recent experience indicates that the target struck does not necessarily dictate the nature of the attack as "strategic." The method of attack and the specific nature of the target are largely irrelevant to the definition. In Bosnia, for instance, ammunition dumps were "strategic" targets because the Bosnian Serbs relied on them to achieve their objectives. During
the Gulf War, the Republican Guard, a fielded military force constituting that outer ring of John Warden's five-ring model, was a strategic target in that Saddam Hussein's continued military and political viability depended upon that force; a force we failed to destroy.

Third, strategic air attack is not Douhetan "city busting" or "terror bombing." While even precision guided munitions cannot be a guarantee against collateral damage and civilian deaths, they do offer a great many more options than were present before the last years of the Vietnam War. Strategic effects can be had without widespread death and destruction being visited on either the enemy's forces or on noncombatants.

While there are long-range aircraft and intercontinental missiles, no specific platform is, in and of itself, "strategic." In Vietnam "strategic" B-52s were used to support ground operations in South Vietnam, while F-4 and F-105 fighter-bombers, designed for tactical missions, hit targets in North Vietnam. In 1981, eight Israeli Air Force F-16s, each carrying a pair of 2,000 pound bombs, achieved the strategic effect of destroying the Iraqi nuclear reactor at Osirak. During the Gulf War, misnamed F-117 Stealth "fighters," planes with an unfueled range of only 550 nautical miles, flew 2 percent of the strike sorties but attacked 40 percent of the strategic targets. B-52s, meanwhile, were notably absent from the skies over Baghdad.

A strategic attack is one that is designed to achieve an effect on the war as a whole. Strategic goals help to dictate the targets that must be hit to achieve that effect. Those may differ from war to war.

Major Conversino concluded by stating that historians will continue to debate the effectiveness of strategic bombing from the 1930s through the Persian Gulf War. Furthermore, contemporary discussion of strategic air power remains mired in theories of air power from the 1920s and 1930s and affected by images of bombing in World War II. If we are to properly anticipate America's defense needs for the next century, we have to move beyond academic quibbling to consider what strategic attack represents today. In that sense, the distance that separates Operation POINTBLANK from Operation DESERT STORM is greater than the five decades that have passed between them.
SUMMATION

General Andrew J. Goodpaster, USA, Ret.
Chairman
The Atlantic Council of the United States
"The Issues in Perspective"

I welcome very much the chance to meet with you whom I term the "gluttons for punishment." You're going to stay right to the end of it, and I welcome the chance to participate in this session. To find the reason, you don't have to go beyond the title of your conference, "National Defense into the 21st Century: Defining the Issues." That, I must say, is a most timely and demanding subject because of the daunting array of issues that have to be thought through, and will need to be acted upon.

My task was to offer a summary and conclusion, the issues and perspective. And I'm going to follow the course of a rather wise man down in Texas that you may have heard of. He was asked to talk about modern art in Texas. He accepted that and then realized what he had done, and he said, "I'll talk about modern art and Texas. I don't know much about modern art, but I'm sure going to tell you about Texas."

Well, I wouldn't attempt to summarize what you've heard. It's not possible, I'm sure, to do full justice to that in anything like the time available or to test your patience to that extent. But I will do the other part of what I was asked to do, and that is to conclude your conference.

I'm going to do so by offering you a perspective and a framework—a perspective for weighing the security issues involved and a framework for placing them in what I would think to be a manageable context, just as our decision-makers need to do, and as we hope they will do in approaching this very multifaceted challenge at all levels of our military forces. Accordingly, I'm going to speak to three main topics: First, the perspective, and there I'm going to talk about America's national interests in the international arena that have military implications. Next, the framework that I'll talk about is U.S. security policies and decision guidelines that have military implications. And the third is some of the military implications that are associated with these national interests and security policies and decision guidelines.

This, I think, is important to military officers and defense officials for two main reasons. First, they must advise the decisionmakers in the executive branch and in the Congress, and ultimately they must be persuasive to the American people, whose support is mandatory if we are to succeed in what we aim to do.
And second, they must anticipate decisions that have yet to be made. They must build forces and they must develop operational capabilities to deal with the international environment, and to deal with it in ways that attempt to foresee what our decisionmakers are going to ask them to do. And that, as I'm sure all of us know from experience, is no small chore. Yet when the future arrives, that's what military officers and defense planners are going to be expected to do.

So let's take a bit of time and talk first about the perspective that I mentioned to you, American national interests in the international arena that have military implications. The source of those interests is a primary question, and the source to me can be really identified by asking the question, "Where is American well-being now at risk in the international arena; where is it likely to be at risk in the future?"

Some of our interests have no military implications, but many--and, I would argue, the most important--do have military implications. It's very important in my mind for all of us--military officers, defense officials, military defense analysts, the public at large, and the Congress--to have a good understanding of what those interests are.

One of my colleagues and friends, Bob Ellsworth--former NATO ambassador, former Deputy Secretary of Defense--and I talked about this a little over a year ago. We joined with Rita Hauser, who is very experienced, very capable in this whole field of public policy, and we established a self-constructed commission on America's national interests. We enlisted the help of Graham Allison and others--Dmitri Simes, numerous others--to assist us in defining America's national interests. We found that the interests fall into several well-recognized categories.

In order of their military implications, I would first speak of security interests, that is, the security of the United States and its allies, support for a condition of international peace and security.

Beyond that, we have economic interests, especially where our whole economic system could be severely, or even fatally, damaged--for example, if an attempt were made to block our access to Middle East oil, on which our country is dependent and the countries of Europe and Japan are utterly dependent.

We also have humanitarian interests, where there is genocide and ethnic cleansing. The military implications there are less sure, less certain, as we saw in the prolonged uncertainty, the prolonged dithering as to what our policy and our actions would be in Bosnia.
In addition, we have environmental interests—oil spills, for example, or the Chernobyl-type disasters—actual or potential. And then we have instrumental interests that come from these, or interests of a secondary character, political interests in maintaining friendly relations with other countries. These, I think, have to be differentiated carefully, where these political interests support our other interests, our primary interests of security or economic well-being or humanitarian policies, or environmental conditions that would affect the United States.

Our instrumental interests include the maintenance of the strength and the vitality of NATO, which serves to enable us to safeguard or to pursue or to advance our security interests in particular but humanitarian interests as well. And there may be others.

Because of this large number and long list of interests, it is immediately clear that setting priorities becomes imperative. My contribution to that study on America's national interests was to suggest something that has seemed useful to me over the years, which was to divide these interests into the "blue chips," the "red chips," and the "white chips."

The blue chips pertain to that short list of things that deserve the title "vital"—those that have a bearing on and importance to the survival of the United States and the values that the United States represents. Let's put those in the blue-chip category. Those blue chips, whatever their military implications are, we do well to regard as absolutes.

When it comes to the red chips, things that are important and are useful but do not go so far as to be vital, those are going to require trade-offs. Those are going to require the kind of assessment, "Is the game worth the candle? Will our people continue to support the operation over a long period of time when the costs begin to accumulate?"

I'm reminded in this regard of a rule that I ran into a long time ago: to govern is to choose. We in the military should know that very well. If you try to be strong everywhere, you'll be strong nowhere; that's the principle of concentration. That's also the principle of being very clear as to what your goal is, and the discriminator to me is a pair of questions: "What has enough impact on America and American well-being for our country to support the use of our military forces?" And the second question is: "Where can we have the needed impact on the situation at costs that Americans are prepared to bear?"

I would suggest that it's best to consider these questions early, because they are going to have to be considered either early or late, and if we engage ourselves without having
confronted these questions, without having asked them, we are liable to get ourselves into commitments that will not be sustained. For those of you who shared with me our experience in Vietnam, you'll know just what I'm talking about, I think.

When I served with President Eisenhower, one of his fundamental rules was that when we approached a situation that might involve combat, he called down the bipartisan leadership from the Senate and the House of the United States Congress. He would lay out the problem.

Then he would have Allen Dulles give an intelligence briefing. Next, he would have Foster Dulles give a briefing on the political considerations and political implications involved. And then he would ask either the Secretary of Defense, or more likely the Chairman of the Joint Chiefs of Staff, to lay out the military implications. And then he would say, "When I put all of this together, it seems to me that the best interest of our country lies in taking the following action." And he said, "I need to know whether you will stand with me in doing that."

At that moment, I can tell you that tension would begin to rise in the room. And very often it was Senator Russell who then said, "Well, Mr. President, we understand this, but of course it's your decision, you are the President." And the President said, "I know that and I'm quite prepared to make that decision, but I need to know whether you're going to stand with me, because that's important to my knowing whether I'm going to have the support of the American people."

Well, this was quite a little minuet that they went through. They went through it a number of times, and Eisenhower never departed from stressing that necessity. And about the third occasion when this occurred, I saw a very interesting thing. At the point when Eisenhower said, "I need to know whether you're going to stand with me," they all looked for the door. They all were looking for a way to get out, but he would tell them, and oftentimes he referred back to this, "I saw what happened with President Truman, and that's not going to happen to me." The result was that in every case, before that door opened and they got out of the room, they had to declare themselves.

Now the reason I go back to this little anecdote is that I think that's a fundamental rule. When the time came to think about taking military action in Kuwait, I myself made a very strong recommendation to the people in the White House. In fact, I went over and talked with them and, I would say, overcame their reluctance with this little anecdote, their reluctance to put this issue to the Congress. I commend that principle to you. We did the same thing, and many of you know that when the issue came up of going into Bosnia, there were those of us--senior retired
military people—who joined together in sending a letter up saying we needed a clear-cut decision from the Congress, a clear-cut commitment to support the commitment. And I'm told that Senator McCain, with that letter in hand, made his talk in the Senate stressing the essentiality of getting that determination from our Congress.

So I suggest that we think in terms of these blue chips where there is use or threatened use of force against the United States or its allies, our people, our territory, and our peaceful conduct of our own affairs, and only then the red chips and the white chips—our United Nations peace-keeping, most economic issues, the humanitarian issues, the environmental issues, the political relations.

I recall from my time many years ago in graduate school, one of my professors who always spoke with a certain pungency said that part of wisdom is to subordinate lesser interests to greater ones. That seemed very wise to me, and over the years I've added to it; even before that comes the need to determine which are which, and make the hard choice to give priority of effort to the greater interests in our security policies and our foreign policy and security actions abroad.

But let me go on then and talk about the framework of security policies and decision guidelines that have military implications. I would offer the proposition that deterrence is now the preferred policy path for us to follow—that we should seek victory in achieving or safeguarding our interests without the costs and losses of actual combat if those can be avoided.

That's part of the wisdom of Sun Tzu, if I remember correctly, who said 2500 years ago or so that that's the wisest course—to attain your ends without actual combat. That holds good today, though it has to be thought through again in this new circumstance where we find ourselves.

The Cold War focus is gone, and we have to reshape ourselves to new needs. The requirement is still an effort to prevent foreign actions and activities that we deem harmful, if possible without bloodshed. But the first rule of deterrence, to my mind, is that it has to be based on will and capability. If it is thought that either the will to act is lacking or the capability to act is lacking, if the crunch comes, deterrence will lack effectiveness.

So we then have to consider what kind of military capability is needed for deterrence. And there I would say it's useful to think of two types of deterrence. One, you deter by having a visible capability to punish through the devastating application of force. But I would say that something additional is needed,
and that's deterrence through the visible capability to deny success and to impose heavy costs and losses.

I recall that Churchill, speaking of the outward thrust of the Soviet Union during his talk in Fulton, Missouri—the famous Iron Curtain talk—said, "They seek the fruits of war without the costs of war." When I served in NATO, I turned that around and said, "It seems to me that we have to present to them a certainty that they will bear heavy costs of war should they attack, and a great uncertainty as to whether they can achieve results that would be worth that."

I was asked one time if we could give assurance of the ability to hold through conventional means alone. This was in testimony here before the American Congress. And I said,

No, I don't think we can give that assurance. If they come against us with their full force, take the losses we could impose, which they could take, and sustain the attack, then we have to expect—not a certainty, but we have to expect—in a short period of days we would be confronted with a necessity to add, to augment our operations with nuclear weapons used at least selectively, or face the possibility of complete rupture of our defensive position and capability.

Well, General, doesn't that mean the Holocaust?

It may, it may. They have to think about that as well as we. But it may not, because at that point they may ask themselves, "What is there west of the Iron Curtain for which we are willing to see Russia destroyed?"

I have to tell you the sequel to that. For some reason, that was made public, and I added a comment in which I said, "If the Russian political leaders don't ask themselves that question: "What is there worth Russian destruction?--the Russian military leaders I think will." The Russians picked this up, printed it in Red Star (their publication for their armed forces), called me a provocateur by suggesting there could be a difference between the political and the military echelons, and circulated it to all of their military.

I could not have paid them to do this. They really did my work for me. I've asked myself in the years since, "Why in the world did they do that?" But perhaps, just perhaps, it was a move on their part to reintroduce, to my mind, a little restraint, a little common sense about getting themselves into something that could cause the destruction of their Russian motherland, which is what really means the most to them.
But I talked about the capability to punish and the capability to deny success and impose heavy losses. That takes manifest will and capability. It means, in my opinion—and you'll have to evaluate this, but I give you my view—it means American presence in some key forward areas. We provided that in Europe when we put our four additional divisions there in 1951 and 1952 when NATO was formed. That told the Soviets that they would have to attempt to run over American forces if they were going to attack in Western Europe. And I'll tell you I'm convinced that was a very sobering and useful thought for them to entertain.

Another thing we can do is to show manifest will and capability—movements of forces, a show of force—when a clash of interests occurs, to demonstrate our intent. The next thing we have to have is a credible and viable strategy, at policy level and at military level.

Let me take just a moment on what I mean by "at policy level and at military level." I've often heard that we had no military strategy in Vietnam. I would challenge that. I was deputy commander there with Abrams. He and I talked about that, and we had a very clear notion of what we were aiming to do. It involved North Vietnamese main force units, it involved local units, it involved the communist infra-structure. It involved all the different types of terrain that we had. It involved all of our forces of different kinds on our side: land, air, and naval forces. All of that had to be put together, and we had a very clear conception of what we were undertaking to do.

I have to say that if you went a level higher to find out at the policy level in our government what it was we were aiming to do, you got a lot of different answers. I have to tell you I didn't have all that much confidence in any of them. It was nailing somebody's hide to the wall. Now what the hell does that mean? I don't think it was ever clear, even to the speaker, just what that meant.

But we should be clear as to what our strategy is, and we, speaking at the military level, should insist that our political leaders develop and pursue what I mean by a credible top-level strategy. And it's not all that difficult. In my mind, it is three things: what to do, how to do it, and what to do it with. If you haven't thought that through, you haven't got a strategy; you're muddling around. And muddling around with military units in combat is a recipe for disaster.

If, indeed, deterrence is our aim, then I think there are two stages of decision that we should be aware of. One is the decisions that are needed in peacetime to create, maintain and prepare plans for employment of forces in being that can be put to use.
The second stage of decision comes when the contingency occurs, and that's to employ the forces that are available. And what does that tell us? It tells us that the forces available should have maximum flexibility, because no one can foresee in full, specific detail exactly how a crisis will arise or where it will arise and how it will need to be dealt with.

So that feeds back to peacetime. When I talked about the decisions of peacetime, about creating, maintaining, preparing plans for the force, we have to take into account in peacetime the provision of maximum flexibility when the crisis comes.

Let me say just a word about the study of the deterrence environment. That's a study that should be kept current. Regarding the major powers of the world, we live in a time when there is limited need for a deterrent. There is no apparent cause of conflict among the major powers of the world or between any two of them, setting aside, for the moment, the strains over Taiwan and mainland China.

The main need for a deterrent, this limited need, is to maintain a stable nuclear relationship. I happen to believe that that can be done and that it will be in our interest to do it, by carrying out step-by-step reductions of nuclear dangers and nuclear arsenals to the lowest verifiable level that's consistent with stable security and that the condition of world relations permits. Supported by that limited deterrent, we can then direct our efforts to building positive security relationships, especially with Russia and China.

The greater deterrence challenge is in dealing with the numerous and diverse contingencies that are created and likely to be created by lesser nations. I'm speaking here of the rogues such as Saddam Hussein. No one can be sure what the future of North Korea will be. We can work to try to keep them within the framework of good sense, but we don't know whether that will work.

We want to shape a stable and secure world order, and we are faced with a multitude of problems, disorder, conflicts, unstable governments, ethnic savagery, nuclear proliferation, use or threatened use of chemical and biological weapons, state-sponsored terrorism.

There is a long list, and they have to be thought about and prepared for because they can jeopardize important interests that will require a response on our part. The reason is that those interests involve such things as our safety from attack, our access to raw materials—especially oil, as I mentioned—our free use of the seas for our commerce, and our humanitarian
commitments and obligations. It's important for us to be able to deal with all of these as far as possible upstream. If you have to deal with them early or deal with them late, it's better to deal with them early. That's more challenging in terms of getting congressional and public understanding and support, but it is much more in our interest to do that, and that's a challenge for our political leaders.

Now, let me just say a word—as I think we can—about the military implications of these interests and deterrence policies and decision and action guidelines. What do they tell us? They tell us that we need a force in being capable of rapid augmentation. It tells us that we need adequate capabilities for the tasks anticipated—adequate in terms of size and composition, adequate in terms of deliverable combat power, adequate in terms of operational effectiveness, training, flexibility, and sustainability.

We need, as I suggested, forward presence in certain key areas. We need sea control if we're to have the assurance that our other capabilities can be provided if called upon. It means the ability to carry out swift action, to "be there firstest with the mostest." You can't do better than Nathan Bedford Forrest, and that should be a central element in our planning.

It tells us we need advanced technology, especially for air attack. We need stealth, the ability to suppress casualties and combat losses. We can't avoid them entirely, but by preparation, you can carry out that suppression and thereby hold them to a minimum. We need primary reliance on conventional arms.

The nuclear weapons will be an existential back-up and hedge for a long time to come, at least 10 years or more. We could reduce our nuclear weapons at the rate of about 2,000 a year, the rate at which we built them. It'll take us 10 years to get down to what I would regard as the lowest verifiable level, say, at 100–200 weapons. We may not get there, and it will have to be done step by step. We'll have to know at every step that we've done it prudently.

We need, as I suggested, the ability to punish with overwhelming destructive combat power. We need the ability to identify and destroy key target complexes; that applies in particular to the chemical and biological. I don't question that our nuclear capability will add an existential make-weight to whatever we can do conventionally, but I regard the arguments that we should rely on our nuclear capability as a cop-out, a means of attempting to avoid the development of conventional forces that can take on that job. And we need the ability to seize, to destroy facilities, and to control key areas.
When you put all that together, I think you see in that the

tasks for our air forces, our naval forces, our Marines, and our
Army forces that are essential if we are to have the kind of
deterrent capability that I have described. In addition, we know
that we are going to be called on for peacekeeping and peace
enforcement activities and operations. This will take military
power. Powerful forces, command and control, intelligence,
logistic support; all of that needs to be carefully planned in
relation to the tasks that our forces may be asked to perform.

With regard to these activities, peacekeeping and peace
enforcement, the key question is not whether military forces can
do that job. The answer is, they can. But more important is the
need for clear mission statements, the need for clear command
channels, the need for clear higher direction and decisions. In
many cases, that's not primarily the responsibility of military
people, but military people have the responsibility to give
advice, indeed, to give insistence that those decisions be made.
Along with this, of course, is the need to avoid overcommitment
on tasks of limited importance to American security. We can't
fritter away our assets, which retain the fundamental
responsibility of meeting threats, dangers to American well-being
that go to the blue-chip level in terms of American security.

I was asked to conclude the conference, and I don't know a
better way of concluding it than by saying that when we put all
this together it is a daunting challenge that will require our
best effort in thinking it through, then referring back to
General Marshall, who reminded us so often, "Man is made for
action." It's not just thinking it through, it's acting on what
we have thought through.

I hope the conference has been of value in clarifying
thinking and clarifying the actions needed, and I commend all of
those whose initiative brought about this conference. Thank you
very much for the opportunity to meet with you.
CONCLUSION AND ACKNOWLEDGEMENTS

This symposium brought together men and women, soldiers, airmen, marines, and civilians from government, industry, academia, and the media to speak and, more importantly, to listen. Every speaker, even those who were clearly the specified advocates for their respective services, emphasized both the need for the current QDR and the absolute conclusion that defending the United States is and will remain a joint endeavor. The honest and forthright exchange of ideas, concepts, and opinions furthered the process and, quite possibly, pushed the Department of Defense closer to a successful QDR.

The planning and coordination for the symposium represented a major undertaking on the part of the Association of the U.S. Army. When the Strategic Studies Institute (SSI) suggested that the AUSA take the lead in putting together a symposium which would endeavor to surface as many issues as possible facing all the services, General Jack N. Merritt, (U.S. Army, Retired) and Lieutenant General Richard L. West (U.S. Army, Retired) and Colonel James D. Blundell (U.S. Army, Retired) immediately saw the need and turned vision into reality. Mr. Gayden E. Thompson of The Atlantic Council and Dr. Robert Wood of the U.S. Naval War College also recognized the value of such a meeting and coordinated participation by their respective organizations.

It was the hard work, however, of a few key individuals that made this symposium successful. At AUSA, Colonel Jim Blundell organized the team that brought the symposium together. Mr. George Ehling, Mrs. Lori Johnston, Ms. Paula Brock, and Mrs. Sandra Daugherty did the detailed work that was needed to make the symposium run smoothly. Finally, Colonel Rod Paschall, (U.S. Army, Retired) served as the symposium rapporteur. Without his diligent pen, this SSI Special Report would not have been possible.

The QDR is an event of extreme importance for the Department of Defense, the individual services, and for the American people. What is at stake is the future capability of the nation's military. Now is the time to face the truth, to speak the truth, and to put aside parochial interest so that the interests of us all, the preservation and extension of freedom, may endure into the coming millennium.