In the Eyes of the Experts

Analysis and Comments on America's Strategic Posture

Selected Contributions by the Experts of the Congressional Commission on the Strategic Posture of the United States

Taylor Bolz, editor

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Contents

Note from the Executive Director

Dear Reader:

As the world begins to reinvigorate its concerns about nuclear weapons, the United States has adopted a policy that pledges the nation to work for the global elimination of nuclear weapons but also recognizes that until such conditions exist, we must maintain a safe, reliable, secure, and credible deterrent force. Integral to this policy is the emerging concept of "strategic posture," a concept that remains under-developed but, even in its infancy, useful to this policy.

This book of fifty-three expert papers has been compiled to expand upon the Final Report on the Congressional Commission on the Strategic Posture of the United States and to provide the public with some perspectives on the input provided to the commissioners. The Commission experts—approximately fifty national security and nuclear weapons professionals—were selected by the chairman, Dr. William Perry, and the vice-chairman, Dr. James Schlesinger, on the basis of their proven and extensive backgrounds in national security, defense policy, nuclear physics, and intelligence. Throughout the life of the Commission, these experts convened meetings and corresponded, brainstormed, developed, and critiqued their ideas before drafting papers that were sent on to the commissioners. As one expert put it, these papers, and the analysis and deliberations that they represent, are a "rich lode" of material from which the commissioners drew to form their recommendations. In an effort to illuminate the debate surrounding these issues, I am pleased to offer these papers to the public.

I would like to express my gratitude toward all the experts involved in both the group proceedings and writing of these papers; it demanded significant amounts of their time and attention, all of which they volunteered for benefit of the nation. Their insightful recommendations and considerable experience on these issues proved invaluable to the Commission and will undoubtedly prove invaluable to the country now and in the future.

I also want to recognize the tremendous support provided to the Commission and experts by Taylor Bolz, the editor of this volume, and Brian Rose, our specialist in just about any task I laid on him. They are the best!

Paul Hughes
Executive Director

Introduction

In mid-May 2008, the newly formed Congressional Commission on the Strategic Posture of the United States met for the first time at the U.S. Institute of Peace. Commission chairman William Perry and vice-chairman James Schlesinger convened this preliminary meeting to discuss the Commission's mandate and the selection of experts to aid commissioners in their work. The chair and vice-chair decided to create five expert working groups, each composed of expert advisers and charged with examining a separate component of strategic posture. Experts with experience in academia, government, and the private and non-profit sectors were selected and placed in groups that fit their respective talents and experience. A chair was chosen for each working group, and the mandate of each group was defined. Over the next eleven months, these groups worked semi-autonomously and produced an abundance of research and analysis for the Commission on a range of strategic posture topics.

The result of all this expert effort was a series of papers addressing a variety of strategic issues that helped the Commission in its deliberations. Both Drs. Perry and Schlesinger thought it important to publish these papers to make them available to a wider audience and further inform the public on these important issues of U.S. strategic posture. The groups were named to convey their respective subject areas: National Security Strategy and Policy; Deterrent Force Posture; Nuclear Infrastructure; Countering WMD Proliferation; and External Trends and Conditions. The function of each group was to address a particular area of concern by convening meetings, exchanging ideas via email and phone, circulating drafts among themselves, and ultimately sending these papers on to the commissioners. Later in the process, experts volunteered to form two additional working groups in order to tackle two specific topics of concern: force structure and arms control.

Groups were essentially fora in which experts could circulate ideas internally, receive feedback, and advance suggestions to the Commission for further discussion. Through this structured yet flexible working group system, experts were able to float ideas and opinions to commissioners, sometimes present their ideas in plenary sessions, and receive taskings for additional research from the Commission. Several government agencies provided briefings to the Commission as well as the working groups, including the Department of Defense, the Department of Energy, the National Nuclear Security Administration, and the Office of the Director of National Intelligence, among

others, to provide experts with the most accurate information available from which they could form their arguments.

This reader is a collection of those expert working group papers and ideas that were presented to the Commission, in one form or another, between the summer of 2008 and the spring of 2009. Papers from the External Trends and Conditions working group could not be included in this compilation because they refer to classified information. All other papers included in this book are organized thematically—not based on group origin or on chronological progression—and focus on three central dimensions of strategic posture identified in the executive summary of the final report: deterrence, nonproliferation, and arms control. A fourth chapter on infrastructure was deemed necessary given the extraordinary wealth of material and the timeliness of the subject.

This compilation represents a portion of the experts' work and only begins to describe the extent to which they contributed their time and expertise. In his statement to Congress, Dr. Perry recognized and praised "the members of [the] five Expert Working Groups and their leaders, who have volunteered countless hours of their time in supporting the Commission and its work and provided us with strong intellectual assistance of the highest caliber." Though this book is an incomplete reflection of the total expert work effort as described by Chairman Perry, it is the most complete account of the experts' contributions to the Commission and is indicative of the nuanced and comprehensive input that factored into the Commission's final conclusions.

To set the stage for the analysis and commentary ahead, both Dr. Perry's and Dr. Schlesinger's statements to Congress are included in this introduction. Taken together, these statements offer a complementary and useful overview of the Commission's mandate and work.

Statement of Dr. William Perry

Last year, Congress appointed our twelve-person bipartisan group to conduct this review of U.S. strategic posture, and asked me to serve as chairman with Jim Schlesinger as vice-chairman. This Commission has deliberated for the last eleven months and is now prepared to report to the administration, to the Congress, and to the American people, and we are here today to do so. We all applaud the wisdom of Congress in setting up this Commission. For too long, there have been unanswered, even unasked, questions about the strategic posture of the United States, especially the nuclear dimensions of that posture. This "strategic silence" has not served America well. Continuing questions about our broader strategic posture have gone unaddressed, while the military, geopolitical, and technical needs that underlie these questions have grown ever more insistent. We understood from the outset that the lack

of consensus about the future of the U.S. nuclear deterrent was a key motivator in Congress's charge to the Commission.

So your tasking last year to the Commission was timely. We hope that our report will be a useful input to the new administration as it prepares to undertake a new nuclear posture review.

The Commission has greatly benefited from the input of a number of members of Congress, outside groups, and individuals of every stripe who care deeply about these issues and their country. Likewise we have been enriched in our understanding of these issues by the thoughtful perspectives and advice of nations that are U.S. allies, friends, or fellow nuclear powers. We received unstinting assistance from the Executive Branch, which has been individually and collectively supportive of the Commission. The United States Institute of Peace, its employees and contractors have provided outstanding support to the Commission, and I thank them. I also want to make special mention of and praise the members of our five Expert Working Groups and their leaders, who have volunteered countless hours of their time in supporting the Commission and its work and provided us with strong intellectual assistance of the highest caliber.

While each commissioner would have written a report that would be worded somewhat differently than our final report, it is most significant that with the exception of parts of the chapter on the Comprehensive Test Ban Treaty (CTBT), this is a consensus document. And even with CTBT, while we could not agree on common language overall, we did agree on recommendations that would prepare the way for Senate reconsideration of the Treaty. We strove to ensure that the essence of our disagreement was presented as clearly and succinctly as possible so that interested individuals and groups can review the arguments, weigh them carefully, and reach their own conclusions.

At the beginning of the Commission's work, I did not imagine that such an ideologically disparate group of senior experts would find so much common ground. And the trail we followed to arrive at this document was not always easy for us, logistically, intellectually, or emotionally. But the seriousness of the issues, and the stakes involved for America and the world, called forth the "better angels" in all of us commissioners, producing the largely consensus document you have before you today. We hope that the Executive Branch and Congress will also face these critical security policy issues in a similar nonpartisan spirit.

In conducting its work, the Commission has adopted a broad definition of strategic posture. We defined the scope of our work to include all dimensions of nuclear weapons, including the key infrastructures that support them, and all the major tools to counter the nuclear threat to the United States and its allies, including arms control, missile defense, and countering nuclear proliferation.

But we also defined some limits to our inquiry. For example, we chose not to expand our scope of work to address issues associated with all weapons of mass destruction, though we did address the question of whether and how nuclear weapons have a role in deterring attacks with biological weapons. Neither did we examine threats such as cyber attacks and space conflict, though this does not mean we consider them unimportant, and believe they merit serious examination in the near future. Also, our pre-eminent conventional military capabilities are themselves a major strategic force, but we understood Congress was not seeking our advice on these matters.

When one considers the destructive power of the nuclear weapons within our strategic posture, which generated important disagreements throughout the Cold War and after, it is not surprising the American nuclear posture has been, and will continue to be, highly controversial on key issues. What was surprising is the extent to which our Commission did reach agreement on numerous issues related to our deterrent capabilities, nonproliferation initiatives, and arms control strategies—what I believe are the three key components of U.S. strategic posture in the years ahead. The Commission agreed that the nation must continue to safeguard itself by maintaining a nuclear deterrent appropriate to existing threats until such time as verifiable international agreements are in place that could set the conditions for the final abolition of nuclear weapons. That is, we seek to safeguard our security by supporting military and intelligence programs that maintain our deterrence force. At the same time, we also seek to safeguard our security by supporting largely non-military programs that prevent the proliferation of nuclear weapons to other states, that reduce the number of nuclear weapons worldwide, and that provide better protection for the residual nuclear forces and fissile material. Both approaches are necessary for America's future; each can and should reinforce the other; and neither by itself is sufficient as long as nuclear weapons still exist in the world.

Nuclear weapons safeguarded our security for decades during the Cold War by deterring an attack on the U.S. and its allies. We will need them to continue to perform this deterrence role as long as others possess them as well. On the other hand, if nuclear weapons were to fall into the hands of a terror organization, they could pose an extremely serious threat to our security, and one for which traditional forms of deterrence would not be applicable, given the terrorist mind-set. We must be mindful that Al Qaeda, for example, has declared that obtaining a nuclear weapon is a "holy duty" for its members.

Preventing nuclear terrorism is closely tied to stopping the proliferation of nuclear weapons, and recent developments in North Korea and Iran suggest that we may be at or near a tipping point in nuclear proliferation. (The urgency of stopping proliferation is articulated compellingly in the recent WMD Commission report: "World at Risk.")

While the programs that maintain our deterrence force are national, the programs that prevent proliferation and safeguard nuclear weapons and fissile material are both national and international. Indeed, it is clear that we cannot meet our goal of reducing the proliferation threat without substantial international cooperation. We cannot "go it alone" on this crucial security issue, nor need we, given that other nations are at risk from nuclear proliferation as much as we. But the international programs that are most effective in containing and rolling back proliferation can sometimes be in conflict with the national programs designed to maintain deterrence. Thus a strategic posture for the U.S. that meets both of these security requirements will necessarily have to make some trade-offs between these two important security goals when they are in conflict. Some commissioners give a priority to dealing with one threat while others give a priority to dealing with the other threat. But throughout the deliberations of the Commission, there was unswerving member loyalty to the importance of ensuring U.S. security in the years ahead, and all of our members sought to strike a balance that supports, to reasonable levels, both of these security needs. To a large extent, I am pleased to say, we were able to meet that objective.

The need to strike such a balance has been with us at least since the ending of the Cold War. President Clinton's policy on nuclear posture spoke of the need to "lead but hedge." That policy called for the U.S. to lead the world in mutual nuclear arms reductions and to lead in programs to prevent the proliferation of nuclear weapons, while at the same time maintaining a nuclear deterrent force that hedged against adverse geopolitical developments. The leadership aspect of this policy was demonstrated most vividly by a cooperative program with Russia, established under the Nunn-Lugar Program, that dismantled more than 4,000 Russian nuclear weapons and assisted Ukraine, Belarus, and Kazakhstan in removing all of their nuclear weapons, a signal contribution to a safer world. U.S. leadership was also demonstrated by signing the Comprehensive Test Ban Treaty (CTBT), which seeks a permanent end to all nuclear testing, and negotiating with Russia a new arms control treaty for further reductions in nuclear weapons.

However, neither treaty was ratified by the Senate. The Bush administration initially took a different view on U.S. strategic posture, but last year Defense Secretary Gates explicitly reaffirmed that the American nuclear posture would be based on the time-tested "lead but hedge" strategy.

President Obama has moved this strategy forward, stating that the U.S. should work towards the goal of eventually eliminating all nuclear weapons. But he has also said that until that goal is reached, he is committed to maintain a U.S. nuclear deterrent that is safe, secure, and reliable. This is, in a sense, the most recent formulation of the "lead but hedge" policy. The Commission believes that reaching the ultimate goal of global nuclear elimination would

require a fundamental change in the world geopolitical situation, something that none of us believe is imminent. Senator Sam Nunn, former chairman of this Committee, who has espoused the vision of nuclear elimination, has described this vision as the "top of the mountain," which cannot be seen at this time, and the exact path to which is not yet visible. But he argues that we should be heading up the mountain to a "base camp" that would be safer than where we are today, and from which the path to the mountaintop becomes clearer. In Nunn's view, getting the international political support to move to this "base camp" requires the United States to affirm the vision of global elimination of nuclear weapons. When we reach the base camp, it would

- provide for U.S. nuclear forces that are safe, secure, and can reliably deter attacks against the U.S. and our allies;
- be headed in the direction of the global elimination of nuclear weapons; and
- be stable—that is, it should be sustainable even under typical fluctuations in geopolitical conditions.

This base camp concept serves as an organizing principle for my own thinking about our strategic posture, since it allows the United States to both lead in the struggle to reduce and ultimately eliminate the nuclear danger; and hedge against a reversal in this struggle, providing an important safety net for U.S. security. While some of the commissioners do not accept this view of the base camp as an organizing principle, all commissioners accept the view that the U.S. must support programs that both lead and hedge; that is, programs that move in two parallel paths—one path which protects our security by maintaining deterrence, and the other which protects our security by reducing the danger of nuclear weapons.

The first path, "Deterrence," would include the following components:

- Clarify our policy on use of nuclear weapons to include a statement that our nuclear forces are intended to deter an attack against the U.S. or its allies (extending this security guarantee to our allies is often referred to as "extended deterrence") and would be used only as a defensive last resort; at the same time, our policy would reaffirm the security assurances we have made to non-nuclear states that signed the Non-Proliferation Treaty (NPT).
- Back up our deterrent and extended deterrent policy by assuring that our nuclear forces—including the weapons themselves, their delivery platforms, and the surveillance, detection, and command/control/communications/intelligence infrastructures that support them and the National Command Authority—are safe, secure, and reliable, and in sufficient quantities to perform their deterrent task.

- Maintain the safety, security, reliability, and effectiveness of our nuclear weapons stockpile by an enhanced nuclear weapons life extension program as long as it is feasible; but ensure the nuclear weapons laboratories maintain their capability to design a new weapon should that ever become necessary.
- Provide robust support for the Stockpile Stewardship Program, DOE's highly successful program to ensure the safety, security, and reliability of the nation's nuclear stockpile without testing. This program seeks a comprehensive, science-based understanding of nuclear weapon systems, and entails pushing the frontiers of computing and simulation along with ensuring robust laboratory experimental capabilities. The weapons labs have achieved remarkable success with stockpile stewardship, but continued success is endangered by recent personnel and funding cuts.
- Maintain all three weapon laboratories with programs that fully support the nuclear weapons programs and maintain their scientific and design vitality. Besides weapons programs, their program mix should include fundamental research and energy technologies as well as an expanded national security role, which will benefit other dimensions of the security challenges we face.
- Transform our weapons production capability by reducing and modernizing it, giving first priority to the Los Alamos plutonium facility, followed by the Y-12 site Uranium Processing Facility site after the plutonium facilities are under construction. The goal would be to have a capability to produce small numbers of nuclear weapons as needed to maintain nuclear stockpile reliability.
- Provide proven strategic missile defenses sufficient to limit damage from and defend against a limited nuclear threat such as posed by North Korea or Iran, as long as the defenses are effective enough to at least sow doubts in the minds of such countries that an attack would succeed. These defenses should not be so sizable or capable as to sow such doubts in the minds of Russia or China, which could well lead them to take countering actions, increasing the nuclear threat to the U.S. and its allies and friends and undermining efforts to reduce nuclear numbers, and nuclear dangers.
- Reprogram funding to initiate F-35 fighter aircraft contractor participation with NNSA to ensure that the U.S. would maintain current capabilities available to support U.S. allies.

The Commission recognizes the tension between modernization and nonproliferation. But so long as modernization proceeds within the framework of existing U.S. policy, it should minimize political difficulties. As a matter of policy, the United States does not produce fissile materials and does not conduct nuclear explosive tests, and does not currently seek new weapons with

new military characteristics. Within this framework, the United States should seek all of the possible benefits of improved safety, security, and reliability.

The second path, "Reducing the Danger," includes the following components:

- Re-energize efforts to reverse the nuclear proliferation of North Korea and prevent the nuclear proliferation of Iran. Seek global cooperation to deal with other potential proliferation concerns arising from the anticipated global expansion of civilian nuclear power.
- Negotiate arms reduction treaties with Russia that make significant reductions in the nuclear stockpiles of Russia and the United States. The treaties should include verification procedures and should entail real reductions, not just a transfer from deployed to reserve forces. The first treaty could decrease deployed strategic warheads to numbers lower than the lower SORT limit (Moscow Treaty of 2002), but the actual numbers are probably less important than the "counting and attribution rules" of preceding agreements. I am quite encouraged by President Obama's announcement that he will seek a replacement strategic arms agreement before START I expires this December, and the positive Russian response. Follow-on treaties should seek deeper reductions, which would require finding ways to deal with difficult problems such as addressing "tactical" nuclear forces, reserve weapons and engaging other nuclear powers.
- Seek a deeper strategic dialogue with Russia that is broader than nuclear treaties, to include civilian nuclear energy, ballistic missile defenses, space systems, nuclear nonproliferation steps, and ways of improving warning systems and increasing decision time.
- Renew and strengthen strategic dialogue with a broad set of states interested in strategic stability, including not just Russia and our NATO allies but also China and U.S. allies and friends in Asia.
- Augment funding for threat reduction activities that strengthen controls at vulnerable nuclear sites. The surest way to prevent nuclear terrorism is to deny terrorist acquisitions of nuclear weapons or fissile materials. An accelerated campaign to close or secure the world's most vulnerable nuclear sites as quickly as possible should be a top national priority. This would build on and expand the important foundation of work begun under the Nunn-Lugar Cooperative Threat Reduction Program. Commit to the investment necessary to remove or secure all fissile material at vulnerable sites worldwide in four years. This relatively small investment could dramatically decrease the prospects of terrorist nuclear acquisition.

- Seek Senate ratification of the Comprehensive Test Ban Treaty and encourage other holdouts to do likewise. I strongly support Senate ratification of the CTBT, but I want to be clear that my view is not shared by all commissioners. I believe that the Stockpile Stewardship Program, established as a safeguard when the U.S. signed the CTBT, has been an outstanding success, and, with sufficient funding support, can continue to be. The United States has refrained from testing nuclear weapons for 17 years already and has no plans to resume such testing in the future. Prior to seeking ratification, the administration should obtain an explicit understanding with the P-5 states as to what tests are permitted by the treaty, and conduct a careful analysis of the issues that prevented ratification a decade ago. (All commissioners agree that these preceding steps should be taken, but not all commissioners support ratifying the CTBT.)
- While the Senate has the responsibility for considering the CTBT for ratification, both the Senate and the House should support funding for any Treaty safeguards the Obama administration may propose, which will be essential to the ratification process.
- Prepare carefully for the NPT review conference in 2010. If we are able to make progress in a new arms reduction treaty and CTBT ratification, this would reassert U.S. leadership and create favorable conditions for a successful conference.
- Seek an international Fissile Material Cutoff Treaty, as President Obama has called for, that includes verification procedures, and redouble domestic and international efforts to secure all stocks of fissile material, steps that would discourage both nuclear proliferation and nuclear terrorism.
- Seek to strengthen the International Atomic Energy Agency (IAEA) in its task to prevent the proliferation of nuclear weapons to other nations and control access to fissile material. In particular, work with the IAEA to promote universal adoption of the Additional Protocol to the NPT, which would allow extra inspections of suspected nuclear facilities as well as declared facilities.
- Develop and pursue options for advancing U.S. interests in stability in outer space and in increasing warning and decision-time. The options could include the possibility of negotiated measures.
- Renew the practice and spirit of executive-legislative dialogue on nuclear strategy that helped pave the way for bipartisanship and continuity in policy in past years. To this end, we urge the Senate to consider reviving the Arms Control Observer Group, which served the country well in the past.

In surveying six-plus decades of nuclear history, the Commission notes that nuclear weapons have not been used since 1945. It is clear that a tradition against the use of nuclear weapons has taken hold, which we must strive to maintain, and urge all nuclear-armed nations to adhere to it.

In sum, this is a moment of opportunity but also of urgency. The opportunity arises from the arrival of the new administration in Washington and the top-down reassessment that must now begin of national security strategy and of the purposes of U.S. nuclear weapons. The opportunity also arises because the Russian government has indicated a readiness to undertake a serious dialogue with the U.S. on strategic issues. The urgency arises because of the imminent danger of nuclear terrorism if we pass a tipping point in nuclear proliferation. The urgency also arises because of an accumulation of difficult decisions affecting our nuclear posture.

The commissioners know and agree on what direction they want to see the world take. We reject the vision of a future world defined by a collapse of the nonproliferation regime, a cascade of nuclear proliferation to new states, a resulting dramatic rise in the risks of nuclear terrorism, and renewed fruitless competition for nuclear advantage among major powers.

As pragmatic experts, we embrace a different vision. We see a world where the occasional nonproliferation failure is counterbalanced by the occasional rollback of some and continued restraint by the many. We see a world in which nuclear terrorism risks are steadily reduced through stronger cooperative measures to control terrorist access to materials, technology, and expertise. And we see a world of cooperation among the major powers that ensures strategic stability and order, and steadily diminishes reliance on nuclear weapons to preserve world peace, not as a favor to others, but because it is in the best interests of the United States, and the world. We commissioners believe that implementing the strategy our report recommends will help the United States lead the global effort to give fruitful birth to this new world.

Statement of Dr. James Schlesinger

The Congress established the Commission on Strategic Posture in order to provide recommendations regarding the appropriate posture for the United States under the changed conditions of the early twenty-first century. The appointed Commissioners represent a wide range of the political spectrum and have had quite diverse judgments on these matters. Nonetheless, urged by members of Congress, the Commission has sought to develop a consensus view. To a large—and, to some, a surprising—extent, the Commission has succeeded in this effort. Secretary Perry and I are here to present that consensus to this Committee. We are, of course, indebted to the Committee for this opportunity to present these recommendations.

For over half a century, the U.S. strategic policy has been driven by two critical elements: to maintain a deterrent that prevents attacks on the United States, its interests, and, notably, its allies—and to prevent the proliferation of nuclear weapons. The end of the Cold War, and particularly the collapse of the Soviet Union/Warsaw Pact, along with the substantial edge that the United States has developed in conventional military capabilities, has permitted this country sharply to reduce our reliance on nuclear weapons, radically to reduce our nuclear forces, and to move away from a doctrine of nuclear initiation to a stance of nuclear response only under extreme circumstances of major attack on the United States or its allies.

On the other hand, the growing availability of nuclear technology, along with the relaxation of the constraints of the Cold War, have obliged us to turn increasing attention to the problem of nonproliferation and, in particular, to the possibility of a terrorist nuclear attack on the United States.

Secretary Perry has just spoken on the diplomatic issues and the problems of preventing proliferation, and the risks of nuclear terrorism. I, for my part, will focus on the need, despite its substantially shrunken role in the post–Cold War world, to maintain a deterrent reduced in size, yet nonetheless reliable and secure—and sufficiently impressive and visible to provide assurance to the thirty-odd nations that are protected under the U.S. nuclear umbrella.

1. Since the early days of NATO, the United States has provided Extended Deterrence for its allies. That has proved a far more demanding task than protection of the United States itself. In the past that has required a deterrent sufficiently large and sophisticated to deter a conventional attack by the Soviet Union/Warsaw Pact. It also meant that the United States discouraged the development of national nuclear capabilities, particularly during the Kennedy administration, both to prevent proliferation and to avoid the diversion of resources away from the development of conventional allied capabilities. With the end of the Cold War and the achievement of U.S. preponderance in conventional capabilities, the need for so substantial a deterrent largely disappeared. Nonetheless, the requirements for Extended Deterrence still remain at the heart of the design of the U.S. nuclear posture. Extended Deterrence still remains a major barrier to proliferation. Both the size and the specific elements of our forces are driven more by the need to reassure those that we protect under the nuclear umbrella than by U.S. requirements alone. Even though the overall requirements of our nuclear forces have shrunk some eighty percent since the height of the Cold War, nonetheless the expansion of NATO and the rise of Chinese nuclear forces, significant if modest, have altered somewhat the requirements for our own nuclear forces.

2. Even though the most probable source of a weapon landing on American soil increasingly is that of a nuclear terrorist attack, nonetheless the sizing of our own nuclear forces (in addition to other elements of our deterrent posture) remains driven in large degree by Russia. Our NATO allies—and most notably the new members of NATO—remain wary of Russia and would eye nervously any sharp reduction of our nuclear forces relative to those of Russia—especially in light of the now-greater emphasis by Russia on tactical nuclear weapons. Consequently, the Commission did conclude that we should not engage in unilateral reductions in our nuclear forces and that such reductions should occur only as a result of bilateral negotiations with Russia under a follow-on START Agreement. Any such reductions must, of course, be thoroughly discussed with our allies
3. Our East Asian allies also view with great interest our capabilities relative to the slowly burgeoning Chinese force. Clearly that adds complexities, for example, to the protection of Japan, though that remains a lesser driver with respect to overall numbers. Still, the time has come to engage Japan in more comprehensive discussions—akin to those with NATO in the Nuclear Planning Group. It will also augment the credibility of the Extended Deterrent.
4. The Commission has been urged to specify the number of nuclear weapons the United States should have. That is an understandable question—particularly in light of the demands of the appropriations process in the Congress. Nonetheless, it is a mistake to focus unduly on numbers, without reference to the overall strategic context. Clearly, it would be illogical to provide a number outside of the process of negotiation with Russia—given the need to avoid giving away bargaining leverage. In preparation for the Treaty of Moscow, as with all of its predecessors, the composition for our prospective forces was subjected to the most rigorous analyses. Thus, it would seem to be unacceptable to go below the numbers specified in that Treaty without a similarly rigorous analysis of the strategic context—which has not yet taken place. Moreover, as our Russian friends have repeatedly told us: strategic balance is more important than the numbers.
5. Given the existence of other nations' nuclear capabilities and the international role that the United States necessarily plays, the Commission quickly reached the judgment that the United States must maintain a nuclear deterrent for "the indefinite future." It must convey, not only the capacity, but the will to respond—in necessity. Some members of the Commission have expressed a hope that at some future date we might see the worldwide abolition of nuclear weapons. The judgment of the Commission, however, has been that attainment of such a goal would

require a "transformation of world politics." President Obama also has expressed that goal, but has added that as long as nuclear weapons exist in the world, the United States must maintain "a strong deterrent." We should all bear in mind that abolition of nuclear weapons will not occur outside that "transformation of world politics."

6. We sometimes hear or read the query, "Why are we investing in these capabilities which will never be used?" This is a fallacy. A deterrent, if it is effective, is in "use" every day. The purpose in sustaining these capabilities is to be sufficiently impressive to avoid their "use"—in the sense of the actual need to deliver the weapons to targets. That is the nature of any deterrent, but particularly a nuclear deterrent. It exists to deter major attacks against the United States, its allies, and its interests.

Years ago the role and the details of our nuclear deterrent commanded sustained and high-level national attention. Regrettably, today they do so far less than is necessary. Nonetheless, the role of the deterrent remains crucial. Therefore, I thank this Committee for its continued attention to these critical questions.