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First published 2009

Printed in the United States of America


ISBN 978-1-60127-045-0
Executive Summary

U.S. nuclear strategy begins with the central dilemma that nuclear weapons are both the greatest potential threat to our way of life and important guarantors of U.S. security. A breakdown of international nuclear order would be a catastrophe for the United States among many others. Preservation of that order requires that we work to reduce nuclear dangers by effective deterrence, arms control, and nonproliferation.

This is a moment of opportunity to revise and renew U.S. nuclear strategy, but also a moment of urgency. The opportunity arises from the arrival of a new administration in Washington and the top-down reassessment that must now begin of national security strategy, of approaches to nuclear security, and of the purposes of U.S. nuclear weapons and their supporting capabilities. The urgency follows, internationally, from the danger that we may be close to a tipping point in nuclear proliferation and, domestically, from an accumulation of delayed decisions about the nuclear weapon program.

In addressing the challenges of nuclear security for the decades ahead, the United States must pursue a comprehensive strategy. So long as nuclear dangers remain, it must have a strong deterrent that is effective in meeting its security needs and those of its allies. This is a challenge that has changed fundamentally over the last two decades—and largely for the better. The nuclear deterrent of the United States need not play anything like the central role that it did for decades in U.S. military policy and national security strategy. But it remains crucial for some important problems.

While deterrence plays an essential role in reducing nuclear dangers, it is not the only means for doing so, and accordingly the United States must seek additional cooperative measures of a political kind, including for example arms control and nonproliferation. This is a time when these approaches can be renewed and reenergized.
These components of strategy must be integrated into a comprehensive approach. They can be mutually complementary and self-reinforcing. But sometimes there are conflicts and trade-offs, and these must be clearly identified and hard choices made.

The body of this report includes a total of nearly 100 findings and recommendations. These elaborate constructive steps that can be taken now to adapt the components of strategy to the challenges and opportunities in front of the nation. The main themes of these findings and recommendations are as follows.

**On the security environment:** Over the last two decades, the security environment of the United States has changed considerably and generally for the better. The threat of nuclear Armageddon has largely receded. At the height of the Cold War, the U.S. nuclear arsenal numbered over 32,000 weapons and the Soviet arsenal over 45,000; today, the United States has reduced its arsenal of operationally deployed strategic nuclear warheads to approximately 2,000 and Russia is not far behind. The two have also withdrawn about 14,000 tactical nuclear weapons from forward deployments. But new challenges have emerged, especially the threat of nuclear terrorism and increased proliferation. The opportunities to further engage Russia and China, as well as U.S. allies and other partners, to meet these new challenges are rising. President Obama has pledged to work for the global elimination of nuclear weapons, but until that happens, to maintain a safe, secure, and reliable deterrent force. The conditions that might make possible the global elimination of nuclear weapons are not present today and their creation would require a fundamental transformation of the world political order. But this report spells out many steps that can significantly reduce nuclear dangers and that are available now.

**On the U.S. nuclear posture:** The principal functions of the U.S. nuclear posture are to create the conditions in which nuclear weapons are never used, to assure allies of the U.S. commitment to their security, and to discourage unwelcome competition while encouraging strategic cooperation. Though the Cold War calculus to achieve these goals was effective at the time, the U.S. nuclear posture needs to change to cope with the new, more complex and fluid threat environment. A great deal of change has already occurred. The nuclear force of the United States is a small fraction of what it was at the end of the Cold War and the U.S. reliance on nuclear weapons in national military strategy and national security strategy has been reduced. This process can continue, assuming that Russia is willing to remain
involved in the process. The sizing of U.S. forces remains overwhelmingly driven by the requirements of essential equivalence and strategic stability with Russia. For the deterrence of attacks by regional aggressors and even China, the force structure requirements are relatively modest. The focus on Russia is not because the United States and Russia are enemies; they are not. No one seriously contemplates a direct Russian attack on the United States. Some U.S. allies located closer to Russia, however, are fearful of Russia and its tactical nuclear forces. The imbalance in non-strategic nuclear weapons, which greatly favors Russia, is of rising concern and an illustration of the new challenges of strategic stability as reductions in strategic weapons proceed. The need to reassure U.S. allies and also to hedge against a possible turn for the worse in Russia (or China) points to the fact that the U.S. nuclear posture must be designed to address a very broad set of U.S. objectives, including not just deterrence of enemies in time of crisis and war but also assurance of our allies and dissuasion of potential adversaries. Indeed, the assurance function of the force is as important as ever. The triad of strategic nuclear delivery systems should be maintained for the immediate future and this will require some difficult investment choices. The same is true for delivery systems of non-strategic nuclear weapons.

**On missile defense:** Missile defenses can play a useful role in supporting the basic objectives of deterrence, broadly defined. Defenses that are effective against regional aggressors are a valuable component of the U.S. strategic posture. The United States should develop and, where appropriate, deploy missile defenses against regional nuclear aggressors, including against limited long-range threats. These can also be beneficial for limiting damage if deterrence fails. The United States should ensure that its actions do not lead Russia or China to take actions that increase the threat to the United States and its allies and friends.

**On declaratory policy:** Declaratory policy is a signal of U.S. intent to both friends and prospective enemies and thus an important aspect of the overall strategic posture. To be effective, it must be understood to reflect the intentions of national leadership. While an element of calculated ambiguity remains essential, there should be enough clarity that potential foes will be deterred. The United States should underscore that it conceives of and prepares for the use of nuclear weapons only for the protection of itself and its allies in extreme circumstances.

**On the nuclear weapons stockpile:** So long as it continues to rely on nuclear deterrence, the United States requires a stockpile of nuclear weapons...
that are safe, secure, and reliable, and whose threatened use in military conflict would be credible. The Stockpile Stewardship Program and the Life Extension Program have been remarkably successful in refurbishing and modernizing the stockpile to meet these criteria, but cannot be counted on for the indefinite future. The Commission observes that the debate over the proposed Reliable Replacement Warhead revealed a lot of confusion about what was intended, what is needed, and what constitutes “new” and believes that, as the nation moves forward, it must be clear about what is being initiated (and what is not) as well as what makes a weapon “new” and what does not. Alternatives to stockpile stewardship and life extension involve to varying degrees the reuse and/or redesign of components and different engineering solutions. The decision on which approach is best should be made on a type-by-type basis as they age. So long as modernization proceeds within the framework of existing U.S. policy, it should encounter minimum political difficulty. As a matter of U.S. policy, the United States does not produce fissile materials and does not conduct nuclear explosive tests. Also the United States does not currently seek new weapons with new military characteristics. Within this framework, it should seek the possible benefits of improved safety, security, and reliability available to it.

On the nuclear weapons complex: The physical infrastructure is in serious need of transformation. The National Nuclear Security Administration (NNSA) has a reasonable plan but it lacks the needed funding. The intellectual infrastructure is also in trouble. Redesignating the weapons laboratories as national security laboratories and strengthening their cooperation with the Departments of Defense, State, and Homeland Security and also the intelligence community can help with both of these problems. NNSA has not achieved the original intent of the law that created it; it lacks the needed autonomy. This requires that the NNSA Act be amended to establish NNSA as a separate agency reporting to the President through the Secretary of Energy, along with other provisions aimed at ensuring the needed autonomy.

On arms control: The moment appears ripe for a renewal of arms control with Russia, and this bodes well for a continued reduction in the nuclear arsenal. The United States and Russia should pursue a step-by-step approach and take a modest first step to ensure that there is a successor to START I when it expires at the end of 2009. Beyond a modest incremental reduction in operationally deployed strategic nuclear weapons, the arms control process becomes much more complex as new factors are introduced. One of the most important factors will be the imbalance of non-strategic nuclear weapons. In support of its arms control interests and interest in strategic stability more generally, the
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United States should pursue a much broader and more ambitious set of strategic dialogues with not just Russia but also China and U.S. allies in both Europe and Asia.

**On nonproliferation:** This is also an opportune moment to reenergize nonproliferation. Success in advancing U.S. nonproliferation interests requires U.S. leadership. Despite the occasional failure of nonproliferation, the historical track record is good, and there is good reason to hope for continued success in the years ahead. The risks of a proliferation “tipping point” and of nuclear terrorism underscore the urgency of acting now. The United States should pursue a broad agenda to strengthen the international treaty system and the institutions that support its effective functioning. It is especially important that it prepare to play a leadership role at the 2010 NPT Review Conference.

**On the Comprehensive Test Ban Treaty (CTBT):** The Commission has no agreed position on whether ratification of the CTBT should proceed. But recognizing that the President has called for the Senate to reconsider U.S. ratification, the Commission recommends a number of steps to enable Senate deliberation, including preparation of a comprehensive net assessment of benefits, costs, and risks that updates arguments from a decade ago.

**On prevention and protection:** Since nonproliferation does not always succeed and deterrence is sometimes unreliable, the overall strategy must be supplemented with additional steps to prevent nuclear proliferation and terrorism and protect ourselves from its consequences. The Commission supports measures such as the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism and also encourages stronger “whole of government” approaches to reduce the risks of nuclear smuggling into the United States. We note also that the United States has done little to reduce its vulnerability to attack with electromagnetic pulse weapons and recommend that current investments in modernizing the national power grid take account of this risk.

**On visions of the future:** The Congress charged the Commission to look to the long term in formulating its recommendations about the U.S. strategic posture. As we have debated our findings and recommendations, it has become clear that we have very different visions of what might be possible in the long term. Fundamentally, this reflects our differences over whether the conditions can ever be created that might enable the elimination of nuclear weapons. But our debates have also brought home to us that, despite our differences over the long term, we share to a very significant degree a vision of the nearer term. And it is a hopeful vision. We reject the notion that...
somehow it is inevitable that international nuclear order will collapse. On the contrary—the past successes of the United States and its international partners in meeting and reducing nuclear dangers make us more hopeful for the future. We embrace the possibility that over the next decade or two nuclear dangers will be further reduced. Despite our many differences of opinion about possibilities and priorities, we have come together around a strategy that offers pragmatic steps for bringing this vision closer to reality. It is firmly grounded in the strategic tradition of the United States in balancing deterrence and other means, including principally arms control and nonproliferation, to reduce nuclear dangers. This strategy is also essential to the preservation of the tradition of nuclear non-use, which is now deeply rooted in six decades of experience and strongly serves U.S. interests.