

National Security and Nuclear Weapons: Maintaining Deterrence in the 21st Century

A Statement by the
Secretary of Energy, Secretary of Defense and Secretary of State



July 2007

Report Documentation Page

*Form Approved
OMB No. 0704-0188*

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE JUL 2007	2. REPORT TYPE N/A	3. DATES COVERED -		
4. TITLE AND SUBTITLE National Security and Nuclear Weapons: Maintaining Deterrence in the 21st Century		5a. CONTRACT NUMBER		
		5b. GRANT NUMBER		
		5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)		5d. PROJECT NUMBER		
		5e. TASK NUMBER		
		5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Department of Defense Department of Energy Department of State Washington, DC 20036		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)		
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited				
13. SUPPLEMENTARY NOTES The original document contains color images.				
14. ABSTRACT				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	SAR	18. NUMBER OF PAGES 4
				19a. NAME OF RESPONSIBLE PERSON

U.S. National Security and Nuclear Weapons: Maintaining Deterrence in the 21st Century

A principal national security goal of the United States is to deter aggression against ourselves, our allies, and friends. Every American administration since President Truman's day has formulated U.S. national security policy in much the same terms, making clear to adversaries and allies alike the essential role that nuclear weapons play in maintaining deterrence. Sustaining U.S. deterrence policy has required decades of dedicated service from the men and women of our armed forces, skilled representation by America's diplomats, and painstaking, often dangerous work by America's nuclear scientists, engineers, and technicians. The extension of a credible U.S. nuclear deterrent has been critical to allied security and removed the need for many key allies to develop their own nuclear forces.

Above all, maintaining a credible deterrent has required a decades-long, bipartisan partnership with Congress. Some in Congress have recently expressed the view that we lack a coherent nuclear weapons strategy that provides the direction and rationale for the post-Cold War U.S. nuclear force structure. To address these concerns in more depth, a detailed report will follow this summary paper. The report will lay out the data and methodology used to determine our nuclear weapons force structure, outline knowledge points for measuring progress in transforming our nuclear stockpile, and dispel a number of myths that have grown up around U.S. nuclear forces.

It is the policy of this Administration to achieve an effective strategic deterrent at the lowest level of nuclear weapons consistent with our national security and our commitments and obligations to allies. In 2001, President Bush directed that the United States reduce the number of operationally deployed strategic nuclear weapons from about 6,000 to 1,700-2,200 by 2012 – a two-thirds reduction. Corresponding reductions in the nuclear stockpile will result in the lowest level since the Eisenhower Administration.

Several factors have permitted these dramatic reductions from our large Cold War nuclear arsenal built and maintained from the 1950s to the 1990s. For several decades, the Soviet Union represented a large, intractable, ideologically motivated adversary; its fall has allowed us to reassess our nuclear force requirements. In 2001, the President also directed the transition to a new set of military capabilities more appropriate for credible deterrence in the 21st Century. This “new triad” of strategic capabilities, composed of non-nuclear and nuclear offensive strike forces, missile defenses, and a responsive national security infrastructure, reduces U.S. reliance on nuclear weapons while mitigating the risks associated with drawing down U.S. nuclear forces.

However, other contemporary factors lead us to conclude that nuclear weapons will continue to be required for the foreseeable future. The future security environment is

very uncertain, and some trends are not favorable. Rogue states either have or seek weapons of mass destruction, including nuclear weapons, and the risk of future proliferation cannot be ignored. The future direction that any number of states may take, including some established nuclear powers with aggressive nuclear force modernization programs, could have a dramatic effect on U.S. security and the security of our allies. We seek to assure our allies that the U.S. nuclear arsenal continues to serve as the ultimate guarantor of their security, thus obviating any need for them to develop nuclear weapons of their own. Indeed, the nuclear weapons programs of North Korea and Iran underscore the importance of U.S. security guarantees to key allies around the world. Credible U.S. nuclear capabilities and our security commitment to allies remain an indispensable part of deterrence and an important element in our effort to limit proliferation.

The Administration believes that an operational force between 1,700 and 2,200 strategic warheads, while much smaller than our Cold War arsenal, still provides sufficient capability to achieve these goals. This force will demonstrate to allies and adversaries alike that the United States has the necessary means, and the political will, to respond decisively against aggression and the use of weapons of mass destruction. The current plan preserves options for future administrations to make additional adjustments in the U.S. nuclear force posture as changes in the international security environment warrant.

We are at a critical juncture that requires the U.S. to invest now in the capabilities needed to maintain a credible deterrent at the lowest level of nuclear weapons. Without assuming serious risk, further reductions in the total stockpile are only achievable with a responsive nuclear infrastructure. Without a responsive nuclear infrastructure, the United States must continue to manage the technical risks associated with an aging stockpile of Cold War-era nuclear weapons, and the geopolitical uncertainties of the years ahead, by maintaining a sizable inventory of reserve weapons to support the operationally deployed force. This is an increasingly expensive and potentially risky approach to stockpile stewardship. Successive efforts at extending the service life of the current inventory of weapons drives these weapons farther away from the original source data derived from underground nuclear tests, and risks incorporating or accruing technical changes that could, over time, inadvertently undermine their reliability and performance. The skills and technologies needed to refurbish and maintain these older weapon designs are increasingly difficult to sustain or acquire. Furthermore, some of the materials employed in these older weapons are extremely hazardous. Moreover, it is difficult to incorporate modern safety and security features into Cold War-era weapon designs. Finally, as the United States continues to observe a moratorium on underground nuclear testing, it becomes increasingly difficult to certify the existing stockpile of weapons.

To address these issues of sustainability, safety, security and reliability, and to achieve a smaller yet credible nuclear deterrent force, the United States needs to

invest in the Reliable Replacement Warhead (RRW) program. Pursuit of this program is critical to sustaining long-term confidence in our deterrent capability—especially as the U.S. reduces its nuclear forces, the total number of weapons in the stockpile, and the size of the nuclear weapons infrastructure. RRW is a replacement warhead – it will help reduce the size of the nuclear stockpile and will not provide new military capabilities. Instead, RRW will make U.S. nuclear weapons safer and more secure against unauthorized use by incorporating state-of-the-art security features that cannot be retro-fitted to older weapons. RRW designs will provide more favorable reliability and performance margins than those currently in the stockpile, and will be less sensitive to incremental aging effects or manufacturing variances. Thus, RRW will allow the United States to manage the risks and challenges of the 21st Century while reducing the likelihood of returning to nuclear testing to certify reliability. Over time, RRW will enable the United States to transition to a smaller, more responsive nuclear infrastructure that will enable future administrations to adjust the U.S. nuclear stockpile as geo-political conditions warrant. RRW is key to sustaining our security commitment to allies, and is fully consistent with U.S. obligations under the Nuclear Nonproliferation Treaty—including Article VI.

Without Congressional support for the Reliable Replacement Warhead program we are concerned for the long-term ability of the United States to sustain its strategy of deterrence, meet its security commitment to allies, and pursue further reductions in nuclear weapons without assuming additional risk. Delaying progress on RRW will force the United States to maintain a large stockpile of nuclear weapons and sustain it through increasingly costly and risky Life Extension Programs. Delays on RRW also raise the prospect of having to return to underground nuclear testing to certify existing weapons.

Maintaining a credible deterrent has required a decades-long, bipartisan partnership with Congress; this partnership will be no less critical in the future than in the past. Over the next two decades Congress will make many decisions, including decisions on RRW, that will help determine how fast and how far the United States can go in transforming and reducing its nuclear forces, nuclear stockpile, and nuclear infrastructure to make them smaller, safer, more secure, and more appropriate to managing the risks and challenges of the 21st Century. We must make progress toward creating a nuclear weapons infrastructure that can respond quickly and effectively to emerging threats and to technological surprise. This will assure our ability to maintain deterrence over the long-term, and enable future reductions in both the operationally deployed force and the overall nuclear weapons stockpile. The sooner Congress authorizes and funds transformative programs like RRW, the sooner the United States and its allies can realize the benefits this approach holds for maintaining a credible and effective deterrent with the lowest possible level of nuclear weapons.