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The Nuclear Posture Review: Overview and Emerging Issues

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Summary

The Bush Administration released the results of its Nuclear Posture Review in January 2002. That study states that the United States will no longer base its nuclear planning on the need to address the "Russian threat." Instead, it will develop forces with the capabilities needed to address a range of threats from unspecified countries. Furthermore, offensive nuclear weapons will combine with missile defenses and conventional strike weapons to deter and defeat potential threats. The United States will reduce its nuclear forces to between 1,700 and 2,200 "operationally deployed" warheads, and will place many of the warheads removed from deployed forces in reserve, as part of a "responsive force." It will also strengthen its nuclear infrastructure so that it can be more "responsive" in sustaining the reliability of U.S. nuclear forces in the future. This study has raised numerous issues, such as how deep the reductions in nuclear forces will actually be, the potential need for new nuclear weapons in the future, and the role of nuclear weapons in U.S. defense and national security policy.

During its first year in office, the Bush Administration conducted a wide-ranging review of U.S. nuclear weapons policy. This review was intended to provide guidance for future U.S. nuclear strategy, doctrine, force structure, and infrastructure. The Administration released the results of its study to Congress, in a classified report[1], and to the public, in an unclassified briefing,[2] in early January, 2002. The present report, which is based on information in the unclassified briefing, provides an overview of the results of the nuclear posture review and describes, briefly, some issues that might attract public and congressional attention in coming months.

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[1] The Department of Defense released, to the public, the unclassified letter that accompanied this report. See [http://www.defenselink.mil/news/Jan2002/d20020109npr.pdf]

[2] U.S. Department of Defense. Special Briefing on the Nuclear Posture Review. News Transcript. January 9, 2002. See [http://www.defenselink.mil/cgi-bin/dlprint.cgi]

Overview

The new security environment. During the Cold War, the United States developed and maintained its nuclear arsenal so that it could seek to deter and, if deterrence failed, defeat the Soviet Union. Other countries, such as those in Soviet-dominated Eastern Europe, were included in U.S. nuclear war plans, but their presence reflected their relationship with the Soviet Union more than any independent threat they might pose to the United States. In the past decade, U.S. national security documents have recognized that the collapse of the Soviet Union radically altered the U.S. security environment, but Russia remained a concern because it retained, in theory, the only nuclear arsenal that could threaten U.S. survival. At the same time, U.S. security documents began to highlight emerging threats from other potential adversaries, particularly those seeking to acquire ballistic missiles and weapons of mass destruction.

The Bush Administration has noted that its nuclear posture review (NPR) is a part of the Administration's broader effort to transform the U.S. military to better meet the security challenges that the United States is likely to face in the future. Within that context, it seeks to account for the "completely new" relationship that the United States now has with Russia. It argues that, instead of facing a threat posed by a single, hostile nation that had the ability to destroy the United States, the United States now faces threats from "multiple potential opponents, sources of conflict, and unprecedented challenges." The briefing also emphasizes that a growing number of nations are seeking to acquire weapons of mass destruction and ballistic missiles.

Strategy and Doctrine. During the Cold War, the United States maintained a nuclear posture to deter the Soviet Union and its allies from initiating a large-scale conventional, chemical, or nuclear attack against the United States and its allies in Europe and Asia. This deterrent capability rested on the U.S. ability to threaten destruction against a number of valued targets in the Soviet Union. The U.S. war plan contained several options, both to allow for a response that met the circumstances of the attack and to improve the credibility of the U.S. deterrent threat. The United States did not preclude the use of nuclear weapons in contingencies that did not include the Soviet Union, but these were seen as "lesser included threats" that could be handled with a portion of the weapons maintained for central deterrence. In the past decade, U.S. officials have argued that nuclear weapons remain important to deter a range of threats faced by the United States and they would not rule out the use of nuclear weapons to deter or respond to chemical, biological, or large-scale conventional attack. But the United States has always had the option to respond with conventional attacks, and probably never relied solely on nuclear weapons for its deterrent threats.

The Bush Administration has described a new model of deterrence to replace the model that, according to the Administration, focused on offensive nuclear retaliation. The Administration states that the Cold War strategy is not appropriate in light of the new U.S.-Russian relationship and may not be sufficient to deter new adversaries. Offensive nuclear weapons will continue to play a role in the U.S. deterrent strategy, but they will be joined by missile defenses and conventional strike forces. According to the Administration, missile defenses would enhance deterrence by denying an aggressor's ability to attack the United States. Conventional strike forces would complement nuclear weapons in allowing the United States to threaten a range of valued targets in the hostile nation without resort to nuclear weapons. According to the Administration, the added

options for defeating or responding to an attack would improve the overall credibility of the U.S. deterrent.

Furthermore, according to the Administration's briefing, deterrence is only one of four goals that will be addressed by U.S. nuclear forces. All U.S. military forces, nuclear and conventional, and the infrastructure that supports those forces, also will seek to 1) assure allies and friends of the U.S. commitment to their security; 2) dissuade competitors from challenging the United States with nuclear weapons or other "asymmetrical threats;" and 3) defeat enemies by destroying a range of targets if deterrence fails.

The Administration has also stated that the United States will no longer use a "threat-based" model to structure its nuclear forces. Specifically, "the U.S. will no longer plan, size, or sustain its forces as though Russia presented merely a smaller version of the threat posed by the former Soviet Union." Instead, the United States would identify the capabilities needed to address "multiple contingencies and new threats" that may not be evident at the present time and would not be country-specific. Furthermore, the United States would need to maintain more efficient command and control over its forces so that it could plan attacks on short notice in response to emerging contingencies.

Force Structure. For more than 40 years, the United States has maintained a "triad" of strategic nuclear forces consisting of long-range land-based ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs) and heavy bombers. Analysts argued that this synergistic "triad" of delivery vehicles would enhance deterrence and discourage a Soviet first strike because the varied basing modes and capabilities of the weapons would complicate Soviet attack planning and ensure that the United States had forces that could survive and retaliate against a range of Soviet targets. The United States maintained this triad as it reduced its deployed forces during the 1990s. According to official documents, the mixture continued to provide a range of capabilities and flexibility in nuclear planning. In 1990, prior to signing the first Strategic Arms Reduction Treaty (START I), the United States had over 10,000 warheads on its strategic nuclear forces. After implementing START I, at the end of 2001, the United States retained around 7,000 warheads on its ICBMs, SLBMs, and heavy bombers.

The Bush Administration has identified a new "triad" that supports its new deterrence policy. This "triad" consists of offensive strike forces, missile defenses, and a responsive infrastructure to support the forces. Strategic nuclear forces combine with conventional strike capabilities in the "offensive strike" leg of the new triad. The NPR does not explicitly identify how many or what types of nuclear delivery vehicles (ICBMs, SLBMs, and bombers) the United States will retain within its new triad. It states, however, that, as the President announced on November 13, 2001, the United States will reduce its forces to between 1,700 and 2,200 "operationally deployed" warheads over the by about 2012. In a first phase, the briefing notes that the United States will reduce its forces to 3,800 warheads by 2007. This reductions will occur when the United States eliminates systems that have been planned for elimination under the START II Treaty since 1994. Specifically, the Navy will convert 4 of its 18 Trident submarines to non-nuclear missions, the Air Force will eliminate all 50 of its 10-warhead Peacekeeper ICBMs, and both services will reduce the number of warheads carried on deployed missiles. The Air Force also will give up the capability to return the B-1 bombers to the nuclear force. The Clinton Administration had chosen to retain this capability as a part of its hedge against uncertainty in Russia.

The NPR briefing notes that the existing U.S. force structure is likely to remain in place through 2020 or longer because the United States has no new ICBMs, SLBMs or bombers in production. Therefore, it has placed a priority on funding and implementing life-extension programs for these systems.

The Administration has stated that many of the warheads removed from deployed nuclear delivery vehicles will be placed in storage and held in reserve. When combined with the remaining force structure (14 Trident submarines, 500 Minuteman III ICBMs, 76 B-52 bombers, and 21 B-2 bombers), these warheads would form a "responsive force" that could be restored to deployment over a period of months or years. The Administration has argued that this is no different from past U.S. policies. Arms control agreements have never mandated the elimination of nuclear warheads; warheads were "reduced" when the delivery vehicles that could carry them were eliminated. The United States and Soviet Union could not verify the elimination of actual warheads without intrusive monitoring that might reveal weapons design secrets. Furthermore, the United States acknowledged in the past that warheads could be returned to active forces; the Clinton Administration planned to retain some warheads in reserve under START II as a "hedge" against the possible re-emergence of a threat from Russia.

Infrastructure. The U.S. Department of Energy maintains and operates a complex of research, design, test, and production facilities to develop, produce, and sustain the warheads deployed on U.S. nuclear forces. The size and capacity of this infrastructure declined in the past decade as the United States has reduced its force structure, suspended nuclear explosive testing, and ceased the design of new types of nuclear warheads.

The NPR briefing identifies a "responsive infrastructure" as a key element in the new U.S. nuclear posture. According to the Administration, a "responsive infrastructure" is one that could address critical problems in the nuclear force structure "in time frames that are not the... 15-20 year time frame we are used to thinking about." This type of infrastructure would be necessary to "reduce the risk" as the number of operationally deployed nuclear forces declines. The Administration argues that, with fewer warheads in the force, it would become relatively more important to maintain confidence in the reliability of the remaining weapons. The briefing indicates that the U.S. nuclear infrastructure would require a significant amount of investment and modification to meet the requirements of a "responsive infrastructure."

The briefing does not identify how the United States would modify its nuclear infrastructure to support the new nuclear posture. However, officials from the Administration have indicated that one key element of this infrastructure is the U.S. ability to test its nuclear weapons. The Bush Administration continues to oppose ratification of the Comprehensive Test Ban Treaty, but it has stated that it will continue to observe the moratorium on nuclear testing that has been in place for more than a decade. However, it plans to reduce the amount of time needed to resume nuclear testing from the current 2-3 year period to a shorter, unspecified amount of time and leaves open the possibility that it may decide to resume testing in the future.

Emerging Issues

Depth of Reductions in Offensive Nuclear Weapons. According to the Administration, the NPR supports deep reductions in U.S. strategic offensive nuclear

weapons. Cuts to between 1,700 and 2,200 "operationally deployed" warheads appear to go beyond those planned for START II, which would have limited the United States and Russia to 3,500 warheads each, and the prospective START III Treaty, which would have limited each side to 2,000 - 2,500 warheads. However, because the Administration will use a different measure of account for warheads, this reduction is not as deep as it might otherwise seem. The START Treaties use counting rules that attribute a number of "warheads" to each type of delivery vehicle. The total number of warheads would equal the number of delivery vehicles multiplied by the attributed number of warheads. All delivery vehicles, except those eliminated according to the complex Treaty rules, counted in this calculation. The Bush Administration, however, will not count the warheads on delivery vehicles that are in overhaul or otherwise unavailable for nuclear missions. This will include 2 Trident submarines and possibly several heavy bombers at any one time. If the weapons on these systems were counted, the U.S. strategic force would carry closer to 3,000 warheads, a number between those planned for START II and START III.

In addition, the United States will not eliminate many of the warheads removed from operational delivery vehicles. Because the Bush Administration could retain the same force structure planned for START II, these warheads, if retained in the active reserve, could raise the U.S. deployed force to at least 3,500 warheads. But the number could be even higher, perhaps over 4,000 warheads, because the START II force also allowed for a hedge of warheads that could be restored to forces in a matter of months. However, the START Treaties required the destruction of delivery vehicles, so the United States could argue that it had a limited capability to restore warheads to deployed forces. The Bush Administration does not, however, believe that the ability to restore warheads to deployed forces should be limited; it has stated that the flexibility inherent in the ability to restore warheads to deployed systems is an important part of the future U.S. nuclear arsenal.

Finally, the reductions authorized by the NPR will not occur quickly. President Bush has stated that the reduction to 1,700-2,200 operationally deployed warheads will occur over 10 years. Furthermore, the United States will retain at least 3,800 warheads until 2007. When it signed START II in 1993, the United States planned to reduce its forces to 3,500 warheads by the beginning of 2003, in spite of the fact that there was some uncertainty about Russia's future and concerns about the re-emergence of a Russian threat. The United States and Russia also agreed, in principle, to reduce their forces to 2,500 warheads by 2007 under START III. Now the United States is planning to keep more warheads for a longer period of time, even though it will no longer base its force size on the "Russian threat." Some analysts have questioned why the United States needs to retain so many warheads for so long when other potential nuclear adversaries possess, at most, a few hundred warheads. This slow pace of reductions could reflect estimates by the Air Force and Navy of the time needed to remove and store the warheads safely. But some might also question whether the NPR concluded that the United States needed more warheads to address potential contingencies in its new "capabilities-based" force.

The need for new nuclear weapons. The briefing on the NPR states that the review made no recommendations about developing new nuclear warheads. However, some Administration officials and analysts have argued that the United States should seek to develop new weapons that can destroy deeply-buried and hardened targets. The briefing noted that the Defense Department is reviewing a number of alternatives to achieve this mission; some might include the use of conventional weapons and some might include the use of modified nuclear weapons from the existing arsenal. However, the

interest in new capabilities, when combined with the stated intention to reduce the amount of time to resume nuclear testing, has led some analysts to conclude that the Bush Administration plans to resume efforts to design, develop, and test new types of nuclear weapons. This approach is likely to raise concerns among many analysts outside government who argue that the United States will encourage other countries to develop new nuclear weapons if it does so itself. They argue that, in the interest of discouraging the proliferation of nuclear weapons, the United States should reduce the perceived utility of nuclear weapons and should not acquire new capabilities for its own force.

Role of Nuclear Weapons in U.S. National Security. In recent years, U.S. national security documents have highlighted the fact that, with the demise of the Soviet Union, the United States has sought to reduce the role of nuclear weapons in the U.S. military posture. The collapse of the Soviet Union and Warsaw Pact, along with changes in U.S. targeting strategy in the early 1990s allowed the Department of Defense to reduce sharply the number of targets the United States would seek to destroy in a nuclear conflict with Russia. In addition, the elimination of the Soviet conventional threat to Central Europe reduced the requirement for U.S. nuclear weapons to extend deterrence to U.S. allies. The United States maintained the option of using nuclear weapons in response to chemical, biological, or massive conventional attack, but many analysts argued that the possible need for a nuclear response had diminished greatly as the United States deployed the next generation of precision-guided conventional weapons.

The Bush Administration has argued that its new nuclear posture will move the United States further along the path away from reliance on nuclear weapons. Although these weapons will remain a part of the U.S. deterrent posture and a part of its offensive strike capability, the Administration has stated that the addition of ballistic missile defenses and the growing capabilities of conventional precision guided weapons will give the United States a growing number of options, in addition to the threat of offensive nuclear retaliation, when threatened by hostile nations.

But, as was noted above, the Bush Administration plans to retain a greater number of nuclear weapons for a longer period of time than had been planned under START II. And the Administration has not ruled out the development of new nuclear weapons. Furthermore, it has grouped nuclear weapons and conventional weapons together as "offensive strike weapons." It argues that the ability to use conventional weapons would reduce reliance on nuclear weapons. But by grouping the two together, in one interptrtation, the Administration's policy could begin to blur the distinction between nuclear and conventional weapons and increase the likelihood of nuclear use.

Furthermore, the new policy of "capabilities-based" planning could be interpreted by some to expand the possible use of nuclear weapons to a longer list of nations, including those that do not possess nuclear weapons themselves. The NPR briefing specifically states that "U.S. strategic forces need to provide the President with a range of options to defeat any aggressor." Yet the United States has pledged that it will not use or threaten to use nuclear weapons against non-nuclear states unless they are aligned with a nuclear state in a conflict with the United States. This pledge may not be consistent with a nuclear posture that declares nuclear weapons to be a part of the range of options available to "defeat any aggressor." The Administration has not yet clarified, publicly, its intent with respect to this policy.

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