

New Nuclear Policies, New Weapons, New Dangers

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April 28, 2003

Since taking office, the Bush administration has increasingly emphasized and relied upon counterproliferation strategies to deal with threats from weapons of mass destruction (WMD). These threats, according to Washington, increasingly come from certain states seeking nuclear, biological, and chemical weapons capabilities or from terrorists able to procure these arms.

A central goal of the administration has been to provide the president with a broader continuum of military options and capabilities, including new kinds of conventional and nuclear options, to “dissuade, deter, and defeat” adversaries armed with or seeking WMD. Over the last two years, the administration has updated the U.S. national security strategy against WMD by declaring that nuclear weapons may be used in response to chemical or biological threats and has produced a Nuclear Posture Review (NPR) that asserts that new nuclear weapons capabilities are needed to defeat chemical and biological weapons targets, as well as deeply buried and hardened targets. It has initiated research on modifications of two types of existing nuclear gravity bombs, has proposed the repeal of a decade-long ban on low-yield nuclear weapons research and development, and is poised to clear away legal and political hurdles blocking the resumption of U.S. nuclear testing, which is generally considered to be necessary to proof-test a new nuclear device type. These moves run counter to long-standing U.S. national policy, accepted international norms of nonproliferation behavior, and trends in U.S. military strategy that de-emphasize nuclear weapons.

Looking at each of these developments separately provides only partial insights to the ambitious policy shift proposed by this administration. Taken together, they form a clearer picture of the Bush administration’s road map toward increased reliance on nuclear weapons.

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The Bush administration’s more aggressive nuclear force posture sets a dangerous precedent that some states may try to emulate and others may try to counter. The pursuit of new U.S. nuclear-weapon capabilities would bypass important preventative constraints on the qualitative improvement of nuclear weapons that are embedded in current U.S. law and policy, as well as those encompassed in international nonproliferation agreements. New nuclear weapons intended to enhance the credibility and range of options for the use of nuclear weapons would also diminish the firewall that has separated nuclear and conventional warfare since the bombings of Hiroshima and Nagasaki. Coming from the United States, the world’s pre-eminent military and political power, such policies undermine nonproliferation efforts by suggesting to other states that nuclear weapons are legitimate and necessary tools that can achieve military or political objectives. Such an approach, if implemented, only increases the odds that another country or group will race to acquire—and perhaps someday use—the destructive power of these terrible weapons.

The Rationale for New Weapons

Documents released and leaked over the last several months have shed light on the Bush administration’s controversial plans for maintaining and, in some ways, expanding the role of nuclear weapons in U.S. foreign and military policy.

The NPR, a classified Pentagon assessment of U.S. nuclear forces and weapons policy—some of which was leaked in January 2002—outlines the current administration’s rationale for the development and possible testing and production of new types of nuclear weapons.

The NPR, which was mandated by Congress in 2000 and delivered in January 2002, asserts that nuclear weapons “provide credible military options to deter a wide range of threats, including WMD and large-scale conventional military force.” The NPR proposes “greater flexibility” with respect to nuclear forces, and it suggests that nuclear weapons are useful to “hold at risk a wide range of target types.” The NPR suggests that “nuclear attack options that vary in scale, scope, and purpose will complement other military capabilities.” The review calls for contingency plans for nuclear strikes against non-nuclear-weapon states or in conflicts that may begin as conventional wars.

The document also outlines plans for developing new nuclear weapons, including “improved earth penetrating weapons...and warheads that reduce collateral damage,” such as low-yield nuclear weapons. It cites the need for weapons specifically for destroying underground targets that may house WMD materials or facilities. The NPR asserts that these new weapon types could more effectively deter states and terrorists since it would be more plausible that the United States might actually use smaller, more accurate nuclear weapons rather than higher-yield nuclear warheads. The NPR also advocates steps to decrease the period of time necessary to prepare for a technically significant nuclear

test explosion from the current requirement of 24-36 months.

Consistent with the NPR policy recommendations, the administration has issued policy directives that lay the groundwork for the development of new nuclear-weapon capabilities and missions.

In September 2002, President George W. Bush issued a public version of his "National Security Strategy," which outlines security issues facing the country and how the United States plans to address threats posed by countries or groups possessing weapons of mass destruction. In this document, the administration clearly asserts its willingness to take pre-emptive action, stating, "We will not hesitate to act alone, if necessary, to exercise our right of self-defense by acting preemptively against" terrorist organizations or the countries that harbor them. The document refrains from linking pre-emptive action with nuclear weapons, however.

In December 2002, the Bush administration released its "National Strategy to Combat Weapons of Mass Destruction," a companion document to the National Security Strategy. A classified version of this December strategy document, National Security Presidential Directive 17 (NSPD 17), was signed by Bush in September 2002. According to a December 11, 2002 *Washington Post* article, a top-secret appendix to NSPD 17 authorizes pre-emptive strikes against states or terrorist groups that are close to acquiring WMD. This executive order apparently merges the concern about these countries expressed by the administration in the NPR with the pre-emptive policy sanctioned in the September 2002 security strategy. It also reiterates a need for a "robust strike capability," which will require the United States to develop "new capabilities to defeat WMD-related assets."

A January 31, 2003, *Washington Times* article reported that the classified NSPD 17 document places even stronger emphasis on nuclear weapons than included in the unclassified version issued by the White House to the public. It highlights "the right to respond with overwhelming force—in-

cluding potentially nuclear weapons" to biological or chemical weapons attacks, whereas the declassified version used the more innocuous phrasing, "including through resort to all of our options."

Based on what has been reported about NSPD 17, it appears that Bush might consider authorizing the first use of U.S. nuclear weapons in the event that a hostile state attacks U.S. forces, allies, or territory with chemical or biological weapons or preemptively striking sites believed to store or manufacture chemical, biological, or nuclear weapons.

Putting Words Into Action

As the Bush administration has made adjustments to U.S. nuclear doctrine, other sectors of the government have started moving forward with plans and programs to create new conventional and nuclear weapons capabilities intended to improve current U.S. military capabilities to strike underground, hardened targets and to create nuclear warheads that "reduce collateral damage."

Some of the research into new nuclear warheads is already underway. Consistent with the recommendation of the NPR, the administration requested and the fiscal year 2003 Defense Authorization Act includes a \$46 million study by the Department of Energy on a robust nuclear earth penetrator (RNEP) that could destroy hardened and deeply buried targets. Energy Department officials have testified that the focus of the effort is on making modifications to the existing B61 and B83 warheads. Congress authorized the first \$15 million installment of the three-year study for fiscal year 2003, and in February 2003, the Department of Energy requested \$15 million for fiscal 2004, the second year of the project.

In addition to modifications of nuclear warheads currently in the U.S. arsenal, the administration is pursuing further research on entirely new types of nuclear warheads. The fiscal year 2004 budget request also

seeks funding for the Advanced Concept Initiatives program. Pursuant to the NPR, which cites the need "to further assess...other nuclear weapons options in connection with meeting new or emerging military requirements," the Department of Energy seeks to reinvigorate the science and development program for new nuclear-warhead concepts. The administration's fiscal year 2004 budget requests \$6 million in funding from Congress for the first year of the Energy Department program, which has been suspended since 1993.

Most significantly, however, is the administration's February 2003 request that Congress repeal the decade-long ban on research and development leading to production of low-yield nuclear warheads. The prohibition was approved by Congress as part of the fiscal year 1994 Defense Authorization Act. Known as the Spratt-Furse law in recognition of its original sponsors, the prohibition bars the conduct of activities that could lead to the production of a nuclear weapon with a yield of five kilotons or less that had not entered into production by the end of 1993. The Spratt-Furse law is a politically, if not technically, significant barrier to the development and production of these weapons.

In its written appeal to Congress to overturn the law, the Pentagon claims that the prohibition "has negatively affected U.S. government efforts to support the national strategy to counter WMD." Linton Brooks, acting director of the National Nuclear Security Administration (NNSA), elaborated on the Energy Department's rationale for the legislation's repeal at an April 8, 2003, Senate Armed Services Committee hearing. Brooks claims that by requesting the repeal of the Spratt-Furse law, "We are seeking to free ourselves from intellectual prohibitions against exploring a full range of technical options." Brooks suggested that, during the course of studying modifications on existing nuclear warheads for the RNEP, scientists might conclude that adapting a current weapon is not feasible and "be forced to say the only way you can get a nuclear earth penetrator is to do something fundamentally new."

Yet, the claim that the Spratt-Furse ban hampers the Department of Energy's ability to "exercise our intellectual capabilities" is highly misleading because the law specifically provides exceptions for it to pursue nuclear warhead design and cost studies that provide weapons scientists with significant room to evaluate new concepts and approaches. The law allows the Energy Department to conduct the research and development necessary to "design a testing

The Spratt-Furse Law

The Spratt-Furse Amendment [Sec. 3136 of P.L. 103-160, the FY 1994 National Defense Authorization Act] bars "the conduct of research and development that could lead to the production by the United States of a low-yield nuclear weapon which, as of the date of the enactment of this Act [Nov. 30, 1993] has not entered production." The law defines a "low-yield nuclear weapon" as one that has "a yield of less than 5 kilotons."



Defense Threat Reduction Agency (DTRA)

The sequence of photos, above, shows the effect of a conventional earth-penetrating weapon. Rather than developing and using new nuclear weapons, the United States can take steps to gain better intelligence for accurate targeting, improve the precision of conventional warheads, further harden conventional warheads to increase penetration capabilities, and establish control of the area around underground targets of concern.

device that has a yield of less than five kilotons; to modify an existing weapon for the purpose of addressing safety and reliability concerns; or to address proliferation concerns," so long as it does not lead to a fully engineered, producible nuclear missile warhead or bomb system.

In an attempt to deflect concern that such research might eventually lead to the production, testing, and deployment of a new type of nuclear weapon, Brooks testified that "the Department of Defense has not identified any requirements for such weapons" and added that "we are not planning to develop any new weapons at all."

Contrary to Brooks' suggestion that the repeal of Spratt-Furse does not mean that the production of new types of nuclear warheads is imminent, Fred Celec, the deputy assistant to the secretary of defense for nuclear matters, recently said that the administration wants the weapon and will move forward with its development and production. If a hydrogen bomb can be successfully designed to survive a crash through hard rock or concrete and still explode, "it will ultimately get fielded," Celec said according to an April 23, 2003, *San Jose Mercury News* article.

The ongoing research, combined with the possible repeal by Congress of the ban on research leading to the production of a new type of low-yield bunker-buster warhead, could easily turn the NPR's proposal for more "usable" nuclear weapons into a reality through the development, engineering, testing, and production of a new warhead. The upcoming congressional decision on whether to repeal or retain the Spratt-

Furse prohibition on low-yield nuclear weapons is a watershed moment for U.S. nonproliferation policy.

Nuclear Testing on the Horizon?

The administration's drive to acquire new nuclear-weapon capabilities for new military missions clearly threatens the 10-year-long U.S. policy not to conduct research leading to the production of new, low-yield nuclear warheads. In addition, it could also put at risk another important barrier to the proliferation of new and more deadly types of nuclear weapons: the U.S. nuclear-test moratorium established in 1992.

Although the administration has stated repeatedly that it has no current plans to resume nuclear testing, significant modifications to existing nuclear warhead designs or the development of entirely new types of nuclear warheads would likely necessitate the renewal of nuclear explosive testing to establish confidence in the performance of the new or amended warhead designs.

The administration has already taken several steps to lower the technical hurdles to resume testing, and some officials have proposed eliminating the legal impediments to the renewal of U.S. nuclear-weapon test explosions. The NPR recommends that the Department of Energy devote additional resources to enhance nuclear test site readiness. The administration's fiscal year 2004 budget request to Congress seeks funding to help reduce the time necessary to con-

duct a technically significant nuclear test explosion from the current 24-36-month requirement to 18 months over the next 3 years. The stated rationale for this shift is to sharpen weapons scientists' skills and to guard against waiting too long to investigate possible flaws in the existing arsenal.

In October 2002, Undersecretary of Defense Edward Aldridge took matters a step further by recommending in a memorandum to the Nuclear Weapons Council that the nuclear weapons laboratories "readdress the value of a low-yield testing program...under very restricted testing conditions." Pursuant to the Aldridge memo, members of the Stockpile Stewardship Conference planning group met on January 10, 2003, according to a document released February 14, 2003, by the independent Los Alamos Study Group. The committee created panels for an August 2003 conference that will consider the safety and reliability of the U.S. nuclear arsenal using science-based stockpile stewardship, discuss renewed nuclear testing, and broach the possible development of new nuclear warheads.

The purported basis for Aldridge's recommendation to reconsider the resumption of testing is the possible value of ensuring the reliability of the arsenal. However, it is important to note that the safety and security of the stockpile has been and can be effectively maintained with the science-based Stockpile Stewardship Program, according to a July 2002 report by the National Academy of Sciences, *Technical Issues Related to the Comprehensive Nuclear Test Ban Treaty*. The study, which included participation by

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three former weapons laboratory directors, noted that nuclear weapons testing was never used for certification of the stockpile, but rather for development of new nuclear warhead types. The panel concluded, “[N]o need was ever identified for a program that would periodically subject stockpile weapons to nuclear tests.” At his April 8 appearance before the Senate Armed Services Committee, Brooks said that the NNSA does not need to conduct nuclear test explosions “at this time” to ensure the safety and reliability of the current stockpile.

Efforts to shorten the testing period, and the push to identify reasons to test the current stockpile despite scientifically sound safety and security checks, point to an administration that seeks to eliminate the technical barriers and to create a rationale to resume nuclear testing, which would help confirm new nuclear weapons designs that the administration wants to pursue. The Bush administration’s refusal to ask the Senate to reconsider approval for the ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT), expressed at the outset of Bush’s term, also indicates its hope to maintain the option to conduct nuclear testing.

There are signs that some factions in the Bush administration also want to eliminate the remaining legal barrier to the resumption of U.S. nuclear testing. According to commonly accepted interpretation of international law, as a signatory to the CTBT, the United States remains legally obligated not to conduct nuclear test explosions. In January 2002, senior Pentagon officials proposed to the White House—but did not get approval for—the repudiation of the U.S. signature on the CTBT.

Impracticality of Nuclear Weapons

Claims about the value of researching, developing, testing, and producing new, more “usable” nuclear weapons must also be judged against the military, political, and humanitarian realities involved in any decision by the president to order their use.

In the run-up to the recent war in Iraq, Bush administration officials fielded questions from reporters about whether the United States might retaliate to possible Iraqi chemical or biological weapons use with nuclear weapons (as suggested by NSPD 17) or use nuclear weapons to strike deeply buried and hardened underground targets of significance.

Many of these questions were prompted by an article in the January 26, 2003, *Los Angeles Times* that reported that the Pentagon had ordered the development of a “Theater Nuclear Planning Document” outlining possible sites in Iraq for nuclear targeting, based on NSPD 17 guidelines. Sources close to the U.S. Strategic Command (STRATCOM) said that underground facilities were of special consideration in the planning document, as well as “thwarting Iraq’s use of [WMD],” which could include pre-emptive action as well as retaliatory strikes.

Appearing on NBC’s Meet the Press on January 26, 2003, White House Chief of Staff Andrew Card said Saddam Hussein “should anticipate that the United States will use whatever means necessary to protect us and the world from a holocaust.” When asked if those options included the use of nuclear weapons, Card responded, “I’m not going to put anything on the table or off the table.” In February 13, 2003, testimony before the Senate Armed Services Committee, Secretary of Defense Donald Rumsfeld also said that past U.S. policy dictated that the United States “not foreclose the possible use of nuclear weapons if attacked,” but he added, the United States could accomplish what it needed to with conventional capabilities.

Clearly, the paramount importance of avoiding civilian casualties and collateral damage to non-military sites limited the Bush administration’s practical choices for dealing with Iraq to conventional military options. The absence of an Iraqi chemical or biological attack and the overwhelming U.S. conventional military superiority made U.S. nuclear weapons all the more irrelevant and inappropriate.

This is not new. U.S. political and military leaders have contemplated the use of nuclear weapons on the battlefield in other non-nuclear conflicts, and each time they have concluded that their use was imprudent and unnecessary. According to the memoirs of Secretary of State Colin Powell, prior to the 1991 Persian Gulf War, U.S. policymakers “took a look” at their nuclear weapons strike options. Powell, then the Chairman of the Joint Chiefs of Staff, wrote, “the results unnerved me. To do serious damage to just one armored division dispersed in the desert would require a considerable number of small tactical nuclear weapons... If I had doubts about the practicality of nukes on the field of battle, this report clinched them.”

Twenty-five years earlier, a 1966 study by the JASON group, a highly regarded technical and scientific panel that issues recommendations on U.S. foreign and defense policy, advised against employing nuclear weapons during the war in Vietnam. The study, which was made public March 9, 2003, concluded that the use of tactical nuclear weapons “would offer the U.S. no military advantage commensurate with its political cost” during the war. Moreover, the JASON report also warned of the possible proliferation consequences from the weapons’ use, concluding, “Insurgent groups everywhere in the world would take note and would try by all available means to acquire [tactical nuclear weapons] for themselves.”

Such concerns are as valid today as they have been for decades. The active pursuit of new, more “usable” nuclear weapons capabilities would increase proliferation dangers by signaling to would-be nuclear-weapon states that such weapons are necessary to deter a potential U.S. attack and by sending a green light to the world’s nuclear states that it is permissible to use them. Using or threatening to use nuclear weapons first is unnecessary given the overwhelming superiority of U.S. military capabilities today. Furthermore, U.S. use of nuclear weapons for any purpose other than to deter the use of nuclear weapons against the United States would constitute a disproportionate and indiscriminate use of force that would be widely condemned. Some congressional leaders recognize the grave risks of this approach to global nuclear nonproliferation efforts. In a February 21, 2003, letter to Bush from Senators Edward Kennedy (D-MA), Dianne Feinstein (D-CA), and eight others, the lawmakers warn, “Lowering the threshold for the first-use of nuclear weapons reduces incentives for other nations to

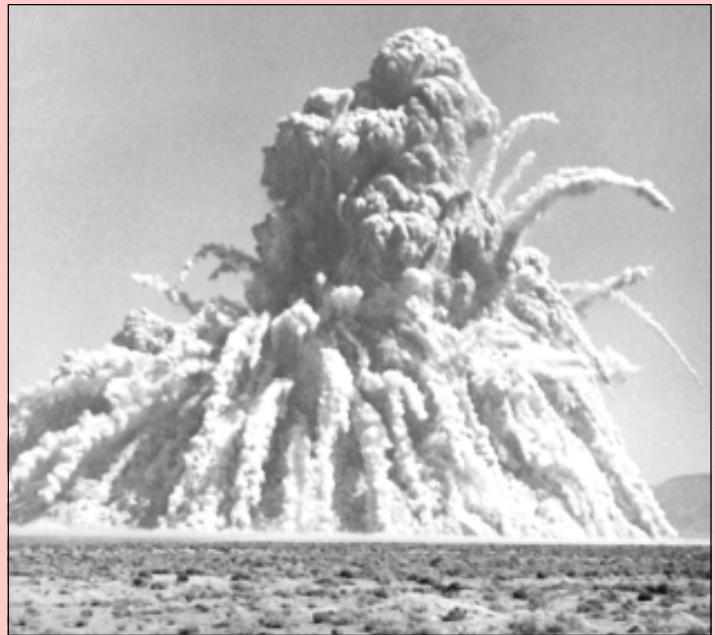
Nuclear Bunker Busters: Technical Realities

The Nuclear Posture Review, and a number of members of the defense establishment, have suggested that the United States develop a new class of hardened, low-yield nuclear weapons, sometimes called “bunker busters.” Their concern is whether the U.S. military can destroy the growing number of hard and deeply buried facilities being built in a number of countries. Citing recent government studies, the Nuclear Posture Review states that there are more than 1,000 known or suspected strategic targets, which are used for storing weapons of mass destruction, protecting senior leaders, or executing top-echelon command and control functions. The implication is that, if their resulting collateral damage can be substantially reduced by lowering the explosive power of the warhead, nuclear weapons would be more politically palatable and therefore more “useable” for attacking deeply buried targets in tactical missions, even in or near urban settings, which can be the preferred locales for such targets.

But even a “low-yield,” one-kiloton earth penetrator would be quite devastating in a city, and against really deep targets, yields in the hundreds of kilotons would be required. The radioactive blast from a one-kiloton warhead (just 1/13 the yield of the bomb that destroyed Hiroshima) detonated at a depth of 20-50 feet would eject more than 1 million cubic feet of radioactive debris from a crater about the size of ground zero at the World Trade Center—bigger than a football field. Indeed, the Hiroshima bomb was detonated at an altitude of close to 1,900 feet in order to minimize radioactive fallout by not digging any crater. A weapon intended to destroy hard, buried targets is therefore going to produce a lot of dangerous radioactive fallout. A nuclear weapon with a yield capable of destroying a target 1,000 feet underground—a yield well over 100 kilotons—would dig a much larger crater and create a substantially larger amount of radioactive debris.

In the past, the United States has developed, tested, and deployed nuclear warheads with a full range of yields, from small fractions of kilotons up to many megatons. Recently, it adapted a high-yield weapon, the B61-11 bomb, with yields that exceed a hundred kilotons, in this manner. Further improvements in their delivery—both in accuracy and earth penetration—could be achieved, but even at the low-yield end of the repertoire, there will be major collateral damage because the blast will eject radioactive debris. Burrowing a few tens of feet into the earth will increase the damaging effects of the shock, but a large proportion of the fallout will still enter the atmosphere and be spread by wind.

—Adapted from “A Strategic Choice: New Bunker Busters Versus Nonproliferation,” by Sidney Drell, James Goodby, Raymond Jeanloz, and Robert Peurifoy, *Arms Control Today*, March 2003.



Department of Energy (DOE)

The 1962 “Sedan” nuclear test, above, illustrates the enormous explosive force of a 100 kiloton nuclear warhead buried 635 feet under the surface—far deeper than any bunker-busting nuclear warhead can penetrate. The detonation produced a highly radioactive cloud that continued to rise, as the heavier particles began falling back to earth and the base surge rolled across the Nevada Test Site.



Department of Energy (DOE)

The Sedan nuclear explosion displaced 12 million tons of earth and formed a crater 320 feet deep and 1,280 feet in diameter. Even at lower yields, earth penetrating nuclear warheads would eject radioactive debris into the environment and spread in the atmosphere, with adverse consequences to innocent civilians, as well as soldiers who might be ordered to enter the danger zone.

adhere to the international arms-control framework, thus increasing the dangers for nuclear warfare.”

The administration’s plans to develop new nuclear strike capabilities, combined with the suggestion in NSPD 17 that nuclear weapons might be used to counter chemical or biological weapons threats and ambiguous public statements from administration officials about the possible use of nuclear weapons, appear to conflict with previous U.S. negative nuclear security assurances to non-nuclear states-parties to the nuclear Nonproliferation Treaty (NPT).

In 1978 and again in 1995, the United States announced that it would not use its nuclear force against countries without nuclear weapons unless the non-nuclear-weapon state had joined with a nuclear-weapon possessor state in an attack on the United States or its allies. On February 22, 2002, State Department spokesman Richard Boucher articulated a similar version:

The United States reaffirms that it will not use nuclear weapons against non-nuclear-weapon states-parties to the Treaty on the Nonproliferation of Nuclear Weapons, except in the case of an invasion or any other attack on the United States, its territories, its armed forces or other troops, its allies, or on a state toward which it has a security commitment carried out, or sustained by such a non-nuclear-weapon state in association with a nuclear-weapon state.

Unfortunately, Boucher undercut this statement by adding that “if a weapon of mass destruction is used against the United States or its allies, we will not rule out any specific type of military response.” Given that the actual use of nuclear weapons in likely future conflicts will again prove to be impractical and inappropriate, U.S. policymakers should reaffirm, rather than undermine, its past negative security assurances to reinforce global nonproliferation efforts.

A Better Course

Proposed changes in U.S. nuclear policy and initiatives for new nuclear weapons research and development suggest that the current administration views nuclear weapons as a mere extension of the continuum of conventional options open to the United States. In the interest of delegitimizing the role of nuclear weapons and strengthening U.S. efforts to dissuade their use by states such as Pakistan and India and to persuade other states not to acquire them, the United States should refrain from using or threatening to use nuclear weapons first. This will not guarantee that other states will forgo or curtail nuclear weapons activities, but the United States would gain substantially greater credibility in its nonproliferation efforts by setting this positive example.

In addition, the United States can and should refrain from the further development and production of new types of earth-penetrating nuclear warheads, which would produce devastating human and political consequences if used. Congress, which oversees the government’s fiscal spending, now must hold the administration accountable for its policy choices and take action to arrest further adverse trends.

Maintain the current prohibition on low-yield nuclear weapons research.

A proposal to repeal the Spratt-Furse prohibition on research and development leading to the production of new types of low-yield warheads is now before the House and Senate. Despite claims by administration officials, the current ban does allow government scientists to explore new weapons concepts, so long as they do not lead to full-scale engineering and production. Given the technical limitations, limited military utility, and enormous collateral damage of nuclear bunker-busting weapons, the ban should remain in place in its current form.

Shift nuclear bunker-buster funding to non-nuclear munitions research.

Rather than pursue new nuclear-weapon capabilities to deal with potential underground and hardened targets, re-

search on improving the United States’ already considerable earth-penetrating conventional munitions could be explored. As STRATCOM head General James Ellis told the Senate Armed Services Committee on April 8, 2003, “We see a need and an opportunity indeed to pursue advanced conventional capabilities.” Congress should transfer the \$15 million requested by the administration for research of the RNEP to explore the possibilities of destroying underground, hardened targets with conventional munitions.

Reaffirm the U.S. nuclear test moratorium and focus the Stockpile Stewardship Program resources on the surveillance and maintenance activities most relevant to ensuring the reliability of the existing U.S. arsenal.

The U.S. nuclear arsenal has been and can for the indefinite future be reliably maintained through the science-based Stockpile Stewardship Program. Using data from previous nuclear tests, computer simulations, and sub-critical testing, the U.S. nuclear weapons laboratories can maintain an effective nuclear stockpile, making repairs and replacing aging components as needed to warheads.

The National Academy of Sciences in July 2002 said, “We judge that the United States has the technical capabilities to maintain confidence in the safety and reliability of its existing nuclear-weapon stockpile under the CTBT.” While drawing attention to necessary program enhancements in areas such as stockpile surveillance, human expertise, and remanufacturing capabilities, the panel concluded, “No need was ever identified for a program that would periodically subject stockpile weapons to nuclear tests.”

Clarify that so long as the United States has nuclear weapons, their role is limited to the deterrence of nuclear attack by other states.

Given that the actual use of nuclear weapons in likely future conflicts will again prove to be impractical and inappropriate, U.S. policymakers should reaffirm, rather than undermine, its past assurances that it will not use nuclear weapons against non-nuclear-weapon states-parties to the NPT.

For more information on U.S. nuclear policy and other issues related to nuclear weapons development and testing, please see the Arms Control Association’s Web site, www.armscontrol.org
