

# **The threat posed by the US development of new low-yield nuclear weapons**

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## Introduction

At a time of real nuclear danger on the Indian Subcontinent it may seem a little self-indulgent to hold a meeting on the threat posed by U.S. nuclear weapons developments. The former British Foreign Secretary Malcolm Rifkind on Monday described the current situation between India and Pakistan as more dangerous than the Cuban missile crisis, called the international response insufficient and demanded that the UN Security Council be placed in permanent session. With no direct hotline, a shared border, and a history of bloody conflict it could indeed be argued that the two states are perhaps closer to a nuclear war than anyone has ever been since the dawn of the atomic age. However, one of the great tragedies of the current dispute is the way in which both sides are repeating the mistakes others have made. The current nuclear arms race between the two sides is just as un-winnable and life threatening as that pursued by Moscow and Washington through much of the Cold War, yet rather than avoid the precedent India and Pakistan seem intent on mimicking it.

Today the United States is on the verge of making another mistake that other states may yet seek to mimic, one that could have a profound impact upon efforts to limit the use of nuclear weapons. Washington is currently considering allocating money for the development of new, more useable nuclear weapons for use against hardened and deeply buried targets. The move could dramatically lower the threshold for nuclear use, threaten the nuclear testing moratorium and undermine efforts to control Russia's arsenal of tactical nuclear weapons. While the immediate danger does not compare with that posed by India and Pakistan, the long-term threat demands that Europe raises its voice.

The starting point of my presentation this morning, therefore, is the recent U.S. Nuclear Posture Review. I will then go on to examine in more detail the rationale behind U.S. plans to develop new nuclear weapons and the implications of these developments for international security and nuclear non-proliferation efforts.

## The Nuclear Posture Review

When the U.S. Nuclear Posture Review (NPR) was leaked to press in March it elicited a strong response from many quarters in Europe. In particular, the Review's request for contingency plans to be drawn up for the use of nuclear weapons against Iraq, North Korea, Iran, Libya, Syria, Russia and China struck many as another example of a hyperpower giddy with its own supremacy and bent on war. The Review was also criticized for requiring a store of nuclear weapons to be kept in reserve at all times, ready to supplement the deployed forces at relatively short notice. Termed the "responsive infrastructure", it was this requirement that helped to block the recent Bush-Putin agreement from including language on destroying the retired warheads of both sides.

An extreme but not untypical response to the NPR came from London's Daily Mirror and its front-page headline "Nuke 'Em All", showing again that Stanley Kubrick's 1964 film continues to exert a powerful influence on the popular consciousness and particularly the consciousness of journalists. But is the image of Dr Strangelove's retaking control of the U.S. military justified?

In truth much of the NPR's recommendations were already part of U.S. nuclear policy before the Bush administration came to power. For example, contingency plans for using nuclear weapons against non-nuclear "rogue states" have probably existed since the last NPR in 1994 and definitely since the issuing of Presidential Decision Directive 60 by Clinton in 1997. The directive responded to growing concerns about the proliferation of weapons of mass destruction by widening the scope of nuclear targeting to include "rogue states". Rather than introducing new targeting plans, the 2002 NPR mainly served to make more explicit what was already present in U.S. nuclear policy.

Perhaps the real story about the NPR was not how much had changed in U.S. nuclear

policy, but rather how little. Over 10 years after the end of the Cold War, the United States is still giving nuclear weapons a prominent role in its military policy and retaining a store of weapons to guard against a resurgent Russian threat. Maintaining the status quo itself threatens arms control efforts. However, there are other aspects to the Review that introduce new and more dangerous elements into U.S. nuclear policy. In particular, the Bush administration is pushing for greater flexibility in force planning and the development of new nuclear weapons.

## **Push For Greater Flexibility**

In order to ensure the ability to develop and deploy the forces the United States feels it may need, the NPR calls on the United States to eschew all but the most minimal restraints on its nuclear force planning. This is reflected in the Bush-Putin deal which contains no requirement to destroy retired warheads, allows either side to return to any force level it desires after 10 years, and lets either side pull out with 90 days' notice at any time. Washington had the opportunity to bind Moscow into irreversible and verifiable reductions of its strategic arsenal and to seriously tackle the question of Russia's enormous arsenal of tactical nuclear weapons, but passed it up because of a perceived need to maintain U.S. force flexibility.

In addition, Washington is signalling its reconsideration of the current moratorium on nuclear testing. At present, the United States is a signatory to the Comprehensive Test Ban Treaty (CTBT), is committed to a testing moratorium imposed by President George Bush in 1992 but is opposed to ratifying the Treaty. However, the Review gives a strong indication of a future return to testing. According to the NPR, "the need is clear for a revitalized nuclear weapons complex that will ... maintain readiness to resume, underground nuclear testing if required." The report also suggests reducing the readiness time for nuclear testing from the current two- to three-year time period down to a year or less.

The flexibility demanded by the NPR poses a grave threat to the health of international arms control and has blocked a meaningful agreement being reached in Moscow. However, a possibly more damaging recommendation contained in the NPR is the call for the development of new nuclear weapons for tackling hardened and deeply buried targets.

## **New Nuclear Weapons**

The Defence Department highlighted Hardened and Deeply-Buried Targets (HDBTs) as a challenge for U.S. capabilities in a report sent to Congress in October 2001. Buildings and facilities that an adversary may construct underground could serve as leadership shelters, host command and control operations, or act as storage depots for weapons of mass destruction. According to the Pentagon report, U.S. intelligence estimates over 10,000 HDBTs worldwide, and while only a tiny proportion are of strategic significance, it anticipates a significant increase in that number in the coming decade.

In the post-Cold War environment, the defeat of hardened and deeply buried targets rapidly emerged as the mission most likely to justify the development and deployment of new nuclear weapons. The idea was first proposed in an influential article in 1991 but it was not until early 1997 that the U.S. fielded the B61-11 (the B61 "mod 11"). A slim, 12-foot long weapon with a variable yield of between 0.3 and 340 kilotons, the B61-11 was designed to burrow 50 feet into the ground before detonating. However, the NPR describes the B61-11 as having "very limited ground penetration capability" and that it "cannot survive penetration into many types of terrain in which hardened underground facilities are located." Given these shortcomings, the B61-11 does not have a high probability of successfully defeating such targets.

With the arrival of the current administration, key nuclear proponents have assumed offices of power and have placed the subject of developing new nuclear weapons back on the political agenda. Renewed calls were made from a number of quarters for the development of new nuclear weapons, particularly by Stephen Younger, former deputy director of Los Alamos National Laboratory, Paul Robinson, director of the Sandia National Laboratories, and the National Institute for Public Policy (NIPP), whose January 2001 report strongly influences the NPR.

These reports go further than promoting the development of weapons for tackling underground targets. Robinson's report in particular calls for a range of new low yield weapons for what he terms "deterrence in the non-Russian world" including "mini-nukes" of very low yields. Congressional legislation from 1994 prohibits research and development that could lead to a precision nuclear weapon of less than five kilotons, stymieing their efforts for now. However, two Republican senators tried to overturn that legislation in the 2001 budget, and more attempts are expected. In order to sidestep the legal provisions, the weapons that the Pentagon now seeks to develop will have a yield of above five kilotons.

## **Current Efforts**

With lower yield nuclear weapons as potential additions to the U.S. arsenal, the current administration's force structure plans are shifting toward giving nuclear weapons a more prominent role as usable weapons. On the one hand, the NPR indicates that the United States is shifting from a strategic force based on nuclear weapons to one based on a mixture of nuclear and non-nuclear forces. In particular, the Review calls for "the modification of a strategic ballistic missile system to enable the development of a non-nuclear payload."

However, the NPR also states that certain missions cannot be carried out with present U.S. technological capabilities, either conventional or nuclear. Potentially the most controversial mission is the defeat of HDBTs. In response, the Pentagon is closely examining the possibility of developing new nuclear weapons to fulfil this mission.

The DoD's report from October 2001 revealed that the nuclear weapons laboratories had re-established advanced warhead concept teams to begin researching lower-yield nuclear options. However, the leaking of the NPR revealed how much further advanced Pentagon thinking has become. In addition to promoting concept teams at the U.S. nuclear weapons laboratories, the NPR called for a further study to determine whether an existing warhead could be modified to offer greater penetration. The three-year study would cost about \$45 million, and would examine both the B61 and the B83 warheads for modification. Most importantly the Department of Energy's budget request for the upcoming year includes \$15.5 million of funding to begin work on a "Robust Nuclear Earth Penetrator," which will likely be created by modifying an existing warhead. If the money is successfully appropriated the programme will undoubtedly be seen through to its conclusion.

With the NPR and the budget request for the upcoming fiscal year, a clear signal has been sent. While the Bush administration has grabbed the headlines with its US-Russian arms reductions, behind the scenes the proponents of new nuclear capabilities have been gaining the upper hand. Developing new weapons for targeting HDBTs is just the start of an ongoing process for expanding the U.S. nuclear arsenal and widening the range of missions it is designed to perform. The implications are stark.

## **Conclusion**

On testing, Washington is already sending out clear signals regarding its opposition

to the CTBT and reports indicate that a debate is currently taking place between the Departments of State and Defence over following the precedent set by the ICC and withdrawing the U.S. signature from the Treaty. If this were to happen, the likely cause of a subsequent U.S. resumption of testing would be the development of new nuclear weapons. This would have far reaching implications for the global testing moratorium and wider structures such as the NPT.

Secondly, indications that the United States is increasing the role of low-yield tactical nuclear weapons in its military planning will place a serious block on efforts to tackle the real proliferation threat posed by Russia's vast arsenal of tactical nuclear weapons. Currently numbering between 4,000 and 12,000, any incentive Russia may have to place further controls on this arsenal will be severely hamstrung by current U.S. actions.

At this time of increasing tension on the Indian subcontinent, Washington should be doing all it can to emphasise the inefficacy rather than the efficacy of nuclear weapons. However, the Bush administration seems intent on sending entirely the wrong message and developing new, more useable nuclear weapons. It is incumbent upon Europe to strengthen the voices in Congress who are opposed to this.