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TAILORED DETERRENCE: THE 'NEW TRIAD' AND THE TAILORING OF NUCLEAR SUPERIORITY

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ABSTRACT

David S. McDonough examines the key nuclear weapon projects that were initiated during the George W. Bush administration, in particular the advocacy of new nuclear capabilities and the codification of new missions – geared towards flexibility and adaptability – for the nuclear arsenal. He argues that these recent initiatives constitute an effort to 'tailor' the US nuclear arsenal to different scenarios and capabilities, with the overarching goal to ensure some degree of nuclear superiority and strategic advantage over potential adversaries. He provides an assessment on the benefits and drawbacks of this approach, and concludes that these developments will likely be very difficult for the current Obama administration to fundamentally alter.

ABSTRAIT

David S. McDonough examine les principaux projets d'armes nucléaires qui avaient été lancés sous l'administration George W. Bush, notamment la défense de nouvelles capacités nucléaires et la codification de nouvelles missions – orientées vers la flexibilité et l'adaptabilité – pour l'arsenal nucléaire. Il soutient que ces récentes initiatives constituent un effort en vue « adapter » l'arsenal nucléaire des É.-U. à différents scénarios et capacités dans le but principal d'assurer un certain degré de supériorité nucléaire et d'avantages stratégiques sur les adversaires potentiels. Il fait une évaluation des avantages et des inconvénients de cette approche et conclut qu'il sera, selon toute probabilité, difficile pour l'administration Obama de changer fondamentalement ces initiatives.

The opinions expressed in this paper are those of the author and do not necessarily reflect the views of the Canadian International Council, its Senate or its Board of Directors.

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INTRODUCTION

The concept of tailored deterrence which was introduced in the 2006 *Quadrennial Defense Review* (QDR) represents the most recent chapter in the story of the Bush administration's nuclear revisions. As the document notes, tailored deterrence reflects "a shift from 'one size fits all' deterrence toward more tailorable capabilities to deter advanced military powers, regional WMD [weapons of mass destruction] states, or non-state terrorists."¹ The document remains, however, fundamentally ambiguous on how US nuclear capabilities will be 'tailored' into that role and whether tailored deterrence is indeed a new concept or simply a term that has been retroactively applied to previous policies. Nevertheless, the concept of tailoring nuclear policy is certainly an insightful one. American nuclear policy does appear to be *de facto* tailored to a number of different scenarios, capabilities and, ultimately, potential adversaries.

It is, however, not deterrence that is being tailored – at least not as it is commonly understood. Instead, the United States appears to be redefining the concept of what constitutes a sufficient deterrent, whereby nuclear superiority and the *unilateral* assured destruction of an adversary's strategic capabilities – whether that adversary is an established nuclear weapon state, an incipient nuclear power or a poorly armed rogue state – become the end goal. The tailoring of superiority, as a nuclear component in the Pentagon's vision of full spectrum dominance, represents an ambitious and increasingly salient strategic development.

THE 'NEW TRIAD' STRATEGIC POSTURE

Under the Bush administration, new nuclear capabilities have been advocated, counterproliferation missions have been codified and prompt and adaptive nuclear war plans have been created. This transformation represents a controversial move towards maximizing the tactical military utility of these weapons. The recent controversy surrounding US nuclear revisions originated in the 2002 *Nuclear Posture Review* (NPR). The traditional nuclear triad will be combined with advanced conventional kinetic weapons to form the offensive strike leg of the 'New Triad' strategic posture. Defences constitute the second leg; lip service may be paid to passive defences, but clear emphasis is on a multilayered, global missile defence architecture. The third leg is a responsive infrastructure which aims to reconstitute the US nuclear weapons production capability.² An added dimension, however, is the continuing modernization of the traditional nuclear triad consisting of intercontinental ballistic missiles (ICBMs), sea-launched ballistic missiles (SLBMs) and long-range strategic bombers. Strategic force modernization programs promise to significantly expand US counterforce and hard-target kill capabilities.

The New Triad will be bound together by a sophisticated command, control, communications and intelligence system. The 2002 NPR also places a very strong emphasis on expanded targeting requirements. First, there are an estimated 1,400 hard and deeply buried targets (HDBTs) that could protect WMD or command and control facilities. Second, chemical and biological (CB) agents and their facilities require particular forms of neutralization, namely through heat, radiation or other means. Lastly, the destruction of mobile or relocatable targets, which like HDBTs could be used to safely protect different strategic assets, requires an improved capability for tracking and surveillance as well as prompt, accurate and selective strike capabilities.

Despite the move towards capability-based planning, the NPR places an explicit emphasis on the threat posed by WMD-armed rogue states. This is not a new development; these adversaries were introduced as a justification for US nuclear weapons in the early 1990s, and were formally incorporated in the now cancelled nuclear strike plans (Silver Books) as early as 1993. However, rogue states are given an especially prominent position in the NPR and appear to be the primary justification for the new targeting requirements and current drive for qualitative improvements in the US nuclear arsenal. These targeting requirements have, in turn, led to the impetus to develop new nuclear weapons capabilities. For instance, the US has begun research on earth-penetrating nuclear bunker-busters with a sub-surface burst capability that, through ground shock and high heat and radiation levels, would be able to hold at risk both HDBTs and underground CB facilities. This interest led to the Robust Nuclear Earth

Penetrator (RNEP) project and the Advanced Concepts Initiative (ACI) on low-yield warhead designs. Specialized counterforce capabilities designed for counterproliferation missions have become a key component in the offensive strike leg of the New Triad.

The new targeting requirements have meanwhile renewed the importance of flexible nuclear strike options. The modernization of the Integrated Strategic Planning and Analysis Network, formerly the strategic warfare planning system, offers the potential for rapid nuclear war plan generation. The traditionally inflexible and deliberative Single Integrated Operating Plan, since renamed Operations Plan 8044 (OPLAN-8044), has incorporated adaptive and crisis action planning. Adaptive planning is designed to rapidly generate limited nuclear war plans for potential contingencies, while crisis action planning is geared towards providing prompt Global Strike capability with both conventional and nuclear strike options in totally unexpected contingencies. Global Strike, initially codified in Concepts Plan 8022, has since been directly incorporated into OPLAN 8044 (Revision 5).³

Controversy has certainly surrounded the United States' publicly articulated doctrine of pre-emption. As noted in the 2002 *National Security Strategy*, preemption (and the more expansive preventive war option) were needed in order to "adapt the concept of imminent threat to the capabilities and objectives of today's adversaries".⁴ But contrary to public perception, the NPR did not directly advocate a preemptive role for nuclear weapons, though it did contain clear messages on the need to defeat WMD capabilities. That being said, the draft *Doctrine for Joint Nuclear Operations* did place preemption squarely in US nuclear doctrine. This document may have been cancelled, but the United States has steadily increased its operational capability to undertake preemptive strikes. Crisis action planning and the Global Strike mission envision prompt, limited and tactical long-range nuclear strikes for the military purpose of destroying a target (as opposed to upholding deterrence); in other words, a capability that would be very useful for preemptive nuclear strikes.⁵

The temptation for limited preemptive nuclear strikes is rooted in the possibility of deterrence failure and the consequent requirement for damage limitation. The administration has chosen an evolutionary approach to its defence component of the New Triad, with initial ground-based interceptors deployed at Vandenberg Air Force Base in California and Fort Greely in Alaska, with two more potential interceptor sites in Poland and in either North Dakota or in Maine. Additional interceptors will be forward deployed on *Aegis*-class cruisers and ground-based theatre systems, and new capabilities added as soon as they become available.⁶ The logic of missile defence, however, has always been more robust when connected to first-strike preemptive capabilities. Missile defence would increase the utility of "offensive counterforce strikes while enhancing security from catastrophic results if an adversary launches a retaliatory strike while under attack."⁷ The temptation to further limit any possible damage through preemptive counterforce strikes would be strong, especially given the still uncertain technological capability of any hit-to-kill interceptor.

Meanwhile, the central *raison d'être* for a responsive nuclear (and indeed conventional) infrastructure is to assure the continued long-term viability of the US nuclear arsenal. In some ways, this leg of the New Triad squares the circle, in so far as it is this capability which becomes necessary to assure the continued maintenance and expansion of American offensive strike capabilities (nuclear and conventional) and missile defence systems (strategic, theatre, tactical and potentially space-based). Yet the RNEP project and ACI have both been cancelled, while funding for a new plutonium pit production facility, early nuclear testing capabilities and even conventional Global Strike platforms have stalled, largely at the behest of a disapproving Congress. The US, however, continues with a Reliable Replacement Warhead program that could potentially reduce the nuclear stockpile and facilitate the development of new warhead designs. The Bush administration has also initiated an ambitious 'Complex Transformation' plan that seeks to restructure and rebuild the US nuclear weapons complex with fewer locations and new production facilities.

Less noticed is the continuing modernization of the existing arsenal. The remaining low-yield Minuteman III ICBM warheads will be replaced by the high-yield MX warhead and further augmented by the inclusion of GPS guidance systems. The SLBM force of highly accurate and high-yield D-5 warheads will also benefit from the addition of

GPS accuracy and ground-burst capability. Even the bomber force will become armed with stealthy and low-flying cruise missiles – ideal to avoid an adversary’s early warning radar. The nuclear force may indeed be smaller, but it is also becoming more accurate and more lethal, and ideal for disarming counterforce strikes.

THE TAILORING OF NUCLEAR SUPERIORITY

These nuclear weapons projects and expanded targeting requirements constitute the latest manifestation of a long-standing American trend towards nuclear superiority. The search for some modicum of superiority was especially prevalent in the later years of the Cold War under the Carter and Reagan administrations’ fixation over a counter-vailing or prevailing strategy, and it appears to have only accelerated – albeit with a different kind of focus – since that period. The Bush administration most recently attempted to redefine its policy by introducing the tailored deterrence concept. In some ways, this description is remarkably apt, in that such a term does properly denote the tailoring of various policies to different adversaries and capabilities. The QDR also goes on to provide a good summary of this strategy, which includes: “prompt global strike capabilities to defend and respond in an overwhelming manner to WMD attacks and air and missile defenses...to deter attacks by demonstrating the ability to deny an adversary’s objectives.”⁸ The first two legs of the New Triad – offensive strike systems and active defences – are central to tailoring deterrence.

This vision places an emphasis on counterforce or counter-conventional capabilities – both Global Strike and missile defences – that would be designed to deny or eliminate the value of an adversary’s own deterrent. This deterrence-by-denial posture would, according to this logic, thereby deter an adversary from undertaking any means of compellence or aggression, given the surety that the United States would have a wide range of capabilities at all levels of conflict in order to deny the adversary’s objectives. This approach is therefore quite different from the more popularly understood deterrence-by-punishment strategy, which only advocates sufficient nuclear capabilities to punish an aggressor. In some ways, the shift from punishment to denial is a natural outcome of the massive disparity in power between the United States and its current adversaries; unlike during the Cold War, the US can more feasibly deny an adversary’s strategic military capabilities and objectives. Indeed, the denial approach can actually be seen as directed less at threatening a purported adversary and more towards assuring that the US has credible nuclear options that would prevent any immobilizing instance of self-deterrence.

Deterrence-by-denial is often perceived as being more ambitious and aggressive than a nuclear posture guided by punishment. The latter strategy allows for an adversary to maintain its own capability for punishment, and is therefore conducive to the idea of mutual assured destruction (MAD). Deterrence-by-denial, however, places a premium on the ability to deny the value of an adversary’s deterrent capability. MAD would be replaced with unilateral assured destruction and deterrence. Yet the counterforce capabilities tailored to deny an adversary’s objectives might not be clearly perceived as a mechanism to buttress deterrence. By requiring more varied and credible nuclear capabilities and the ability to deny an adversary’s objectives over a range of conflict levels, this approach basically constitutes an escalation dominance posture for the goal of deterrence; it might even look like a splendid first-strike posture to those American adversaries that lack a second-strike capability.

Nuclear superiority is therefore at the heart of the tailored deterrence concept. It is less about tailoring retaliatory and punishing deterrent capabilities against various actors, and more about tailoring counterforce and denial capabilities to negate the utility of an adversary’s own deterrent. This is ostensibly directed at America’s rogue state adversaries, in so far as the US has never accepted any form of mutual deterrent constraints with these states. Such constraints were only reluctantly accepted with the Soviet Union, and even then hawkish strategies to allow for escalatory dominance – with definite overtones of superiority – were advocated and initiated by American nuclear war planners.⁹

One must therefore assess the New Triad's proposed capabilities within this kind of scenario. Conventional strike capabilities – including the current plans for conventionally-armed ICBMs – are seen as a very useable means to eliminate a rogue state's WMD capabilities. New nuclear counterforce capabilities are equally important as a means to hold at risk those strategic assets that conventional weapons are unable to destroy. Nuclear bunker-busters or agent defeat weapons could in turn be used to deter any last ditch spasm attack by a rogue state, and would thereby buttress intra-war deterrence during any regime change campaign. But given the real possibility of military conflict with rogue states and the increased difficulty of intra-war deterrence in any such scenario, there would likely be pressure to utilize denial capabilities for preemptive disarming purposes. That these capabilities are a component of the Global Strike scenarios does not make one sanguine that nuclear weapons are viewed solely through the lens of deterrence. Even with such a robust counterforce strategy, there remains the possibility of failure – that a rogue state, even after being bombarded with preemptive disarming strikes, might be capable of launching a retaliatory WMD attack. Nuclear (and potentially low-yield) bunker-busters provide a more proportional means of retaliation, while defences become a critical and damage-limiting safety net against such an occurrence.

The Bush administration's nuclear revisions are being tailored to maximize its ability to undertake military interventions against rogue states. The tailoring of nuclear superiority against these states is therefore even more ambitious than a simple deterrence-by-denial strategy, in so far as the US could potentially utilize such denial capabilities in the midst of a regime change campaign. Strategic stability, given the more feasible possibility of conventional conflict, is simply not a salient issue for US nuclear war planners in these scenarios. New Triad capabilities represent an intervention enabler against asymmetrical adversaries. But nuclear superiority is not simply a concern for rogue states. The envisioned capabilities offer a potential first-strike advantage against established nuclear powers such as Russia and China. Conventional strategic weapons could be used for "nonnuclear counterforce coercion", whereby the US could threaten to conventionally degrade an adversary's "long-range nuclear strike forces".¹⁰ The high-yield and more accurate hard-target kill capabilities of the existing legacy systems, while perhaps disproportional for a tactical bunker-busting strike against rogue states, could be useful for a strategic disarming attack against the hardened silos in Russian and, in the future, Chinese territory.

Counterproliferation missions may be specifically directed at rogue states, but these specialized counterforce weapons would also have utility as a tool of coercion against both Russia and China. These nuclear powers have significant HDBTs for their respective command and control centres. Mobile missile launchers, while only hypothetical and long-term possibility amongst rogue states, have been a significant problem for US nuclear planners against Russian targets for many years, and will likely be increasingly problematic with the solid-fuelled (and mobile capable) missiles that China is gradually developing. These capabilities will not enable any American military adventurism in these cases; the strategic capabilities of both Russia and China are substantial enough to negate the credibility of such an option, and the mature relationships make the need for such a campaign non-existent. It would, however, give the United States a potential first-strike advantage against both countries, especially considering the declining state of the Russian arsenal and the relatively small size of China's.

A first-strike capability might be a moot point in the current strategic threat environment, where the dangers of a bolt-out-of-the-blue attack is simply not credible and a serious nuclear crisis with either country appears highly unlikely – the only possible exception being a confrontation with China in the Taiwan Strait. But it does complement the current American drive towards maintaining and extending grand strategic "primacy", while providing a useful coercive hedge in the event that more serious geostrategic competition does indeed return to the international system.¹¹

CONCLUSION

Tailored deterrence may indeed be a construct that has been retroactively applied to past policies. It also could be seen as the most recent attempt to justify the Bush administration's nuclear revisions on the clear grounds of deterrence, as it diverts attention from high-profile and controversial remarks on the need to defeat WMD capa-

bilities. But the deterrence that is being tailored is based on obtaining strategic counterforce and damage limitation capabilities that would be able to deny an adversary's own deterrent. As such, it represents a very unilateral understanding of deterrence that harkens back to the myth of the "golden age" of nuclear superiority.¹²

This type of strategic nuclear advantage, however, interacts with different types of actors with equally diverse capabilities. Nuclear superiority against weak rogue states entails the potential for military interventions and regime change campaigns, whereby American nuclear weapons would be so credible and usable as to deny the rogue's own deterrent capability. Tailoring nuclear weapons in this scenario is centred on enabling conventional military campaigns. On the other hand, tailoring nuclear superiority against established nuclear powers implies first-strike capabilities that would, at least hypothetically, be able to successfully disarm either Russia or China. Any such superiority could be seen as potentially useful in any future crisis situation, given the long history of attempting to leverage nuclear superiority to gain concrete political gains. Strategic instability between the United States and other established nuclear powers may not be the intention of extending and tailoring the quest of grand strategic primacy into the nuclear weapons realm, but it may in fact be the *long-term* trade-off.

The Bush administration may have accelerated this process, and its departure may curtail some of the more ambitious elements of this approach. But these developments have percolated in the United States for many years and will likely be difficult for the new Obama administration to reverse. The Strategic Posture Commission and the upcoming 2009 NPR may make some rhetorical or semantic changes (i.e., avoiding the use of the New Triad), but it is unlikely to alter the fundamentals of this strategic approach.

NOTES

- ¹ *Quadrennial Defense Review Report* (Washington DC: Department of Defense, 6 February 2006), 4 (hereinafter *Quadrennial Defense Review*).
- ² *Nuclear Posture Review Report* (Washington DC: Department of Defense, 8 January 2002). The NPR was submitted to Congress on 31 December 2001, and excerpts are available at <http://www.globalsecurity.org/wmd/library/policy/dod/npr.htm>.
- ³ See Hans M. Kristensen, "Counterproliferation and US Nuclear Strategy," *International Journal*, 63, 4 (Autumn 2008), 803-820.
- ⁴ *National Security Strategy of the United States* (Washington DC: The White House, September 2002), 15.
- ⁵ The US did plan for strategic preemptive attack against the Soviet Union during the early Cold War. But that policy was still rooted in the need to deter a general nuclear war; due to the American inability to absorb a Soviet first-strike, the United States often relied on strategic preemption and, by the 1970s or so, the capability for hair-trigger 'launch-on-warning' postures as a means to buttress deterrence. See Bruce Blair, "The Fallacy of Nuclear Primacy," *China Security*, 2, 3 (Autumn 2006), 51-77.
- ⁶ James Fergusson, "Thinking About a 'Known Unknown': US Strategy and the Past, Present and Future Implications of Strategic Defence," *International Journal*, 63, 4 (Autumn 2008), 823-845.
- ⁷ Joint Chiefs of Staff, *Doctrine for Joint Nuclear Operations*, Joint Pub 3-12 (Final Coordination [2] draft, March 15, 2005) II-10, available at http://www.nukestrat.com/us/jcs/JCS_JP3-12_05draft.pdf.
- ⁸ *Quadrennial Defense Review*, 27.
- ⁹ David S. McDonough, *Nuclear Superiority: The 'New Triad' and the Evolution of Nuclear Strategy*, Adelphi Paper 383 (London, New York: International Institute of Strategic Studies/Routledge, 2006), Chp 1.
- ¹⁰ Douglas Ross, "Nuclear Weapons and American Grand Strategy: Essential Pillar or Terminal Liability," *International Journal*, 63, 4 (Autumn 2008), 855.
- ¹¹ An examination of 'primacist' grand strategies can be found in David S. McDonough, "Beyond Primacy: Hegemony and 'Security Addiction in US Grand Strategy,'" *Orbis*, 53, 1 (Winter 2009), 6-22. For more on 'nuclear primacy' as a first-strike capability, see Keir Lieber and Daryl Press, "The End of MAD? The Nuclear Dimension of US Primacy," *International Security*, 30, 4 (Spring 2006), 5-48.
- ¹² See Richard Betts, "A Nuclear Golden Age: The Balance Before Parity," *International Security*, 11, 3 (Winter 1986-87), 3-32.

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