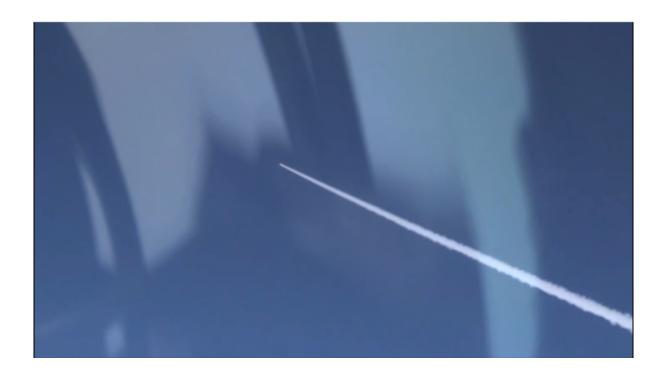


# **Nuclear Knock-On Effects**

The NAPSNet Policy Forum provides expert analysis of contemporary peace and security issues in Northeast Asia. As always, we invite your responses to this report and hope you will take the opportunity to participate in discussion of the analysis.



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by Peter Hayes 9 May 2013

# I. INTRODUCTION

Peter Hayes writes that automatic budget cuts in the US will result in the shrinking of the US

strategic triad. He writes "each service will maintain its nuclear mission for political-bureaucratic and ideological reasons, and the triad itself will simply get smaller, remain militarily incoherent with warheads and missiles mismatched to military mission, with less funds available for conventional deterrent forces as a result. In turn, the deficit of conventional forces will justify continued funding of nuclear forces."

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#### II. POLICY FORUM BY PETER HAYES

#### **Nuclear Knock-On Effects**

Automatic budget cuts in the United States have already cramped the operations of the US military in the Pacific. However, the scale, capacity, and quality of US forces in the region today are so superior to any combination of adversaries that the cuts make little difference to its ability to conduct coercive diplomacy—today.

Nonetheless, the cuts are already visible and affect perceptions.[1] Existing forces largely are taken for granted and increasing lethality of future forces at lower cost is discounted as over the horizon, even if almost certain to occur--as exemplified by the May 3, 2013 successful test of the X-51A hypersonic Waverider aircraft above the eastern Pacific.[2]

If US budget cuts continue on auto-pilot, then the knock-on effects will serious erode the foundations of American military leadership and hegemony in the region. It will also force the US military to make some hard decisions about maintaining the Cold War strategic triad of naval, air-delivered, and land-based long range nuclear weapons systems.

The doctrinal basis for the US strategic nuclear triad is to ensure that no pre-emptive attack on the United States could possibly diminish its ability to fire back a devastating retaliatory strike, thereby "stabilizing" strategic deterrence.

However, the conceptual basis for the triad has almost disappeared today. "Stable" deterrence between the United States and Russia is possible at far lower numbers of weapons than exist today in their respective arsenals. China's strategic arsenal is tiny compared with US nuclear firepower although the relationship is more one of mutually neutralized strategic compellence than of strategic deterrence. Indeed, the United States does not refer to strategic deterrence in its pronouncements concerning China's nuclear weapons.

Whatever the logic of "strategic deterrence," there is no advantage to be gained in drawing fire onto land-based missiles in one's homeland—indeed, doing so always seemed utterly absurd. Who in their right minds offers up their homeland to be sacrificed for putative deterrence?

Airborne nuclear weapons are nice because they a slow to deliver over long distances, and can be recalled up to point of dropping or firing cruise missiles from offshore. However, they need lots of logistical support such as refueling tankers, and their airfields present tempting targets for pre-

emptive strikes.

Many strategic analysts have concluded that the land-based and airborne strategic weapons are superfluous and that submarine-based strategic forces are all that is needed to achieve "strategic deterrence" in the minds of possible adversaries—by which is meant Russia and China. Former CINCPAC Admiral Dennis Blair argues that only *dedicated* nuclear forces should be fielded (that is, strategic submarines, and long range Minutemen missileers) and that dual-use forces should be eliminated.[3] Others, such as former vice chairman of the US Joint Chiefs General James Cartwright, have called for a dyad based only on strategic bombers and strategic submarines.[4]

Thus, the fight in Washington over the allocation of budget dollars to nuclear forces is intensifying on two fronts. The first is the inter-service rivalry whereby each service strives to avoid losing its part of the triad. The second is the ever-escalating demand for dollars to sustain US conventional military forces, first and foremost, to meet the high costs of pay, benefits, and support to enlisted personnel; and second, to invest in modernization and deployment of high technology forces that increase the lethality and reach of US forces and, to some extent, substitute for expensive enlisted personnel and forward-deployed logistic support systems, including bases.

Thus, the more that conventional high technology weapons systems substitute for missions formerly reserved to or uniquely fulfilled by nuclear weapons, the more dollars can be moved from the strategic nuclear budget into each service's conventional forces budget. This choice is becoming increasingly stark. In this FY budget request, the Pentagon requested \$12 billion for nuclear weapons out of a total request of \$527 billion—already \$52 billion above that allowed under the sequestration automatic limit on defense spending.[5]

The Navy is planning to keep the Ohio submarines, each armed with 24 Trident II D-5 missiles, in service until at least 2040. According to Ronald O'Rourke, the first of the 14 Ohio-class SSBNs will leave service in 2027. "The remaining 13 will reach the ends of their service lives at a rate of roughly one ship per year thereafter, with the 14th reaching the end of its service life in 2040."[6]

Thus, the Navy faces a tradeoff between being able to afford new strategic nuclear submarines versus reducing its blue water conventional navy. William Burke, deputy chief of Naval Operations Warfare Systems, said in the Washington Post on May 2, that if the US Navy committed to forward funding 12 new replacement strategic submarines for these Ohio submarines, starting with its fiscal 2014 budget request for \$1.2 billion in research, development, test, and evaluation funding, it would force the Navy to make do with only 250 instead of 300 ships for its global power projection mission. [7]

"At these numbers," he stated, "our global presence will be reduced such that we'll only be able to visit some areas of the world episodically."[8]

The obvious solution to the conventional horn of this dilemma is to set priorities and to construct regional security architectures based on power sharing rather than military dominance. This approach is not viewed with equanimity by the US Navy.

The way to tackle the nuclear horn of this dilemma is to reduce the funds committed to the other two legs of the strategic triad. The latter is unlikely given inter-service rivalry for the strategic nuclear budget. Alternately, the Navy can field fewer submarines to deploy the required number of warheads at sea rather than focus on the number of submarines. The question becomes: How many cities must be exterminated to assure "stability."

Indeed, Hans Kristensen made exactly this argument, noting that the Ohio strategic submarines

deploy today are at historically low operating tempo and that no more than eight submarines should suffice to provide guaranteed retaliatory annihilation on any country attacking the United States.[9]

Meanwhile, the sequester is affecting fleet readiness and actual operations in the Pacific. Unsurprisingly, the Navy is spending assured dollars on ensuring that forces about to deploy are fully trained and equipped, and on overhauls of warships. That has led to deferment of fleet maintenance wherever possible; and likely reductions in future procurement.[10] Steaming time, exercises, and reduced non-deployed readiness levels for naval forces are the net result.[11]

The end result of this pincer movement of the budget squeeze, strategic nuclear imperatives, and conventional force demands, is that the strategic triad likely will shrink over time. The mix of warheads and delivery systems in a smaller triad could be rationalized in order to make the forces far more reliable, flexible, and lethal. [12] However, due to organizational rigidity, budget constraints, and political risks arising from adversarial perception of nuclear weapons modernization, such a reconstitution of the triad is unlikely.

Perhaps one leg of the triad will be defunded and eliminated; but more likely is that each service will maintain its nuclear mission for political-bureaucratic and ideological reasons, and the triad itself will simply get smaller, remain militarily incoherent with warheads and missiles mismatched to military mission, with less funds available for conventional deterrent forces as a result. In turn, the deficit of conventional forces will justify continued funding of nuclear forces. Perhaps this is why the Navy is planning to operate the next strategic submarine until 2080, well beyond the lifetime of readers of this essay. Apparently nuclear abolition is budgetarily inconceivable.

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#### IV. NAUTILUS INVITES YOUR RESPONSES

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