

# THE AMERICAN FOREIGN POLICY COUNCIL

## *Defense Technology Program Brief*

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## American Deterrence and Future Conflicts

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### ***Briefing Highlights***

The development of new, non-nuclear strategic technologies and space and cyber warfare capabilities provides states and even non-state actors with the capacity to generate strategic effects, creating new dilemmas for escalation control and management in a crisis.

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In a peer competitor contingency involving either or both Russia and/or China, or a crisis with a nuclear Iran or North Korea, conflict escalation could take the form of a horizontal escalation, whereby the geographic scope of the crisis is expanded, or a vertical escalation, in which advanced non-nuclear or nuclear weapons are used to achieve a strategic effect.

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We need to re-think our ideas about: (1) new and emerging technology options for deterrence planning; (2) alliance and coalition management in a multinuclear world and the potential for catalytic warfare, and; (3) the erosion of the U.S. strategic position vis-à-vis potential competitors and adversaries.

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Dissuasion of an adversary from attack is the essence of deterrence planning. The missile defense concept goes to the heart of both considerations, and with the advances in defensive technologies it holds even greater potential to shape and impact enemy and allied perceptions in a crisis confrontation.

On the centennial of the start of World War I—a war that began largely as a result of crisis miscalculations and escalations—we are entering a new era with important implications for deterrence, escalation control, and coalition management. Today, like at the time of World War I, we confront a large number of actors who have the potential to misread cues and red lines while relying on treaty relationships if they miscalculate. Then, as now, military technologies were widely diffused. Prevailing assumptions about how an adversary (or potential adversary) would react in a crisis or confrontation were based on imperfect intelligence and inadequate understanding of red lines.

During the Cold War, global stability was predicated on the state of the U.S.-Soviet strategic relationship, which underwent periods of instability and even confrontation. However, the bipolar nature of the international system at the time lent a certain predictability to U.S.-Soviet relations, which were based on a presumption of “rationality” in each side’s decision-making—and, over time, an extensive knowledge about the other side’s capabilities, interests, and Achilles’ Heels. Both sides understood that they could be destroyed by the other if nuclear forces were used, and that even with the development of

active and passive defenses (particularly in the Soviet Union), the existence of survivable second-strike forces meant “victory” might never be attained.

In the post-Cold War era, marked by the dissolution of the Soviet Union and the diffusion of nuclear technology, U.S. strategic planning assumptions were increasingly challenged. The emergence of multiple nuclear power centers meant that individual states could take decisions that would have far-reaching consequences for regional and global stability. As the possibility of catalytic warfare increased, the United States began to understand that it might very well be drawn into a nuclear war by a third party which had little regard for U.S. interests or the stability consequences of its actions.

India’s rivalry with Pakistan fits this paradigm, as do Iran’s antagonism with Israel, China’s struggle against Taiwan, and the North Korean conflict with South Korea. Where once nuclear weapons possession was crucial to the idea of catalytic warfare, it no longer is; the development of new, non-nuclear strategic technologies and space and cyber warfare capabilities provides states and even non-state actors with the capacity to generate strategic effects, creating new dilemmas for escalation

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control and management in a crisis. Noteworthy in this regard are new non-nuclear technologies or enablers that have the potential to provide precision and strategic effects, in addition to systems that could disable command and control networks and crucial critical infrastructure networks using cyber or electronic warfare measures.

*“Emergence of multiple nuclear power centers meant that individual states could take decisions that would have far-reaching consequences for regional and global stability.”*

As a result, non-nuclear weapons options can now put the onus for escalation decisions on the defender. In turn, decisionmakers need to find ways to de-escalate a crisis if nuclear war is to be avoided. Yet there has been an inadequate focus, both inside and outside government, on how nuclear and conventional escalatory options can be synchronized to shape and control conflicts in a multinuclear world.

## **A need for new thinking**

Reinforcing the demands of this new era are Russia and China’s nuclear modernization efforts. These stand in stark contrast to reductions now underway in U.S. strategic force structure and the deleterious effects of sequestration—which, if current FY2016 budget projections hold, will further curtail many U.S. military modernization efforts in order to pay rising manpower costs and finance ongoing operations. Changes in the nuclear balance between the United States and China, and in the U.S.- Russian strategic nuclear relationship—with Russia for the first time surpassing the United States in numbers of deployed warheads—could have consequences for the options that a U.S. leadership perceives it has in a crisis where the use of force is a real possibility. While the U.S. strategic relationship with Russia has been tested over time, there is still the prospect for overreach or unintended escalation, particularly in Eastern Europe or the “gray area” states, such as Moldova, where no formal Article 5 treaty commitment from NATO exists.

Moreover, as U.S. nuclear forces are reduced (either unilaterally or via a new arms control accord), the resulting force levels may well create a situation of nuclear parity with China, whose own nuclear forces continue to multiply. At a time in which the Sino-American relationship is fraught with new challenges, the consequences of this could be profound, both in terms of the political willingness of the United States to intervene in a crisis and with respect to its tools for managing escalation and de-escalation.

Against this backdrop, new thinking about escalation management and escalation control is a top priority, one that is as essential today as it was at the beginning of the nuclear age. In fact, it may even be more important, as the risks of catalytic warfare increase and the dynamics of nuclear coalition management become more complex and less readily manageable than they were in the Cold War setting.

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In a peer competitor contingency involving either or both Russia and/or China, or a crisis with a nuclear Iran or North Korea, conflict escalation could take the form of a horizontal escalation, whereby the geographic scope of the crisis is expanded, or a vertical escalation, in which advanced non-nuclear or nuclear weapons are used to achieve a strategic effect. In either instance, the U.S. would need to control the escalation spectrum, protect and reassure allies and key partners, and implement options for de-escalation and/or to terminate the crisis on terms favorable to U.S. interests. This suggests that—more so than in the past—the discussion of deterrence and escalation requires a focused and sustained dialogue between the strategic-military-political and the technology communities.

## **Emerging threats**

In the Asia-Pacific region, China is emerging as a peer competitor to the United States and its allies. While our

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understanding of China's strategic forces is less than perfect, it is clear that the PRC is pursuing a range of strategic modernization programs, some nuclear, some non-nuclear, that will give it great flexibility in a crisis or confrontation with the United States. Even so, relatively little thought has been devoted to issues like the impact of Chinese nuclear modernization and space programs for nuclear stability and crisis management. The prevailing presumption seems to be that the MAD framework would apply, and that Chinese strategic programs had a long way to go before reaching a condition of strategic equivalence with the United States.

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Recently, however, some analyses have suggested otherwise. Informed assessments suggest the PRC may be approaching a situation of “strategic parity” with the United States, especially when taking into account its comprehensive efforts in space, EMP, and nuclear modernization, as well as the impact of sequestration on all U.S. military research and development programs. China's ability to resort to cyber and space warfare increases its options in a crisis, and could even undermine such advanced U.S. planning concepts such as Air-Sea Battle, providing the basis for access denial and basing vulnerabilities. Above all, it could impact thinking in allied or partner countries about the need to pursue their own nuclear weapons option, especially if they doubt the credibility of the American extended security guarantee. This, in turn, could lead Japan or South Korea to explore its own nuclear option, or provide another impetus for Taiwan to re-consider the nuclear path, if it has not already done so in the aftermath of further Chinese interference in Hong Kong's governance.

Similarly, Russia is modernizing its nuclear arsenal, even as it puts into place a “de-escalatory doctrine” based on tactical nuclear weapons use—a strategy announced in 1999 after the Kosovo war as a means of staving

off conventional weapons defeat in a war or crisis confrontation. According to Russian thinking, if Russia were to use a nuclear weapon in a conflict, its adversaries would stop fighting, presumably to avoid further escalation. Indeed, in 2009, Russia experimented with this concept in the Zapad exercise, which simulated a nuclear attack against Warsaw, Poland. From the Russian perspective, this exercise was a great success. However, from a Western perspective, Zapad '09' was assessed to lower the threshold for nuclear usage to a dangerously low level.

Clearly, the events of the last year offer persuasive evidence that Vladimir Putin intends to restore Russia's sphere of influence in Eastern and Central Europe. Russia's land-grab in the Crimea, which utilized so-called “hybrid” warfare and covert means, together with its invasion of Eastern Ukraine and its ongoing efforts to pressure the Baltic states and NATO's East European members, calls into question the notion of “partnership” enshrined in U.S. and NATO approaches to stability planning. Concerns now exist that Russia is introducing tactical nuclear weapons into Crimea, raising the stakes in any further confrontation over Ukraine or even freedom of navigation in the Black Sea. There are also concerns among Western strategic planners that Russia could implement a *fait accompli* in the Baltics or Moldova—one that might go unchallenged by NATO since Moldova lacks NATO's Article 5 protection. Even more worrisome from an Alliance perspective is the situation confronting some NATO allies. With respect to both the Baltic states (Lithuania, Latvia, and Estonia) and Turkey, which anchors NATO's Southern flank, the credibility of the Alliance could be challenged by a Russian thrust into the Baltic or even a failure to agree on measures to defend Turkey in a crisis contingency—both options that are within the realm of the possible at this moment in time.

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Putin's use of covert forces and of unconventional means to annex the Crimea and control the pro-Russian portions of Eastern Ukraine raise fundamental questions about escalation management and the tools that we have relied on to shape the outcome of this crisis. Sanctions and political-diplomatic demarches have their roles to play, but at the end of the day, as Henry Kissinger notes in his new book, *World Order*, reliance on the military tool to protect vital interests and to shape outcomes remains essential for a world power.

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The question, then, is how have these tools changed over time and is there a way of exploiting better the political shadow that is cast by military power in specific contingencies. Moreover, how can this be done in the context of 21st century security planning? To answer these questions, we need to re-think our ideas about: (1) new and emerging technology options for deterrence planning; (2) alliance and coalition management in a multinuclear world and the potential for catalytic warfare, and; (3) the erosion of the U.S. strategic position vis-à-vis potential competitors and adversaries.

## **New problems**

The new strategic era in which we are living heightens the need for creative thinking about nuclear coalitions, taking into account the possibility that the United States may need to deal with additional, less predictable nuclear partners in the future, each with its own ideas about deterrence and escalation control. NATO's Cold War experience is instructive in that it forced us to consider cooperative planning with a nuclear ally (namely, France) whose nuclear forces were not (and still are not) subject to Alliance targeting or policy planning decisions. Even with France's re-entry into the Alliance's integrated military command structure in 2009, its leadership has reserved the

right to keep French nuclear weapons outside of NATO's decision-making apparatus. There remains, therefore, an ongoing need to consider anew how different coalitions of nuclear powers might function together in the future, including against adversary coalitions composed of multiple nuclear powers.

The possibility that in a multinuclear world the United States could also face enemy coalitions in which two or more members possessed nuclear weapons cannot be ignored, and this gives rise to even more complex issues relating to crisis escalation and escalation control. For instance, new and emerging nuclear actors may have perspectives on nuclear weapons use and strategic and operational planning that differ fundamentally from those of the United States. Countries such as Iran and North Korea may not necessarily share our views that nuclear weapons use should be restricted to major contingencies in which only vital national interests are at stake. The Cold War-era MAD framework (which envisaged nuclear weapons retaliation as a means of checkmating their use in the first place) presumed a rationality of decision-making and a shared value in survival between adversaries. Arguably, this line of thinking might be applied to a state actor that possessed a handful of nuclear weapons, or one that shared Western conceptions about the horrors of nuclear weapons use. However, it might not be applicable to a country whose leadership embraced a different world-view, let alone an apocalyptic vision of nuclear weapons use. In the twenty-first-century security setting, the United States is more than likely to face multiple potential nuclear opponents, some having such views, as well as nuclear allies or partners who think very differently about nuclear weapons and their potential uses, making escalation control and alliance nuclear management issues all the more difficult.

*“According to Russian thinking, if Russia were to use a nuclear weapon in a conflict, its adversaries would stop fighting, presumably to avoid further escalation.”*

Secondly, the current strategic environment also demands a new look at recent advances in non-nuclear technologies

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and in cyber, space-based, and space-related capabilities, which have created unprecedented opportunities for deterrence and escalation management. Non-nuclear response options can put the onus for nuclear escalation decisions on an adversary—and with it, the need to find ways to de-escalate a crisis if nuclear war is to be avoided. New and emerging non-nuclear technologies enhance our ability to disable an opposing nuclear force (and eliminate or substantially downgrade the threat of nuclear retaliation) without necessarily resorting to nuclear weapons use. Such opportunities highlight the need to understand how nuclear and conventional escalatory options can be synchronized to shape and control escalation in a multinuclear world.

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So far, relatively little attention has been paid to such synergies and linkages, even among current international relations theorists. That represents a critical shortfall. In today’s world, new and emerging non-nuclear weapons have strategic value, and attacks on critical infrastructure, population centers, and military forces can be accomplished using non-nuclear weapons.

## **No substitute for seriousness**

This is not to suggest that nuclear weapons are no longer relevant in the American deterrence equation. Indeed, they remain critical to credible deterrence and their role in escalation management essential. But absent a perceived willingness to actually use nuclear weapons, the American deterrence posture—and by extension, the U.S. extended deterrence concept—will be ineffective in the face of an adversary who views nuclear weapons and their possible use very differently.

One essential ingredient of American deterrence planning, therefore, is the deployment of weapons systems that are reliable, secure, and have the tested potential to operate as advertised. For the United States, this means the

implementation of a nuclear modernization program to replace aging systems that are facing the end of their service lives. Warhead replacement programs are likely to be extremely contentious and expensive, if the Reliable Replacement Warhead (RRW) program of past years is any guide. Moreover, debate is likely to focus on costs in a defense-constrained budget environment and the Obama administration’s vision of a world without nuclear weapons.

Even without this latter consideration, the plan for recapitalizing the Triad is unaffordable under current budget constraints and in the context of other weapons modernization programs. Though nuclear spending is formally exempted from sequestration, the scale of the necessary modernization, to include nuclear complexes and support systems, is such that the services are actively trying to find ways to defray costs and eliminate missions. To meet the country’s strategic needs and to reinforce allied reassurance (and hence undermine incentives for proliferation), the United States needs to consider carefully its future deterrence requirements. Such a comprehensive assessment, based on the synergy of nuclear and non-nuclear strategic technologies, may cause us to reconsider the Triad. But it needs to be done carefully and with great attention to looming challenges, peer competitor threats, and the opportunities afforded by technological innovation.

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Such an assessment will also need to explore in greater depth how coalition management can impact nuclear planning. The potential for catalytic warfare has risen as the number of nuclear actors increases. The consequences for the United States therefore are becoming more profound, particularly if Iran gets the bomb and if the Chinese attain a form of strategic equivalence with the United States. In both contingencies, the ability of the United States to control the escalation chain is questionable,

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particularly if U.S. military modernization programs are undermined by sequestration and if its principal allies decide to operate independently. If, for example, Israel struck Iran's nuclear infrastructure, Iran might retaliate against both Israel and the United States. Even if it were not directly attacked, the United States could be drawn into an Iran-Israel conflict in order to prevent Israel's destruction. In both examples, the escalatory process would not be easily controlled, and de-escalation would become an imperative if only to avoid the potential for a full-blown regional conflict.

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At a time in which America's position in the world is perceived as changing and U.S. allies and partners are seeking options to reinforce or even to replace U.S. extended security guarantees, more and more nations are exploring their own advanced weapons—including, potentially, nuclear capabilities. Others, such as France and Israel, both of which are already nuclear powers, may be defining their national interests in ways that enhance and complicate the requirements for managing coalitions in a multinuclear world. This makes it increasingly important for the United States to have credible and immediately available escalation and escalation management options.

*“Missile defense remains an important operational, political, and psychological option for influencing adversary calculations.”*

Finally, coalition management and escalation control require a concerted political and military effort to reassure and dissuade. Allied/partner reassurance is a lynchpin of contemporary non-proliferation policy. Dissuasion of an adversary from attack is the essence of deterrence planning. The missile defense concept goes to the heart of both considerations, and with the advances in defensive technologies it holds even greater potential to shape and impact enemy and allied perceptions in a

crisis confrontation—but only if we are serious about exploiting its technological promise, and if we are open to new concepts for its operationalization.

Missile defense remains an important operational, political, and psychological option for influencing adversary calculations. Operationally, missile defense technologies can, for example, shape enemy perceptions about the effectiveness of missile-based attacks, especially in the context of a small strategic force structure. And even though a larger nuclear force could exploit the offensive-defensive missile equation and threaten to saturate current missile defense architectures, technologies like space-based systems and boost-phase interceptors offer the potential to level the playing field. Politically, meanwhile, missile defenses can contribute to crisis management and enhance the potential for escalation control in a regional scenario. Moreover, by their mere deployment, missile defenses may impact enemy thinking about offensive operations, as well as the “end-game” with respect to nuclear escalation and the ultimate destruction of national territory, peoples, and culture.

## Endnotes

1. “Catalytic warfare” was a term of art first coined by Herman Kahn. As described by Kahn, catalytic warfare refers to the “notion that some third party or nation might for its own reasons deliberately start a war between the two major powers.” According to Kahn, “the widespread diffusion of nuclear weapons would make many nations able, and in some cases also create the pressure, to aggravate an on-going crisis, or even touch off a war between two other powers for purposes of their own.” See Herman Kahn, *On Thermonuclear War* (Princeton, NJ: Princeton University Press, 1960), 217, 231.
2. Because of the lack of transparency with respect to Chinese military projects and the likelihood of concealment and deception when it comes to systems and their deployments, the precise numbers and capabilities are “unknown knows,” but based on information distributed by the Chinese government and from U.S. and Allied/partner intelligence, we have some idea of the dimension of the deterrence problem, though not its magnitude. Various assessments made by RAND, CSIS, and under Dr. Andy Marshall’s Net Assessment Office at the Department of Defense suggest a far greater deterrence problem than is generally accepted by the U.S. government.
3. Henry A. Kissinger, *World Order* (New York: Penguin Press, 2014), 362.
4. See Ron Haskins and Michael O’Hanlon, “Stop Sequestering Defense,” *Defense News*, October 13, 2014, [www.defensenews.com/article/2014/DEFBEAT05/310130020/Commentary-Stop-Sequestering-Defense](http://www.defensenews.com/article/2014/DEFBEAT05/310130020/Commentary-Stop-Sequestering-Defense).
5. Jacquelyn K. Davis and Robert L. Pfaltzgraff, *Anticipating a Nuclear Iran: Challenges for U.S. Security* (New York: Columbia University Press, 2013).



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## About The Defense Technology Program

A revolution is taking place in the nature of warfare. The proliferation of ballistic missiles and weapons of mass destruction has given rogue states and terrorist groups unprecedented access to potentially devastating capabilities, while space and cyberspace have emerged as distinct new arenas of strategic competition. The American Foreign Policy Council's (AFPC) work in these areas is aimed at helping U.S. officials understand and respond to this new, and increasingly complex, threat environment.

For more information about the program, please contact Richard Harrison, Director of Operations and Defense Technology Programs at [Harrison@afpc.org](mailto:Harrison@afpc.org).

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For over three decades, AFPC has played an essential role in the U.S. foreign policy debate. Founded in 1982, AFPC is a 501(c)(3) non-profit organization dedicated to bringing information to those who make or influence the foreign policy of the United States and to assisting world leaders with building democracies and market economies. AFPC is widely recognized as a source of timely, insightful analysis on issues of foreign policy, and works closely with members of Congress, the Executive Branch and the policymaking community. It is staffed by noted specialists in foreign and defense policy, and serves as a valuable resource to officials in the highest levels of government.

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