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Nuclear Weapons in the Third Offset Strategy: *Avoiding a Nuclear Blind Spot in the Pentagon's New Initiative*

By Elbridge Colby



Center for a
New American
Security

Cover Images

RT-2PM2 Topol-M TEL with presumably Yars system transport-launch container during the first rehearsal for the Victory Day Parade at the training ground in Alabino. (Top Right)

(VITALY V. KUZMIN/Wikipedia)

Buk-M1-2 SAM system. 9A310M1-2 self-propelled launcher. MAKS, Zhukovskiy, Russia, 2005. (Middle Right)

(WIKIMEDIA COMMONS)

“Little green men” at Perevalne military base, 25 kilometres south of Simferopol, March 9, 2014. (Bottom Right)

([HTTP://WWW.EX.UA/76677715/Wikipedia](http://www.ex.ua/76677715))

A Trident II missile fires its first-stage SRB after an underwater launch from a Royal Navy Vanguard class ballistic missile submarine. (Top Left)

(U.S. Department of Defense)

MARINETTE, Wis. (Aug. 4, 2008) The first U.S. Navy Littoral Combat Ship, Freedom (LCS 1), the inaugural ship in an entirely new class of U.S. Navy surface warships, is seen conducting a speed run during Builders Trials. The ship is designed for littoral, or close-to-shore, operations and to provide access and dominance in coastal-water areas. (Middle Left)

(U.S. Navy)

U.S. Army Rangers assigned to 2nd Battalion, 75th Ranger Regiment, fire off a Carl Gustav 84mm recoilless rifle at a range on Camp Roberts, Calif., Jan 26, 2014. Rangers use a multitude of weaponry during their annual tactical training. (Bottom Left)

(PFC. RASHENE MINCY/ U.S. Army)

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EXECUTIVE SUMMARY

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The Pentagon is launching a new, third “offset strategy,” an effort designed to extend U.S. power projection advantages in the face of challenges to U.S. military superiority around the world. This initiative, which will cover strategy, procurement, doctrine and a wide gamut of other Department of Defense (DOD) activities, makes a great deal of sense and should be resolutely pursued and supported. The problem, however, is that it is not clear whether Pentagon leaders responsible for the initiative – and DOD more broadly – are adequately conscious of the essential importance of considering how nuclear weapons will factor into the kind of warfighting “regime” envisioned in this new offset endeavor.

This is a serious problem because it is increasingly clear that potential U.S. adversaries – and particularly the potential adversaries on which the offset strategy appears to focus most – are preparing to use their own nuclear arsenals to negate U.S. conventional advantages.

To deny adversaries this leverage, or at least reduce it, the Pentagon must studiously think through how the offset strategy can be shaped and implemented to deter, discourage and, if need be, control for and respond to adversary nuclear employment. The offset strategy, in simpler terms, must show U.S. adversaries that using nuclear weapons against the United States or its allies would be distinctly unwise and that the United States has ways and means to defeat (at least in limited terms) and deny the objectives of these opponents even if nuclear weapons have been used.

Distracted by more than a decade of tactical concerns stemming from large-scale stability operations, the Department of Defense has become increasingly seized by mounting challenges to U.S. military-technological superiority and the consequent need for the United States to redouble efforts to maintain its advantages. A number of senior Pentagon officials have been vocal in pointing to the growing threats to U.S. military superiority posed by Chinese and Russian military modernization as well as by the broader proliferation of advanced weapons systems and capabilities to states hostile to U.S. interests, such as North Korea and Iran. In a major step designed to put the Pentagon's highest-level imprimatur on these points, Secretary of Defense Chuck Hagel delivered a series of speeches in the late summer and fall of 2014 emphasizing the scale of the danger to America's military ascendancy and the need for focused work to maintain it.¹

In light of this growing recognition, DOD has begun to respond more vigorously to these challenges, building on earlier efforts such as the Air-Sea Battle initiative.² A signal component of this new initiative to meet the challenges to U.S. military superiority is the Pentagon's third offset strategy, an effort to "sustain ... the American military's unfair competitive advantage."³ This endeavor is modeled on both the Eisenhower administration's "New Look" strategy of the 1950s and in particular on the offset strategy that DOD undertook in the late 1970s and 1980s to capitalize on the opportunities afforded by advances in technology to seek to "offset" the Soviet Union's conventional advantages, especially in light of the perceived diminished credibility of the West's nuclear deterrent caused by the arrival of parity in nuclear forces between the superpowers. Senior defense decisionmakers have repeatedly indicated that this second offset strategy is serving as a crucial model for the Department's conceptualization of how to undertake this latest offset approach.⁴

This makes a great deal of sense, as the second offset strategy yielded a tremendous strategic bounty in the form of the formidable juggernaut that the U.S. military became through adopting and effectively integrating technologies and practices such as stealth, advanced communications, new forms of reconnaissance and better interconnection among forces, all designed to make the use of American force more precise, controlled and effective.⁵ This force was first unveiled during the Persian Gulf War of 1990-1991 and came into full view in the years afterward.

But this view of a military utterly dominant over the well-armed but inept regional power Iraq of 1990-1991 and weaker foes such as the Iraq of 12 years later, Serbia and Taliban Afghanistan obscured the full ambition of the original offset effort. That ambition was not only to find a way to fight a conventional war effectively against an enemy far more capable than those the United States faced in the 1990s and 2000s, but also to do so effectively under the shadow of the ever-present possibility of escalation to nuclear war.

Since the collapse of the Soviet Union and the lightening of the nuclear shadow over U.S. security concerns, however, this part of the effort has received less attention, including, it seems, in preliminary discussions of this new, third offset strategy. But the fact remains that, to have fully met its ambitions, the second offset strategy needed not only to offer a way for the United States to prevail at the conventional level, but also had to provide a way to do so in the face of the adversary's ability to resort to nuclear escalation.⁶ It is worth observing that, despite the deserved plaudits for the second offset strategy, it is not at all clear that the United States ever figured out how to do this.⁷

Pentagon decisionmakers should keep this in mind, because the same criterion will need to be applied to judging the success of the third offset strategy. This is because the potential adversaries

the third offset strategy is supposed to deal with are nations capable not only of wielding formidable conventional military force but also of escalating to the use of nuclear weapons, including their use against the U.S. homeland.

For example, the most challenging future military competitor for the United States, China, is not only building a daunting conventional force focused on blocking effective U.S. power projection into the Western Pacific and, increasingly, to projecting its own power within the region and beyond – a point amply understood by the leaders of the new offset strategy.⁸ China is also a state possessed of an increasingly sophisticated nuclear force capable of more controlled operations and a more secure second-strike capability.

The other potential challenger to U.S. military dominance cited most often, Russia, is likely to pose a more limited challenge to U.S. conventional military superiority but, at the same time, wields a far larger and more sophisticated nuclear force than China's, one specifically being shaped to enable Moscow to gain strategic advantage in the face of what it views as superior U.S. and NATO conventional forces. Moreover, nations that cannot hope to contend with the United States at the conventional level, particularly North Korea (and possibly Iran if it succeeds in obtaining a nuclear arsenal), could seek to short-circuit U.S. non-nuclear advantages by nuclear blackmail or the actual employment of their nuclear arsenals.⁹

Indeed, these countries are linked together by a shared interest in leveraging the potential of nuclear weapons to stymie U.S. use of its conventional advantages; indeed, it is a core aspect of their offset strategy. Former DOD nuclear policy lead Brad Roberts has observed that these three countries (and, to some extent, Iran) have “gone to school” on U.S. military doctrine and style and have dedicated substantial thinking to how to use their own nuclear forces to block U.S. intervention

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and achieve their regional strategic aims. Roberts has termed this shared interest the “Red Theory of Nuclear Victory.”¹⁰

Those pointing to this disturbing dynamic are not so concerned with the possibility that one of these adversaries could achieve victory against the United States in a full-scale nuclear war. China and North Korea lack the force size even to pretend to such an aim, and Russia would suffer cataclysmic retaliation if it launched a major strike against the United States. Rather, what worries analysts seized with this challenge is that, in different ways, these powers could use their nuclear forces to persuade the United States to back down in the midst of a fight through a combination of threats to escalate and tailored nuclear use. In addition, some of these countries may seek to leverage the increased coercive power they judge is provided by their nuclear forces to pursue their political aims below the threshold of outright war. In other words, they may seek to outmaneuver the United States and its allies in a contest characterized by brinkmanship and what Thomas Schelling classically called “a competition in risk-taking.”¹¹

These fears do not stem merely from the fervid imagination of analysts; rather, there is substantial

evidence that this is precisely what some of these countries are planning to do in the event of conflict with the United States. For instance, Russian President Vladimir Putin and other senior Russian figures have been strongly suggesting – if not loudly stating – Russia's willingness to introduce nuclear weapons into a conflict with NATO.¹² Nor is this mere rhetoric. Russia has demonstrably been working to create capabilities to enable it to use the threat of nuclear escalation to further its strategic objectives in its near abroad. It is well-known that formal Russian nuclear doctrine contemplates the use of its nuclear forces to “escalate to de-escalate.” The logic of this approach is usually seen to be that Russia would use nuclear weapons to dramatically escalate a conflict to convey to an adversary – usually understood to be the United States, though possibly also China – that further advances against Russia would incur punishing nuclear retaliation.¹³ Most commentary on this doctrine has focused on Russia's stated willingness to conduct such strikes should Russian state survival be placed in jeopardy.¹⁴ Yet many experts believe that Russia's actual nuclear doctrine, for instance as reflected in the classified annex to Russia's 2010 public defense white paper, provides for a more elastic understanding of how such a doctrine could be applied, and recent rhetoric by Russian leaders, including President Putin himself, suggests such a broader ambit for the doctrine may have considerable purchase at the highest levels of the Russian government.¹⁵ Perhaps more to the point, Russian policy on the point is vague, and any statements on the subject, especially by a government clearly not wedded to a strict policy of avoiding dissimulation and even outright falsehood, cannot be accepted at face value.

In addition, Russia has clearly been seeking to build the capabilities and assets useful for implementing a strategy designed to leverage the limited employment or threatened use of nuclear weapons for political advantage. To be most effective, such

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a doctrine would require not only strategic nuclear forces designed to maintain central deterrence but also theater-range and tactical nuclear weapons that could be employed for more tailored use, including on the battlefield to favorably swing the local balance of forces in a conflict. Unsurprisingly, Moscow has been avidly procuring modernized nuclear forces in the last decade, while at the same time more actively exercising its nuclear weapons-carrying platforms and maintaining its substantial inventory of tactical nuclear weapons.¹⁶

In addition, such a doctrine would be best served if a state had substantial conventional force capability designed to coerce adversaries in a more scalable fashion, avoid putting too much coercive weight on nuclear forces in a way that might strain credulity and enable the creation of favorable military-political circumstances below the nuclear threshold, thereby giving the state a better bargaining position in a nuclear standoff with its opponents.¹⁷ Here again, Russia has been rapidly restoring its conventional force capabilities to enable Moscow to enjoy local conventional advantage in much of the former Soviet Union (at least for some period of time) and to credibly threaten locally decisive escalation to get its way.¹⁸ These assets and the leverage they provide have been observable in the Ukraine conflict, where Russia has exercised crucial influence

over the conflict by repeatedly mobilizing significant and capable forces just across the border from the conflict in the eastern parts of Ukraine.¹⁹

Of course, such actions fall outside, if disturbingly close to, NATO's declared orbit and thus do not directly implicate the forces of the Alliance. Yet a number of informed observers have noted that Russia could exploit this doctrine and its associated capabilities in the event of a crisis or showdown over the Baltic states.²⁰ These nations, as members of the North Atlantic Alliance, are protected by NATO's Article V defense commitment, and President Barack Obama has publicly and forcefully stated the United States' resolve to defend them from attack.²¹ Yet they are also former constituent republics of the Soviet Union and were part of the Tsarist Empire before their independence in the interwar period. They are thus the object of some Russian revanchist ambitions. Moreover, their exposed position, their long historical subjection to and association with Russia, and the presence of significant populations of Russians within their borders offer substantial opportunity for the emergence – or creation – of politically ambiguous situations that Moscow could seek to exploit.²²

The United States and NATO need to be prepared, therefore, for a situation in which Russia has either created or is seeking to capitalize on a politically ambiguous crisis in the Baltic states or even Poland to intervene in, suborn or even assault these NATO allies. In such a scenario, Russia might, as it has in Ukraine, insert substantial and capable conventional forces onto the territory of a NATO Baltic state or states. Given Russian immediate local conventional advantages (NATO forces in this area are modest in size and non-Baltic NATO forces are rotational), it can be assumed that Russia might well be able to seize parts of NATO Baltic territory. Once ensconced, the Russians could attempt to fortify their position through entrenchment of their newly established positions, forward deployment

of their increasingly sophisticated surface-to-air missile (SAM) and associated air defense systems, extension of lines of communication overland into the Baltic areas, mobilization of cyber and anti-space assets and so forth.²³ In addition, the Russians could activate SAM systems and offensive missile forces in the Kaliningrad enclave, placing them astride NATO lines of entry and supply.²⁴

Together, these actions would present a formidable, but very likely manageable, threat to NATO counteraction. Russia's conventional forces include an increasingly modern and professionalized core, but this segment remains a relatively modest proportion of the total Russian force. As a whole the Russian armed forces are still hobbled by persisting problems with funding, training, logistics and the like.²⁵ It is therefore unlikely that the Russian military could stand up to the United States and NATO in a full-fledged conventional conflict. Yet while this Russian conventional force cannot hope to overcome full-scale U.S. and NATO conventional military might, it appears sufficient to make a U.S. and NATO response to Russian action in areas near Russian territory costly and risky. At the same time, it is also capable enough to make NATO efforts to escalate in a controlled manner problematic and risky, thereby making effective U.S. and NATO retorts to Russian aggression or attempt at blackmail both harder and more perilous – and thus less palatable.

This is particularly important because it cannot be assumed that Russia would allow such a conflict to remain non-nuclear. Rather, in this context Moscow might well plan to threaten to use or actually to employ its nuclear forces to try to limit the conflict to parameters advantageous to itself and even to force de-escalation and settlement of the conflict on its own terms.²⁶ As one expert on Russia's strategic doctrine described this approach, "Analysis of Russian military writings and, more importantly, scenarios of military exercises confirm that Russian military planners see limited

use of nuclear weapons either tactical or strategic as the only way to challenge an enemy [namely, the United States] by an awful dilemma: either to stop military operations and recognize defeat, or to respond by a nuclear strike, which would be followed by an escalation up to strategic nuclear exchange with catastrophic consequences for all.”²⁷ Moscow has occasionally described the objective of such nuclear employment as “de-escalation of aggression,” an approach sometimes termed an “escalate to de-escalate” strategy.²⁸ An influential 2003 official document, for instance, described “[d]e-escalation of aggression” as the effort to “forc[e] the enemy to halt military action by a threat to deliver or by actual delivery of strikes of varying intensity with reliance on conventional and (or) nuclear weapons.”²⁹ Russia appears to see both nuclear weapons of tailored effect and non-nuclear but “strategic” conventional weapons as being of potential use in such scenarios.³⁰

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In the event of war and facing a U.S. campaign designed to dislodge Russian military forces from NATO Baltic territory, then, Russia might threaten to use limited nuclear strikes, including against crucial NATO military or even civilian targets, to try to escalate its way to victory.³¹ Russia might threaten to conduct or actually conduct

such attacks in a number of ways. It might, for instance, use nuclear weapons (particularly from its sizable tactical nuclear arsenal) to attack military targets either in the Baltics themselves or deeper behind NATO lines, such as key air bases; command, control and communications nodes; support facilities; or surface vessel groups, including aircraft carriers.³² Given Russia’s particular concern about the potency of U.S. long-range conventional strike capabilities, Moscow might focus such attacks in particular on interrupting U.S. air and missile strike operations.³³ To carry out these strikes, Russia has land-attack variant nuclear weapons usable against air bases, air-supporting infrastructure, missile defense installations and ground components; anti-air and missile defense weapons for use against aircraft (including crucial low-observable and C4ISR aircraft); and anti-ship cruise missiles that could be employed against aircraft carriers and other vessels supporting air and strike operations.³⁴ Strikes oriented against military targets would likely be designed both to convey Russia’s resolve to continue the conflict and make clear the danger to NATO of continuing to fight, while at the same time also degrading NATO’s ability to exploit its conventional force advantages to prevail.

Alternatively, Moscow might elect to strike at nonmilitary targets to make especially and dramatically clear to Western publics Russia’s ability and will to attack them directly – and thus to shake the resolve of NATO governments. Such attacks might also be conducted using conventional weapons, which would of course still show Russia’s ability to hit such targets with nuclear weapons. Russia would have considerable flexibility in how to conduct such strikes, given both the multiplicity and sophistication of its platforms as well as of its warheads, which reports indicate include substantial numbers of very low-yield and thus low-collateral-damage weapons.³⁵ Such strikes could be aimed at critical infrastructure, symbolic

targets and a range of other facilities. Attacks of this kind would likely be designed to maximize the dramatic effect on the will of the more distant NATO states, including the United States.

Russian threats to use nuclear weapons in one of these ways could exercise a major influence on the outcome of a conflict between NATO and Russia. Of course, such threatened or actual use could directly persuade key NATO member-states to fold, breaking apart the coalition defending the Baltic states. They could even lead the Alliance as a whole to terminate the war on terms favorable to Russia and detrimental or even fatal to NATO as a meaningful alliance and to the independence of its Eastern members. But even a more limited negative influence might prove decisive. For instance, if Moscow threatened to “go nuclear” if the Alliance struck Russian sovereign territory, NATO might be deterred by fears of nuclear escalation (or further nuclear use) from attacking crucial Russian targets that it would need to destroy or disable to successfully prosecute its dislodgement campaign. Such systems could include longer-range, more sophisticated air defense systems operating from Russian sovereign territory capable of substantially interdicting effective Western air operations. Given that much of the Russian war effort would presumably be mounted from Russian sovereign territory and given the centrality of air superiority to Western military success, acceding to a demand by Moscow that NATO not strike Russian sovereign territory and so leave Russian air defense systems to operate freely might be tantamount to conceding.³⁶ Yet if NATO proceeded with its attacks on these systems, Russia might use nuclear weapons (or further use them), for instance in a way designed to tip the military balance in the region in its favor and to do so in a manner that did not seem to justify a large-scale U.S. response. Alternatively, it might strike at a target in Western NATO territory in a fashion designed to drive home to Western leaders and publics Russia’s ability and willingness to strike at their homelands.

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Needless to say, determining how to respond to such threatened or actual use would pose a tremendously difficult quandary for U.S. and NATO leaders, even if effective nuclear or other responses were available. And it is not clear that suitable responses are available.

Nor is Russia alone in presenting this kind of a challenge. While Russia’s nuclear forces are far larger and are more sophisticated than those of China, Beijing is developing a larger and more modern nuclear force that will likely increasingly be able to provide Beijing with some degree of capability for controlled and tailored use.³⁷ And while China’s nuclear forces are more modest than Russia’s, its conventional forces are likely to be more of a challenge to U.S. power projection capability than Moscow’s, meaning that Beijing would probably need to rely less on its nuclear forces to negate U.S. conventional advantages than Russia. China, in other words, may only need to deter a narrower band of more intense and dramatic forms of escalation by the United States than Russia would hope to deter. China might, for instance, threaten to conduct limited nuclear strikes against key regional military or civilian targets to deter U.S. escalation in the event the People’s Republic of China (PRC) appeared to be prevailing in a conflict over Taiwan.³⁸ If the United States were unprepared for such threats and they were effective in materially constraining U.S. escalation, they could

prove decisive in such a conflict, with dramatic and possibly devastating consequences.

Finally, while North Korea does not pose a qualitative conventional challenge to the United States, it is ruled by an especially volatile and risk- and cost-tolerant regime that may seek to gamble more on its advancing nuclear and missile capabilities in the event of conflict. U.S. conventional capabilities, including those generated by the third offset strategy, may incentivize Pyongyang to reach earlier and more brazenly for its nuclear arsenal to ward off U.S. conventional might and even to attempt to blackmail the United States and its allies into backing off in the event of war.³⁹

Each of these approaches among potential U.S. adversaries presents a challenge not only to the legacy American way of war, but also to any new kind of approach that neglects to seriously address the possibility of adversary nuclear escalation. Accordingly, U.S. defense decisionmakers need to be keenly aware that preparing to take on potential adversaries cannot be thought of merely as a conventional force problem, with the possibility of escalation to the nuclear level seen as something so improbable that it can be ignored or relegated to an afterthought.

Unfortunately, precisely this sort of marginalization has become the norm in post-Cold War defense thinking and planning. Even the most sophisticated and influential studies on U.S. military preparations for conflict with major power adversaries sometimes seem to assume that nuclear weapons will not become embroiled in a conflict (even indirectly) – and sometimes make that assumption explicitly.⁴⁰ By the same token, much of the best discussion about the offset strategy thus far has tended to address only briefly the role of nuclear weapons and how they might decisively affect a conflict between the United States and one of these powers.⁴¹ These studies seem to treat the problems of nuclear escalation as something

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extraneous, a matter that can be safely left until after the real decisions are made about U.S. force posture, doctrine and strategy.

This problem also takes bureaucratic form. Within the Pentagon, organizations responsible for nuclear policy and forces within the Office of the Secretary of Defense and the services are usually separate – both organizationally and often culturally – from those dealing with conventional force challenges and often struggle to participate in deliberations on issues not seen as clearly pertaining to nuclear weapons. Nuclear issues have also been demoted within these organizations.⁴² In short, within the U.S. national security establishment, nuclear thinking has become ghettoized. This is no longer tolerable, not least since the more successful the offset strategy is in extending U.S. conventional advantages, the more attractive U.S. adversaries will find strategies of nuclear escalation.

This cannot be allowed to persist as a lacuna in U.S. defense strategy and posture. Realism and prudence demand that U.S. defense strategy and posture be prepared for intrawar nuclear deterrence to fail. The United States should therefore

be prepared to manage escalation in such a context and to have ways and means to incentivize de-escalation.⁴³ Accordingly, defense decisionmakers should insist that U.S. military strategy and posture as a whole ensure that the United States has credible ways and means not only to prevail in a conventional war against nuclear-armed adversaries but also to dissuade or at least discourage them from resorting to nuclear escalation. This will be the most effective way of demonstrating to potential U.S. adversaries that resorting to nuclear use – or seriously threatening to do so – would be unavailing and far too dangerous. The best way to ensure that nuclear weapons remain irrelevant, in other words, is to treat them as of the greatest relevance.

This means that sufficient attention must be paid in the defense planning and procurement process to how U.S. conventional capabilities would affect escalation considerations and to how U.S. conventional and nuclear forces could best be modernized and postured to deter adversary escalation to nuclear use and, if necessary, employed to acceptably de-escalate a war involving nuclear weapons.⁴⁴ In particular, this means genuinely and meaningfully integrating nuclear weapons and escalation issues into the whole offset strategy and related initiatives. Doing so is the only reliable way for the United States to persuade its nuclear-armed potential adversaries that, as the 2014 Quadrennial Defense Review aptly put it, “they cannot escalate their way out of failed conventional aggression.”⁴⁵

The best way to ensure that nuclear weapons remain irrelevant, in other words, is to treat them as of the greatest relevance.

ENDNOTES

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13. Nikolai N. Sokov, "Why Russia calls a limited nuclear strike 'de-escalation,'" *Bulletin of the Atomic Scientists* (March 13, 2014), <http://thebulletin.org/why-russia-calls-limited-nuclear-strike-de-escalation>. For a longer treatment, see the chapters by Sokov and other experts in *Russian Nuclear Weapons: Past, Present, and Future*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, 2011).
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15. On the classified annex and its alleged contents, see Yury E. Federov, "Russia's Nuclear Policy," in *NIDS International Symposium on Security Affairs* (Tokyo: National Institute for Defense Studies, 2010), 54-59, http://www.nids.go.jp/english/event/symposium/pdf/2009/e_04.pdf; and Richard Weitz, "Russian Tactical Nuclear Weapons: Current Policies and Future Trends," in *Russian Nuclear Weapons: Past, Present, and Future*, 377. Weitz notes that this is a common view among experts on Russian nuclear policy, citing Dmitry Gorenburg, "Russia's new military doctrine: An exercise in public relations," *Russian Military Reform blog on russiamil.wordpress.com*, February 8, 2010, <http://russiamil.wordpress.com/2010/02/08/russias-new-military-doctrine-fairly-innocuous/>; and Marcel de Haas, "Doctrinal Stipulations and Political Realities: What Should Be the Western Response to the New Doctrine?," *Nezavisimaya Gazeta*, February 2, 2010. See also Pavel Podvig, "New Russian doctrine and preventive nuclear strikes," *Russian Strategic Nuclear Forces blog on russianforces.org*, October 14, 2009, http://russianforces.org/blog/2009/10/new_russian_doctrine_and_preve.shtml. Regarding Putin's view, see, for instance, Jeffrey Taylor, "Putin's Nuclear Option: Would Russia's president

really be willing to start World War III?," *Foreign Policy* (September 4, 2014), http://www.foreignpolicy.com/articles/2014/09/04/putins_nuclear_option_russia_weapons. The article upon which some of this assessment is based is available at http://www.echo.msk.ru/blog/piontkovsky_a/1376104-echo/. Especially given the opacity of decisionmaking by Putin and the Kremlin, it is essentially impossible to tell with certainty how serious this possibility is. Nonetheless, the Kremlin and Putin himself seem to have been willing to telegraph their resolve to use nuclear weapons in ways that are not wholly defensive. For further elaboration of this point, see Damien Sharkov, "Russia Has Threatened Nuclear Attack, Says Ukraine Defence Minister," *Newsweek* (September 1, 2014), <http://www.newsweek.com/russia-has-threatened-nuclear-attack-says-ukraine-defence-minister-267842>; Anne Applebaum, "War in Europe," *Slate.com*, August 29, 2014, http://www.slate.com/articles/news_and_politics/foreigners/2014/08/vladimir_putin_s_troops_have_invaded_ukraine_should_we_prepare_for_war_with.html; and Gordon G. Chang, "Putin Threatens Nuclear War Over Ukraine," *The Daily Beast*, August 31, 2014, <http://www.thedailybeast.com/articles/2014/08/31/putin-threatens-nuclear-war-over-ukraine.html>.

16. See, for instance, Diane Barnes, "Experts See Russian Strides on Nuclear-Force Updates," *Global Security Newswire* at *NTI.org*, March 6, 2014, <http://www.nti.org/gsn/article/experts-see-russian-strides-nuclear-force-updates/>. For a more detailed assessment, see Hans M. Kristensen and Robert S. Norris, "Russian nuclear forces, 2014," *Bulletin of the Atomic Scientists*, 70 no. 2 (March 2014), <http://bos.sagepub.com/content/70/2/75.full.pdf+html>. For reports of Russian exercises of limited nuclear strikes, see, for instance, Zachary Keck, "Russia Threatens Nuclear Strikes Over Crimea," *The Diplomat* (July 11, 2014), <http://thediplomat.com/2014/07/russia-threatens-nuclear-strikes-over-crimea/>; and Applebaum, "War in Europe." For reports of earlier exercises along these lines, see Jacob W. Kipp, "Russia's Nonstrategic Nuclear Weapons," *Military Review* (May-June 2001), http://fmso.leavenworth.army.mil/documents/russias_nukes/russias_nukes.htm.

17. For some classic treatments of the logic of this thinking, see Robert E. Osgood, *Limited War: The Challenge to American Strategy* (Chicago: University of Chicago Press, 1957); Henry A. Kissinger, *Nuclear Weapons and Foreign Policy* (New York: Harper & Brothers, 1957); Herman Kahn, *On Escalation: Metaphors and Scenarios* (New York: Frederick A. Praeger, 1965); and Bernard Brodie, *Escalation and the Nuclear Option* (Princeton, NJ: Princeton University Press, 1965). For a lucid official exposition of this logic, see NATO's Military Committee Report 14/3, the expression of the Western Alliance's "Flexible Response" doctrine, <http://www.nato.int/docu/stratdoc/eng/a680116a.pdf>.

18. For an overview of this effort and the logic behind it, see Nikolas K. Gvosdev, "The Bear Awakens: Russia's Military Is Back," *The National Interest* (November 12, 2014), <http://nationalinterest.org/commentary/russias-military-back-9181?page=show>. For an earlier official Russian explanation of the goals of its defense modernization program, see Sergei Ivanov, *The Report of the Defense Ministry of the Russian Federation* (Moscow: Ministry of Defense, October 2, 2003).

19. See, for instance, David M. Herszenhorn, "Satellites Show Russian Forces Poised Near Ukraine," *The New York Times*, April 10, 2014, http://www.nytimes.com/2014/04/11/world/europe/satellites-show-russia-mobilizing-near-ukraine-nato-says.html?_r=0.

20. In late October 2014, for instance, retired U.S. Air Force Lieutenant General David Deptula observed that "It is not farfetched that at some point within the next two years [Russian President Vladimir] Putin makes a more aggressive move in Eastern Europe and uses a nuclear threat to deter a NATO response." Dave Majumdar, "Are Russian Bombers Flying Nuclear Drills Near Europe – Or Just Testing NATO's Defenses?" *The Daily Beast*, October 30, 2014, <http://www.thedailybeast.com/articles/2014/10/30/are-russian-bombers-flying-nuclear-drills-near-europe-or-just-testing-nato-s-defenses.html>.

21. President Barack Obama, "Remarks by President Obama to the People of Estonia" (Nordea Concert Hall, Tallinn, Estonia, September 3, 2014), <http://www.whitehouse.gov/the-press-office/2014/09/03/remarks-president-obama-people-estonia>.

22. For an analysis of this problem, see Jakub Grygiel and A. Wess Mitchell, "Limited War Is Back," *The National Interest* (September/October 2014), <http://nationalinterest.org/feature/limited-war-back-11128>; and Peter Apps, "West struggles with Russia's 'ambiguous warfare' tactics," *Reuters*, November 27, 2014, <http://www.reuters.com/article/2014/11/27/us-russia-nato-security-idUSKCN0JB0BU20141127?feedType=RSS&feedName=everything&virtualBrandChannel=11563>.

23. For some of the difficulties this could pose, see, for instance, Corentin Brustlein, "Toward the End of Force Projection? II. Operational Responses and Political Perspectives" (Institut Francais des Relations Internationales, 2011), 18 et seq.

24. I am grateful to Etienne de Durand of the Institut Francais des Relations Internationales for this insight.

25. See, for instance, *The International Institute for Strategic Studies, The Military Balance 2014* (London: The International Institute for Strategic Studies, 2014), especially Chapter 5. See also Roger N. McDermott, "Russia's Conventional Armed Forces: Reform and Nuclear Posture to 2020," in *Russian Nuclear Weapons: Past, Present, and Future*, 33-98.

26. For the author's analysis of this strategy, see Colby, "Russia's Evolving Nuclear Doctrine and Its Implications" (Fondation pour la Recherche Strategique, forthcoming).

27. Federov, "Russia's Nuclear Policy," 54. For a more authoritative description, see Sergei Ivanov, *Priority Tasks of the Development of the Armed Forces of the Russian Federation* (Moscow: Ministry of Defense, October 2003), 70, which describes the logic of such strikes as "forcing the enemy to halt military action by a threat to deliver or by actual delivery of strikes of varying intensity with reliance on conventional and (or) nuclear weapons

28. See, for instance, Sokov, "Why Russia calls a limited nuclear strike 'de-escalation.'" For a longer treatment, see the chapters by Sokov, Weitz and other experts in *Russian Nuclear Weapons: Past, Present, and Future*.

29. Ivanov, *The Report of the Defense Ministry of the Russian Federation*, 70. For further explication of this important document and how it relates to Moscow's limited nuclear conflict doctrine, see Nikolai Sokov, "Nuclear Weapons in Russian National Security Strategy," in *Russian Nuclear Weapons: Past, Present, and Future*, especially 205-208.

30. For an exploration of this approach, see A.A. Kokoshin, *Problems of Providing Strategic Stability: Theoretical and Applied Problems*, Chapter 16. Kokoshin outlines in particular a system of “non-nuclear” or “pre-nuclear” deterrence that relies on “high-precision remote combat weapons of different kinds and types with conventional explosives, including high-power explosive, with the use, first of all as a platform, both submarines and combat ships, and also long-range bombarding aircraft.” Such employment would be integrated with the threat of nuclear escalation, in Kokoshin’s argument, but would provide “an act of ‘last warning’ in the course of military actions before the selective use of comparatively low-power nuclear weapons.” He argues that “weapons of this kind should be used against objects of high cost and complex systems for ensuring national security, comparatively far from densely populated areas . . . [including] ground centers of radio-electronic surveillance, large ships of analogous purpose, communication units, control units . . .” See page 154. Such employment would be itself of greater appeal than immediate use of nuclear weapons and would increase the credibility of subsequent nuclear strikes.

31. This would have an alluring (though dangerous) surface plausibility since during the Cold War, the United States and the Soviet Union implicitly recognized that attacks on the superpowers’ respective homelands would represent a significant escalation. The difference, however, was that during that period the expectation was that most of any war would be fought in Central Europe, quite distant from the Soviet border.

32. Sokov, “Nuclear Weapons in Russian National Security Strategy,” 207. Sokov derives these potential targets from Russian exercises.

33. See, for instance, Federov, “Russia’s Nuclear Policy,” 54.

34. See, for instance, Kristensen and Norris, “Russian nuclear forces, 2014,” 81-83.

35. See, for instance, Mark B. Schneider, “Russian Nuclear Modernization” (Air Force Association, National Defense Industrial Association and Reserve Officers Association Seminar, June 20, 2012), 10-11.

36. For a similar discussion of this dynamic, see Forrest Morgan’s very insightful and useful monograph, “Dancing with the Bear: Managing Escalation in a Conflict with Russia” *Proliferation Papers* No. 40 (Institut Francais des Relations Internationales, Winter 2012), <http://www.ifri.org/en/publications/enotes/proliferation-papers/dancing-bear-managing-escalation-conflict-russia>. See especially Page 38 for discussion of the escalation management problems raised in this context by U.S. military doctrine on suppression of enemy air defenses.

37. See the author’s “Asia Goes Nuclear,” *The National Interest* (January/February 2015), <http://nationalinterest.org/feature/welcome-china-americas-nuclear-nightmare-11891>. For a more in-depth recent analysis, see Christopher T. Yeaw, Andrew S. Erickson and Michael S. Chase, “The Future of Chinese Nuclear Policy and Strategy,” in *Strategy in the Second Nuclear Age: Power, Ambition, and the Ultimate Weapon*, eds. Toshi Yoshihara and James Holmes (Washington: Georgetown University Press, 2012), 53-80.

38. For the author’s further exploration of how such scenarios might unfold, see Elbridge Colby, “The Need for Limited Nuclear Options,” in *Challenges*

in *U.S. National Security Policy*, eds. D. Ochmanek and M. Sulmeyer (Santa Monica, CA: RAND Corporation, 2014).

39. See, for instance, Keir Leiber and Daryl Press, “Coercive Nuclear Campaigns in the 21st Century,” Report No. 2013-001 (Project on Advanced Systems and Concepts for Countering Weapons of Mass Destruction, March 2013); and Vincent Manzo’s forthcoming untitled article in *Joint Force Quarterly* on how North Korea might behave in this type of scenario.

40. See, for instance, the excellent and pathbreaking study by Jan van Tol, Mark Gunzinger, Andrew Krepinevich and Jim Thomas, “AirSea Battle: A Point-of-Departure Operational Concept” (Center for Strategic and Budgetary Assessments, 2010), which explicitly states that it assumes that “mutual nuclear deterrence holds.” See page 50.

41. See, for instance, the excellent study by Robert Martinage, “Toward a New Offset Strategy: Exploiting U.S. Long-Term Advantages to Restore U.S. Global Power Projection Capability” (Center for Strategic and Budgetary Assessments, 2014), 55, which treats nuclear forces only briefly as a “backstop” to deter adversary use of nuclear weapons. How this backstopping might be accomplished in the face of intelligent and concerted adversary resort to nuclear employment, and how the recommended concepts might influence this dynamic, are left unexplored.

42. See, for instance, John Harvey and Larry Welch, *Independent Review of the Department of Defense Nuclear Enterprise* (June 2, 2014), <http://www.defense.gov/pubs/Independent-Nuclear-Enterprise-Review-Report-30-June-2014.pdf>, especially 18-20.

43. For the author’s further thoughts on this important and difficult topic, see “Defining Strategic Stability: Reconciling Stability and Deterrence,” in *Strategic Stability: Contending Interpretations*, eds. E. Colby and M. Gerson (Carlisle, PA: Strategic Studies Institute, 2013), 47-83.

44. For the author’s elaborated recommendations on this, see Colby, “The Need for Limited Nuclear Options”; and Elbridge A. Colby, “Don’t Sweat AirSea Battle,” *The National Interest* (July 31, 2013), <http://nationalinterest.org/commentary/dont-sweat-airsea-battle-8804?page=show>.

45. U.S. Department of Defense, *Quadrennial Defense Review* (2014), 13, http://www.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf. As noted previously, it is worth noting that nuclear-armed adversaries might seek to escalate to nuclear use to prevent “failing” in the conventional fight.

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