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Nuclear Deterrence In a New Era: Applying "Tailored Deterrence"

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Introduction: On Deterrence

Carl von Clausewitz writes that the nature of war has enduring continuities, but its characteristics change with different circumstances.¹ Similarly, the fundamental nature of deterrence has endured for millennia: a threatened response to an adversary's prospective provocation causes that adversary to decide against the provocation i.e., the adversary is deterred from attack because it decides that the prospective costs would outweigh the gains. Effective deterrence shapes the calculations and thus the decision making of an adversary in a more benign direction than otherwise would have been the case.

While this threat-based nature of deterrence endures, its character must adapt to different circumstances. Numerous factors can necessitate adapting a deterrence strategy for greatest effect, including the character, attention, and health of the adversary, the deterrence goal, the historical and cultural contexts, and the available channels of communication, *inter alia*.

¹ This is a theme of the first chapter of the first book in *Vom Keiege* (On War). See, Carl Von Clausewitz, *Vom Kriege* (Hamburg, Germany: Nikol Verlag, 2008), p. 49.

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INFORMATION SERIES Issue No. 431 | May 21, 2018

For example, in one case, the most effective deterrent may be based on a threat to punish the adversary in a manner that aligns with the adversary's fears. Depending on the opponent and context, this threatened punishment could be communicated via a variety of possible channels and be based on a range of possible threat instruments, including military and financial sanctions. In another case, the necessary deterrent threat may be to deny the adversary its specific political or military objectives. ² In yet another case, a combination of unique punishment and denial threats may be necessary to deter. And, in all of these cases, effective deterrence may require adjusting the means of communicating the needed threats and the level of logical credibility that is attached to the threat.

Understanding the basic threat-based nature of deterrence is not an intellectual challenge. That simplicity is deceptive, however, *because understanding how to adjust the character of deterrence strategies in practice across different adversaries and contexts is a significant challenge*. Doing so is complicated by adversaries' divergent worldviews, values, goals, priorities, risk tolerances, motivations, levels of pragmatism and determination, channels of communication, and perceptions of US credibility.³ The significance of meeting that challenge is of unparalleled value when the deterrence goal is the prevention of nuclear attack.

The introduction of nuclear weapons in 1945 and their extreme lethality against most societal targets dramatically expanded both potential security threats and the corresponding means of deterrence, as was recognized almost immediately by some at the time. As Bernard Brodie famously observed in a 1946 publication, "If [a nation that considers launching an attack] must fear retaliation, the fact that it destroys its opponent's cities some hours or even days before its own are destroyed may avail it little. Thus far, the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them."⁴ The advent of nuclear weapons did not alter the nature of deterrence, but it did alter its character.

The contemporary emergence of new types of threats, and new domains of conflict, such as modern biological weapons, and cyber and space respectively, has again affected the character of deterrence. But its nature endures. The fundamental questions about deterrence remain as elaborated by Raymond Aron and Herman Kahn during the Cold War: who deters whom, from

² For an early discussion of the distinction between deterrence by punishment and deterrence by denial see, Glen H. Snyder, *Deterrence and Defense: Toward a Theory of National Security* (Princeton, NJ: Princeton University Press, 1961), pp. 3-16, 33-40.

³ The diversity of such variables and their significance to the functioning of deterrence is presented in, Keith B. Payne, *The Fallacies of Cold War Deterrence* (Lexington, KY: University Press of Kentucky, 2001), pp. 1-77.

⁴ Bernard Brodie (ed.), *The Absolute Weapon: Atomic Power and World Order* (New York: Harcourt, Brace & Company), 1946, p. 76.



INFORMATION SERIES Issue No. 431 | May 21, 2018

what action, by threatening what response, in what circumstances, in the face of what counterthreats?⁵

Despite the continuity in the basic nature of deterrence, significant geopolitical, doctrinal and technological developments now demand that we again adapt our deterrence goals, means and applications to fit a new strategic landscape. During the Cold War, US nuclear deterrence strategies had to adapt to the *relatively* slow changes and enduring continuities of the US-Soviet bipolar strategic environment, and thereafter to the dramatic systemic transformation brought on by the collapse of the Soviet Union and Warsaw Pact. A basic task now is to understand how a third and dramatically different new strategic threat environment demands that we, again adjust the character of deterrence.

Flexibility, Deterrence Tailoring, and Hedging

By definition, effective deterrence requires that US deterrence strategies be sufficiently credible and intolerable to different adversaries to shape their decision making decisively. This deterrence requirement for US threats that are both intolerable and credible follows as day follows night from the threat-based nature of deterrence. The great potential variation in adversaries noted above demands that we adjust the character of our deterrence strategies, i.e., we "tailor" them, as necessary to the unique characteristics of diverse adversaries and circumstances.

The failure to understand the unique characteristics of diverse adversaries has, on numerous past occasions, led the United States to be shocked by unexpected foreign actions. For example, in 1941, Assistant Secretary of State Dean Acheson reassured President Roosevelt that, "no rational Japanese could believe an attack on us could result in anything but disaster for his country."⁶ Despite Acheson's confident prediction, four months later Japan struck Pearl Harbor – apparently in the belief that Japan was "doomed" if it did not act.⁷

The need to tailor deterrence to the unique character of adversaries and context is likely to apply to the form and substance of our deterrence threats, the source of their delivery, their timing, content, format, and the channels of their communication. As a relatively early discussion of the need to adjust deterrence strategies to the differing possible opponents and

⁵ Herman Kahn, *Thinking the Unthinkable in the 1980s* (New York: Simon and Schuster, 1985), p. 120. Raymond Aron, *The Great Debate: Theories of Nuclear Strategy* (New York: Doubleday & Company, 1965), p. 163.

⁶ Quoted in Scott Sagan, "The Origins of the Pacific War," *Journal of Interdisciplinary History*, Vol. 18, No. 4 (Spring 1988), p. 906.

⁷ See, for example, Louis Morton, "Japan's Decision for War," *Command Decisions* (New York: Harcourt, Brace, 1959). See also, Richard Betts, *Surprise Attack* (Washington, D.C.: Brookings Institution, 1982), pp. 133-137.



INFORMATION SERIES Issue No. 431 | May 21, 2018

contexts concludes, "If one does not threaten the right target for the right reasons, it may not matter how well one does it."⁸

It should be noted that the need to tailor deterrence strategies is not a new idea. For many decades scholars of deterrence pointed in their own words to the need to do so.⁹ The 1983 bipartisan *Report of the President's Commission on Strategic Forces* ("Scowcroft Commission") essentially presented the need to tailor deterrence to the specific "set of beliefs in the minds of the Soviet leaders, given their own values and attitudes."¹⁰ The catch-word "tailoring" itself came into play more recently.¹¹ The 2018 *Nuclear Posture Review* (NPR) culminates a decadeslong road to the elevation of tailoring deterrence to a fundamental principle of US policy.¹²

The breadth of the spectrum of adversaries with highly-lethal capabilities will affect the degree to which the United States must have sufficient flexibility of deterrence threats and planning to tailor its deterrence strategies. In this regard, the new strategic environment is very different from the Cold War and the immediate post-Cold War period.

During the Cold War, the number of deterrence variables was limited because the US focus was largely on a single threatening superpower. Now, in an era of Great Power confrontation and uncertainty, the spectrum of potential adversaries with highly-lethal capabilities has grown and there is considerable variation in their character; conflict scenarios range from the relatively familiar to the largely unfamiliar; and the stakes at risk differ widely and can shift unpredictably.

In addition, the number and character of great powers, rogue states and terrorist organizations that may join the array of contemporary adversaries is uncertain, as is the nature of the future threats they may pose. Deterring contemporary adversaries is a challenge; deterring future adversaries yet to emerge is, by definition, a challenge of unknown dimensions. This reality is why the US flexibility to tailor deterrence and to "hedge" against uncertainty and risk is so critical for US and allied security, as is emphasized in the 2018 NPR.¹³

⁸ Peter Karsten, Peter Howell and Artis Frances Allen, *Military Threats: A Systemic Historical Analysis of the Determinants of Success* (Westport, CT: Greenwood Press, 1984), p. xii.

⁹ See for example, Alexander George and Richard Smoke, *Deterrence in American Foreign Policy* (New York: Columbia University Press, 1974), pp. 82-83;

¹⁰ Brent Scowcroft, Chair, Presidents Commission On Strategic Forces, April 6, 1983, p. 3.

¹¹ My own discussion of the need to adjust deterrence strategies given the diversity in adversary decision-making dates back to 1982; my use of the corresponding phrase "tailored" deterrence dates back at least to 1996. See, *Nuclear Deterrence in U.S.-Soviet Relations* (Boulder, CP: Westview Press, 1982), pp. 57-60; and, Keith B. Payne, *Deterrence in the Second Nuclear Age* (Lexington, KY: University Press of Kentucky, 1996), p. 127-128.

¹² U.S. Department of Defense, *Nuclear Posture Review* (Washington, D.C.: Department of Defense, 2018), pp. 25-37, available at https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF.

¹³ U.S. Department of Defense, Nuclear Posture Review (2018), op. cit., pp. 37-40.



INFORMATION SERIES Issue No. 431 | May 21, 2018

From a "New World Order" to a New Era of Confrontation and Uncertainty

Each *Nuclear Posture Review*, including the 2018 NPR, has emphasized that US nuclear policy and deterrence strategy must be responsive to the evolving character of the threat environment in which US nuclear policy and deterrence must operate.¹⁴ This is a significant point of consensus because the dramatic developments in the international threat environment over the past decade have included such profound changes that US nuclear policy and considerations of deterrence must adjust to be responsive. As the former Commander of US European Command, Gen. Philip Breedlove rightly said in 2017, "The United States and its security partners have impressive military forces that should be capable of bolstering deterrence against these new challenges. But achieving this favorable outcome will require policymakers to implement critical reforms in order to prepare their forces for a more diverse and challenging future."¹⁵ What are the new challenges that carry such significant implications?

With the end of the Cold War and the collapse of the Soviet Union, there was a striking reduction in the generally perceived level of nuclear threat from Russia and China, and a corresponding reduction in the generally perceived value of US nuclear weapons and nuclear deterrence. During the immediate post-Cold War era, the general belief was that the prospect for interstate nuclear crises and the need for nuclear deterrence was dwindling. The hope and even common expectation—shared by many senior officials and frequent commentators alike—was that nuclear threats and the potential for nuclear employment belonged to the past, never to return.¹⁶ Following the 9/11 terrorist attacks, the United States moved further away from interest in nuclear weapons and focused heavily on defeating terrorism.

Washington paid limited attention to nuclear deterrence or modernizing US weapons; the emphasis instead was on how to reduce nuclear force numbers and their salience. The Obama administration in particular highlighted nonproliferation and the elimination of nuclear weapons rather than deterrence as the priority goals of US nuclear policy. The Obama Administration's 2010 NPR explicitly elevated nonproliferation "for the first time" to the highest priority of US nuclear policy.

This prioritization was significant because the Administration considered the continuing reduction in the role and number of nuclear weapons as a means to promote the priority nonproliferation goal.¹⁷ President Obama himself emphasized this linkage, saying that continued nuclear force reductions, "will then give us greater moral authority to say to Iran, don't develop a nuclear weapon; to say to North Korea, don't proliferate nuclear weapons." ¹⁸ Correspondingly, senior Department of Defense (DoD) officials listed "preventing nuclear proliferation and nuclear terrorism," and "reducing the role of nuclear weapons in US strategy" as the top US objectives, and stated explicitly that the DoD assessed US deterrence requirements against these priority metrics.¹⁹ The Administration continued to affirm deterrence, but subordinated it to the priority goal of nonproliferation, which in turn was



INFORMATION SERIES Issue No. 431 | May 21, 2018

believed to demand the continued reduction of the US instruments of nuclear deterrence. This was indeed unprecedented, as rightly noted in the 2010 NPR.

During this period, the United States self-consciously sought to take the lead in moving away from nuclear weapons and toward "nuclear zero." ²⁰ Doing so was expected to advance nonproliferation and serve the desired broader long-term goal of establishing cooperative international norms and institutions, and transitioning away from the "harsh world of security competition and war."²¹

This idealistic theme pervaded numerous official statements about nuclear policy and the goal of "nuclear zero," which dominated public discussion. And, even while potential adversaries were establishing or enlarging their nuclear and missile capabilities, commentators such as Joseph Cirincione claimed that with the ending of the Cold War, "...the ballistic missile threat

http://history.defense.gov/Portals/70/Documents/annual_reports/1995_DoD_AR.pdf?ver=2014-06-24-152712-813; U.S. Department of Defense, *Nuclear Posture Review* (Washington, D.C.: Department of Defense, December 2001), available at http://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/NCB/06-F-

1586_Nuclear_Posture_Review.pdf; U.S.; Department of Defense, *Nuclear Posture Review Report* (Washington, D.C.: Department of Defense, *Nuclear Posture Review* (2018).

¹⁵ Gen. Philip Breedlove, former Supreme Allied Commander, Europe, in, "Memo to Washington: Reforming National Defense to Meet Emerging Global Challenges," *Mitchell Institute Policy Papers*, Vol. 5 (March 2017), p. 2.

¹⁶ "The risk of nuclear confrontation between the United States and either Russia or China belongs to the past, not the future..." James Cartwright, Chair, Global Zero U.S. Nuclear Policy Commission, *Modernizing U.S. Nuclear Strategy*, *Force Structure and Posture* (Washington, D.C.: Global Zero, May 2012), p. 6, available

at http://www.globalzero.org/files/gz_us_nuclear_policy_commission_report.pdf. Renewed hostility with Russia is described as, "hardly more likely to be revived than the religious wars of the sixteenth and seventeenth centuries between Catholics and Protestants in Europe." Carl Kaysen, Robert S. McNamara, and George W. Rathjens, "Nuclear Weapons After the Cold War," *Foreign Affairs*, Vol. 70, No. 4 (Fall 1991), p. 96.

¹⁷ See the U.S. Department of Defense, Nuclear Posture Review Report (2010), op. cit., p. vi.

¹⁹ Testimony of James Miller, as quoted in, "The Current Status and Future Direction for U.S. Nuclear Weapons Policy and Posture," *112th U.S. Congress*, House Armed Services Committee, November 2, 2011, p. 62, available at https://fas.org/irp/congress/2011_hr/nw-posture.pdf.

²⁰ President Obama's 2009 Prague speech promoting the goal of nuclear disarmament, and his September 20, 2016 speech to the United Nations are masterpieces of idealist thought applied to international relations and U.S. nuclear policy in particular. See, Barack Obama, "Remarks By President Barack Obama In Prague As Delivered," *ObamaWhiteHouseArchives.gov*, April 5, 2009, available at https://obamawhitehouse.archives.gov/the-pressoffice/remarks-president-barack-obama-prague-delivered; Barack Obama, "Address by President Obama to the 71st Session of the United Nations General Assembly," *ObamaWhiteHouseArchives.gov*, September 20, 2016, available at https://obamawhitehouse.archives.gov/the-press-office/2016/09/20/address-president-obama-71st-session-unitednations-general-assembly.

²¹ As the international system known for millennia is described in, John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W. W. Norton & Co., 2001), pp. 17-18.

¹⁴ See, William J. Perry, *Annual Report to the President and the Congress* (Washington, D.C.: GPO, February 1995), Part IV, "Nuclear Posture Review," pp. 83-92, available at

¹⁸ Barack Obama, "Remarks by President Obama at Strasbourg Town Hall," *ObamaWhiteHouseArchives.gov*, April 3, 2009, available at https://obamawhitehouse.archives.gov/the-press-office/remarks-president-obama-strasbourg-town-hall.



INFORMATION SERIES Issue No. 431 | May 21, 2018

is generally in decline around the world and particularly in regards to our nation," and that, "We could quickly reduce our existing nuclear arsenal from the 10,000 hydrogen bombs we now have down to the low hundreds, without any threat to our own national security."²²

The assessment that, 1) with the passing of the Cold War, interstate nuclear threats are largely a thing of the past and US nuclear deterrence requirements greatly eased, and, 2) continuing US nuclear reductions are a key to nuclear non-proliferation, has been at the heart of virtually every argument *against* US efforts to modernize the residual "legacy" US nuclear force posture inherited from the Cold War.

For scholars from the realist school, this assessment and associated policy recommendation were obviously imprudent because, despite the end of the Cold War, military threats and the potential for Great Power confrontation, including nuclear crises and conflict, had hardly been purged from the international system. As Colin Gray observed in 2005, "If 'the war that will end war', in the words crafted by H.G. Wells on 14 August 1914, its even greater successor twenty years later, and then the atomic discovery, did not suffice to oblige humankind to change its political habits, it is difficult to see what could do so in the future."²³ An Air Force General Officer's quip portrayed the realist skepticism regarding the continued US push for nuclear zero, "I hope that day comes soon. And when it does, I want to invite you all over to my house for a party. I'd just ask that you don't feed any of the hors d'oeuvres to my unicorn."²⁴

But the West generally welcomed the sanguine expectations and claims that because the Cold War had ended, interstate nuclear threats and the need for nuclear deterrence was largely a thing of the past. As then-Commander of European Command, General Philip Breedlove remarked in 2016, "We embarked on a policy of 'hugging the bear' with what we perceived was a former adversary turned strategic partner."²⁵ This optimistic narrative fit well with the enduring idealist strain in American foreign policy. It also was promoted by a professional anti-nuclear lobby and embraced by those captured by the hubris and feel-good emotion of it all.

In a departure from this general narrative that culminated in the 2010 NPR, the 2018 NPR emphasizes that while countering proliferation and terrorism remain key US goals, effective nuclear deterrence again is the priority of US nuclear policy. Correspondingly, Secretary of

²² Joseph Cirincione, "Replacing a Failed Nuclear Strategy," *Proceedings of the Annual Meeting (American Society of International Law)*, Vol. 101, March 28-31, 2007, pp. 443-444, 446.

²³ Colin S. Gray, Another Bloody Century (London: Wiedenfeld and Nicolson, 2005), p. 63.

²⁴ Quoted in, Keith B. Payne and James Schlesinger, et. al., *Minimum Deterrence: Examining the Evidence* (Fairfax, VA: National Institute Press, 2013), p. 3.

²⁵ Philip Breedlove, "U.S. European Command Posture Statement 2016," *EUCOM.mil*, February 25, 2016, available at http://www.eucom.mil/media-library/article/35164/u-s-european-command-posture-statement-2016



INFORMATION SERIES Issue No. 431 | May 21, 2018

Defense Mattis recently identified the modernization of US nuclear deterrence capabilities as the highest priority of the DoD FY 2019 budget request.²⁶

The reason for this renewed US focus on deterrence, including nuclear deterrence, is clear: as if to confirm realists' skepticism, key potential adversaries viewed the idealistic US nuclear disarmament agenda as a subterfuge,²⁷ and refused to follow the US lead. Instead, they continued to emphasize the roles of nuclear weapons and to modernize and/or expand their arsenals. Rather than a more benign "new world order," the strategic environment is now characterized by the intensification of great power competition, coercive nuclear threats, and the increasing integration of nuclear weapons into adversary declaratory policy and war planning.²⁸

Secretary of Defense Mattis stated in April 2018 testimony before Congress that, "Long-term strategic competition—not terrorism—is now the primary focus of US national security."²⁹ Why? Because "Nations as different as China and Russia have chosen to be strategic competitors as they seek to create a world consistent with their authoritarian models and pursue veto power over other nation's economic, diplomatic, and security decision."³⁰

Russia

Moscow clearly feels that it must correct an unacceptable loss of position supposedly imposed on it by the West following the collapse of the Soviet Union.³¹ Unsurprisingly, Moscow is pursuing Great Power competition aggressively, with a revanchist agenda backed by coercive nuclear threats – its nuclear threats to Western countries surpass even those of the Soviet Union during the Cold War.

For example, in March 2015, the Russian Ambassador to Denmark, Mikhail Vanin said, "If Denmark joins the American-led missile defense shield...then Danish warships will be targets

 ²⁶ Secretary of Defense Jim Mattis, Senate Armed Services Committee, Written Statement for the Record, April 26, 2018, p. 5.
²⁷ Russian President Putin, when presented with the proposal for nuclear zero, reportedly viewed the proposal "as just another U.S. trick to weaken his country, according to two accounts of the meeting." See, Jim Hoagland, "Nuclear Crossroads," *The Washington Post*, December 14, 2008, p. B 7.

²⁸ As a 2008 report by DoD and DOE stated, Russia has "increased training for nuclear operations in all Russian military branches," and "has re-incorporated theater nuclear operations into its military planning." See, U.S. Department of Energy and U.S. Department of Defense, National Security and Nuclear Weapons in the 21st Century, September 2008, p. 8, available at http://www.aps.org/policy/reports/popareports/upload/nuclear weapons, pdf. ²⁹ Secretary of Defense Jim Mattis, *Senate Armed Services Committee, Written Statement for the Record*, April 26, 2018, p. 3.

³⁰ Ibid, p. 3.

³¹ For an overview, see, Defense Intelligence Agency, *Russia Military Power* (Washington, D.C.: Defense Intelligence Agency, 2017), pp. 14-17, available at

http://www.dia.mil/Portals/27/Documents/News/Military%20Power%20Publications/Russia%20Military%20Power%20Report%202017.pdf.



INFORMATION SERIES Issue No. 431 | May 21, 2018

for Russian nuclear missiles."³² Russia also made coercive nuclear threats to Sweden, apparently to pressure it away from interest in joining NATO.³³ And, Russian President Putin stated explicitly that Russia was prepared to put its nuclear weapons on alert as part of its operations against Crimea in 2014, and reportedly did so during its military operations against Georgia in 2008.³⁴ NATO Secretary General Jens Stoltenberg wrote in 2015:

Russia has conducted at least 18 large-scale snap exercise, some of which have involved more 100,000 troops. These exercises include simulated nuclear attacks on NATO allies (eg. ZAPAD) and on partners (eg. March 2013 simulated attacks on Sweden), and have been used to mask massive movements of military forces (February 2014 prior to the illegal annexation of Crimea) and to menace Russia's neighbors.³⁵

Perhaps the most visible of these Russian nuclear threats was offered by President Putin on March 1, 2018, when his "State of the Union" speech was accompanied by an animated video depicting a Russian multi-warhead nuclear missile strike on what appears to be Florida.³⁶ Russia's nuclear posturing in this regard is not limited to such an extreme declaratory policy: various nuclear force programs, according to Gen. Valery Gerasimov, the chief of the Russian General Staff, already have resulted in the modernization of three-fourths of Russia's "ground, air and sea strategic nuclear forces."³⁷

In addition, during the Cold War and the decades immediately thereafter, the United States devoted immense efforts to the negotiation of nuclear arms control treaties and agreements with first the Soviet Union and later Russia. Yet, Russia now engages in continuing, willful noncompliance with many, perhaps most of its arms control commitments, most notably the 1987 Intermediate-Range Nuclear Forces Treaty (INF).³⁸

³² Julian Isherwood, "Russia warns Denmark its warships could become nuclear targets," *The Telegraph*, March 21, 2015, available at http://www.telegraph.co.uk/news/worldnews/europe/denmark/11487509/Russia-warns-Denmarkits-warships.

³³ "Security official warns about dangers of anti-missile shield for Baltic states," *TASS*, June 24, 2015, available at http://tass.ru/en/russia/803499. See also, "Russia vows harsh response if Sweden joins NATO," *UNIAN Information Agency*, July 21, 2015, available at http://www.unian.info/world/1102979-russia-vows-harsh-response-if-swedenjoins-nato.html.

 ³⁴ Frank Miller, "Keynote, 2015 USSTRATCOM Deterrence Symposium," *STRATCOM.mil*, July 29, 2015, available at http://www.stratcom.mil/Media/Speeches/Article/986412/keynote-2015-usstratcom-deterrence-symposium/.
³⁵ Jens Stoltenberg, The Secretary General's Annual Report 2015 (Brussels, Belgium: NATO, January 2016), p. 19, available at

https://www.nato.int/nato_static_fl2014/assets/pdf/pfd_2016_01/2016128_SG_AnnualReport_2015_en.pdf. ³⁶ See for example the CNN presentation of this animation at, https://youtu.be/3iQ3CyX1U04.

³⁷ "Russia's Nuclear Forces Can Inflict 'Unacceptable Damage' on Any Aggressor – MOD," *Sputnik News*, November 7, 2017, at, https://sputniknews.com/military/201711071058879855-russia-nuclear-forces-damage-aggressor/.

³⁸ See the discussion in, Franklin C. Miller and Keith B. Payne, "No More US-Russian Arms Treaties Until Moscow Stops Violating Existing Treaties and Agreements." *Information Series*, National Institute for Public Policy, No. 418, March 9, 2017.



INFORMATION SERIES Issue No. 431 | May 21, 2018

China

China continues to avoid transparency and arms control in favor of strategic opacity, and is provoking US allies severely as Beijing seeks to overturn the existing order in Asia. As the *Summary of the 2018 National Defense Strategy of the United States of America* states:

China is leveraging military modernization, influence operations, and predatory economics to coerce neighboring countries to reorder the Indo-Pacific region to their advantage. As China continues its economic and military ascendance, asserting power through an all-of-nation long-term strategy, it will continue to pursue a military modernization program that seeks Indo-Pacific regional hegemony in the near-term and displacement of the United States to achieve global preeminence in the future. The most far-reaching objective of this defense strategy is to set the military relationship between our two countries on a path of transparency and non-aggression.³⁹

China's illegal expansionism and rapidly growing military capabilities, nuclear and nonnuclear, pose a direct threat to US allies and interests. US allies, particularly Japan are highly concerned about China's military rise, and the threatening position it has taken in Asia.⁴⁰ Japanese Prime Minister Abe has likened China's military rise and the current situation in Asia to the ominous developments in Europe prior to World War I.⁴¹

These respective Russian and Chinese goals and worldviews are important to US considerations of deterrence because cognitive studies that were not available in the 1960s or 1970s indicate that *decision makers typically are willing to accept greater risks to recover that which they perceive to be rightfully theirs, but have lost.*⁴² The Western goal of preserving the international order which these Great Powers now seek to overturn will be particularly challenging as they seek to recover what they believe to be rightfully theirs, but are now denied by Western opposition. Russia's illegitimate occupation of Crimea and China's expansion into the East and South China Seas certainly appear to reflect this dynamic.

³⁹ U.S. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America* (Washington, D.C.: Department of Defense, January 2018), p. 2, available at

https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf.

⁴⁰ Chris Ford, a noted Asian security expert, and U.S. Assistant Secretary of State for International Security and Nonproliferation, has described China as, "...a wealthy but insecure and prickly power prone to regional bullying – one that has not been socialized to modern forms of international behavior but instead still nurses revanchist dreams of geopolitical 'return' to a position of global centrality it believes it had, it lost, and it is today desperate to regain." See, "China's Global Ambitions and U.S. Interests," New Paradigms Forum, November 5, 2015, at http://www.newparadigmsforum.com/NPFtestsite/?p=1971.

⁴¹ "Japanese PM Shinzo Abe urges Asia military restraint," *BBC.com*, January 22, 2014, available at http://www.bbc.com/news/world-asia-25851960.

⁴² Thomas Scheber, "Evolutionary Psychology, Cognitive Function, and Deterrence," in Keith B. Payne, ed., *Understanding Deterrence* (New York: Routledge, 2013), pp. 65-92.



INFORMATION SERIES Issue No. 431 | May 21, 2018

North Korea

North Korea's extreme nuclear threats and long-range means of delivery now pose a clear and present danger to the United States and allies. At this point, North Korea may be merely months away from the capability to launch nuclear armed missiles at US cities.⁴³ The potential is clear for North Korea to threaten the use of such capabilities against the United States and allies for coercive purposes. As then-CIA Director Mike Pompeo said in January 2018:

And so we do believe that Kim Jong-un, given these tools sets, would use them for things besides simply regime protection. Now, that is to put pressure on what is his ultimate goal, which is reunification of the peninsula under his authority. And so we don't think it's the case that he's simply going to use this tool set for self-preservation. We think he'll use it in a way that is either -- call it what you will, call it -- coercive is perhaps the best way to think about how Kim Jong-un is prepared to potentially use these weapons..⁴⁴

In addition, with the ultimate goal of unifying the Korean Peninsula under its rule, North Korea is expanding its nuclear capabilities. From the 1990s to the mid-2000s, North Korea used its nuclear program to extort diplomatic concessions, economic assistance, and food aid from us and our allies. Secretary of Defense Mattis has stated that North Korea now has the capability to strike, "everywhere in the world, basically."⁴⁵ If North Korea realizes the capability to threaten the United States with nuclear-armed intercontinental ballistic missiles (ICBMs), the prospect is for even greater demands and coercive nuclear threats by the "shakedown state."⁴⁶ Whatever may come of forthcoming diplomatic efforts, absent virtually a complete and enduring reversal of North Korean behavior, it is imperative for US and allied security, and for the assurance of US allies, that the United States be capable of deterring and defending against this eccentric rogue power.

Iran

Iran seeks hegemony in the Middle East and threatens US allies and friends in the process. Iranian leaders correspondingly express extreme hostility toward us and our allies—most recently labeling the United States Iran's "number one" enemy.⁴⁷ Despite the Joint

⁴³ As reportedly stated by the Director of Central Intelligence Mike Pompeo. See, Associated Press, "CIA head: NKorea months from perfecting nuclear capabilities," *CNBC.com*, October 20, 2017, available at

https://www.cnbc.com/2017/10/20/cia-head-nkorea-months-from-perfecting-nuclear-capabilities.html.

⁴⁴ CIA Director Mike Pompeo, American Enterprise Institute, January 23, 2018.

⁴⁵ Quoted in, Zachary Cohen, et al., "New Missile Test Shows North Korea Capable of Hitting All of US Mainland," *CNN*, November 29, 2017, at http://www.conn.com/2017/11/28/politics/north-korea-missile-launch/index.html.

⁴⁶ Nicholas Eberstadt, "The Shakedown State," American Enterprise Institute, October 31, 2003, available at www.aei.org.

⁴⁷ Parisa Hafezi, "Supreme Leader Khamenei says U.S. is Iran's 'number one enemy,'" Reuters, November 2, 2017, at, https://www.reuters.com/article/us-irsn-usa/supreme-leader-khamenei-says-u-s-is-irans-number-one-enemyidUSKBN1D211H.



INFORMATION SERIES Issue No. 431 | May 21, 2018

Comprehensive Plan of Action (JCPOA), Iran has continued to pursue robust missile programs, including the development of long-range missiles. Iran's *Simorgh* space launch vehicle (SLV) provides technical advances that could shorten Iran's pathway to acquiring an ICBM capability. As a 2017 National Air and Space Intelligence Center (NASIC) report states: "Tehran's desire to have a strategic counter to the United States could drive it to field an ICBM. Progress in Iran's space program could shorten a pathway to an ICBM because space launch vehicles (SLV) use inherently similar technologies."⁴⁸ If so, protecting and assuring US allies and partners in the region may become increasingly challenging given the potential for coercive Iranian missile threats.

While terrorist organizations continue to threaten us and our allies, we must now recognize the reality of both Great Power and rogue state revisionist international goals, nuclear threats and their potential for nuclear employment.

Clinging to Demonstrably False Expectations

Despite the now-manifest realities of a dynamic threat environment in which significant interstate nuclear threats are a prominent feature, the claim continues to be repeated that because the Cold War is over, US deterrence requirements have eased and the United States can further eliminate its nuclear capabilities, including at least one leg of the nuclear triad. For example:

Thankfully those [Cold War] days are over. The Soviet Union disappeared 25 years ago. Current Russian belligerence, although worrisome, does not constitute a renewed Cold War...Our submarines alone give us an assured deterrence...The United States does not need to arm its bombers with a new generation of nuclear-armed cruise missiles...Similarly, the United States should cancel plans to replace its ground-launched ICBMs....⁴⁹

It is obvious that the 20th Century Cold War is over. But that fact certainly does not justify the linked claims that contemporary US nuclear requirements thus are minimal, and that, "our submarines alone give us an assured deterrence." This oft-repeated argument is a non sequitur presented as if a known, self-evident fact. It is, instead highly-speculative and imprudent in a subject area that demands the greatest prudence. Why? Because it posits: 1) a continuing and

⁴⁹ William J. Perry and James E. Cartwright, "Spending Less On Nuclear Weapons Could Actually Make Us Safer," *Washington Post*, November 16, 2017, at https://www.washingtonpost.com/opinion/spending-less-on-nuclear-weapons-could-actually-make-us safer/2017/11/16/396ef0c6-ca56-11e7-aa96-54417592cf72_story.html?utm_term=.2fe3b14ea6c7.

⁴⁸ National Air and Space Intelligence Center (NASIC) and the Defense Intelligence Ballistic Missile Analysis Committee, *Ballistic and Cruise Missile Threat* (Wright-Patterson Air Force Base, OH: NASIC, June 2017), p. 2, available at

http://www.nasic.af.mil/Portals/19/images/Fact%20Sheet%20Images/2017%20Ballistic%20and%20Cruise%20Miss ile%20Threat_Final_small.pdf?ver=2017-07-21-083234-343.



INFORMATION SERIES Issue No. 431 | May 21, 2018

relatively benign nuclear threat environment that, unfortunately, does not exist; and 2) the undoubtedly mistaken claim that a specific, relatively static force structure can be known to provide "assured deterrence" in a dynamic threat environment.

Confident claims of what assuredly will deter simply ignore the inherent uncertainties regarding the functioning of deterrence, and the reality that deterrence strategies must adapt to fit shifting adversaries and contexts. No one, regardless of their position or experience, can claim with any credibility to know in advance that a relatively modest and static set of US nuclear capabilities will provide "assured deterrence" across a broad spectrum of known and now-unknown opponents and contingencies, particularly for the many future decades in which US nuclear deterrence capabilities are expected to function. Static deterrence postures do not long survive dynamic threat environments.

Indeed, the nuclear threat environment in this era of confrontation and uncertainty poses more diverse and severe challenges to US deterrence strategy than were operative during much of the Cold War, with greater uncertainties about the future. In 2016, then-DNI Clapper observed in his opening statement to Congress on the *Worldwide Threat Assessment*, "Unpredictable instability has become the 'new normal,' and this trend will continue for the foreseeable future."⁵⁰ In this new era, the range of possibilities and uncertainties has expanded regarding plausible answers to the enduring deterrence questions posed by Aron and Kahn: whom must we deter, from what action, by threatening what response, in what circumstances, in the face of what counterthreats?

Implications for US Deterrence Strategies and Capabilities

The basic nature of deterrence endures. US security does not require new theories of deterrence; it does demand broader familiarity with *what already is known about deterrence and greater facility with its implementation in a dynamic threat environment*. This includes attention to the requirements posed by diverse adversaries and contexts, and to the US flexibility needed to tailor deterrence strategies and capabilities accordingly. We must pursue the hard work of understanding how to deter a more diverse set of adversaries and potential adversaries,⁵¹ from a wider array of specific actions, in a similarly wider array of plausible circumstances, while also hedging against the unknown and unexpected.

⁵⁰ James R. Clapper, "Remarks as delivered by The Honorable James R. Clapper, Director of National Intelligence," *DNI.gov*, February 9, 2016, available at https://www.dni.gov/files/documents/2016-02-09SSCI_open_threat_hearing_transcript.pdf.

⁵¹ As then-Commander of Strategic Command, ADM Cecil Haney rightly stated, "To address the spectrum of conflict, we must have a comprehensive understanding of the strategic environment as perceived from an adversary's point of view. We must understand capability and intent so that we can deny enemy action, threaten the important areas the adversary values, and prevent misperceptions and actions from escalating. We must have a deep understanding of the adversary." See, ADM. Cecil D. Haney, "An Interview with Cecil D. Haney," *Joint Forces Quarterly*, October 2016, available at http://ndupress.ndu.edu/JFQ/Joint-Force-Quarterly-83/Article/979753/an-interview-with-cecil-d-haney/.



INFORMATION SERIES Issue No. 431 | May 21, 2018

Deterring Limited First-Use Threats

In particular, we must understand how to deter Great Powers and nuclear-armed rogue states from exploiting limited nuclear threats or use for coercive purposes in support of their respective goals to change established orders and borders in Europe, Asia, and prospectively the Middle East.

As noted above, for over a decade Russia has engaged in coercive nuclear first-use threats and emphasized the value of limited nuclear first-use as a tool of statecraft in support of its revisionist agenda. Its apparent notion of "escalate-to-deescalate" essentially envisions nuclear weapons as coercive means to defeat the West's will and capability to respond in strength to Russia.⁵² Moscow appears to expect that its nuclear threats, or limited, low-yield first-use if necessary, will compel Western capitulation in crises or conflict.⁵³

As the National Intelligence Council states in its 2017 *Global Trends* report: "Russian military doctrine purportedly includes the limited use of nuclear weapons in a situation where Russia's vital interests are at stake to 'deescalate' a conflict by demonstrating that continued conventional conflict risks escalating the crisis to a large-scale nuclear exchange."⁵⁴ Evelyn Farkas, former Deputy Assistant Secretary of Defense for Russia, described this element of Russian military doctrine concisely in Congressional testimony regarding Russian military doctrine: "The Russian armed forces developed a further means to attempt to deter the West using nuclear or asymmetric weapons – the concept of 'escalating to de-escalate.' The rationale is that by raising the price to the adversary – through a cyberattack or limited use of a nuclear weapons – Russia could force the enemy to capitulate."⁵⁵

This Russian concept of using limited nuclear first-use threats to compel capitulation appears not to be restricted to the defense of agreed Russian borders, but also to support the expansion of Russia's area of dominance by deterring or countering any robust NATO response.⁵⁶ As Jacek Duralec, a scholar with a Polish government-sponsored think tank, concludes: "The

⁵⁴ National Intelligence Council, *Global Trends: Paradox of Progress* (Washington, D.C.: Director of National Intelligence, January 2017), p. 36, available at https://www.dni.gov/files/documents/nic/GT-Full-Report.pdf.

⁵⁵ Dr. Evelyn N. Farkas, *Testimony before the House Armed Services Committee on "Understanding and Deterring Russia:* U.S. Policies and Strategies," February 10, 2016, p. 2.

⁵⁶ Adrian Bradshaw, "The latest security challenges facing NATO," *RUSI.org*, February 20, 2015, available at https://www.rusi.org/go.php?structureID=videos&ref=V54E7621089708#.VTFlcJN4d0T.

⁵² See especially, U.S. Department of Defense, Nuclear Posture Review (2018), op. cit., pp. 8-9.

⁵³ Dr. Mark Schneider, Senior Scholar at the National Institute for Public Policy has produced unparalleled open source work. I draw here from his work. See for example, "Deterring Russian First-Use of Low-Yield Nuclear Weapons, *Real Clear Defense*, March 12, 2018, at

https://www.realcleardefense.com/articles/2018/03/12deterring_russian_first_use_of_low_yield_nuclear_113180.h tml. See also the discussion in Colin S. Gray, "Strategic Sense and Nuclear Weapons Today," *Information Series*, National Institute For Public Policy, No. 425, December 11, 2017, p. 4; and, Keith B. Payne and John S. Foster, *Russian Strategy: Expansion, Crisis and Conflict* (Fairfax, VA: National Institute Press, 2016).



INFORMATION SERIES Issue No. 431 | May 21, 2018

expanded function of Russia's nuclear arsenal...is not just for traditional deterrence, which is aimed at preserving the status quo; it is also to be used as a tool of intimidation and coercion, supporting territorial change."⁵⁷ Indeed, senior DoD officials of the Obama Administration described this "escalation to deescalate" facet of Russian doctrine as a "reckless gamble for which the odds are incalculable and the outcome could prove catastrophic.⁵⁸

Some commentators, however, now claim that "escalate-to-de-escalate" is *not* a facet of Russian military doctrine – because, they say, there are few if any corresponding statements by Russian officials.⁵⁹ This claim ignores or dismisses key countervailing facts.

First, numerous US officials with full access to pertinent information about Russian military doctrine confirm Russia's "escalate-to-deescalate" concept. For example, in 2016 then-Secretary of Defense Ashton Carter stated, "It's a sobering fact that the most likely use of nuclear weapons is not the massive nuclear exchange of the classic Cold War-type, but rather the unwise resort to smaller but still unprecedentedly terrible attacks, for example, by Russia or North Korea to try to coerce a conventionally superior opponent to back off or abandon an ally during a crisis."⁶⁰ In 2017, DIA Director, Lt. Gen. Vincent Stewart said Russia has built nuclear de-escalation "into their operational concept, we've seen them exercise that idea,"⁶¹ and the former Commander of US European Command, Gen. Philip Breedlove, said, "Russia (and even North Korea) view nuclear weapons not merely as a strategic deterrent, but as practical weapons for employment to control escalation to Russia's advantage and to quickly terminate conflicts on Russian terms."⁶² In 2015, Lt. Gen. David Hogg, then-US Military Representative to the NATO Military Committee, said that, "There is a Russian document [that] states that they will escalate to de-escalate and will be the first to issue a nuclear strike."⁶³

⁵⁷ Jacek Durkalec, "Russia's evolving nuclear strategy and what it means for Europe," *European Council on Foreign Relations*, July 5, 2016, available at

http://www.ecfr.eu/article/commentary_russias_evolving_nuclear_strategy_and_what_it_means_for_europe.

⁵⁸ Robert Scher, "Statement of Robert Scher Assistant Secretary of Defense for Strategy, Plans, and Capabilities" *114th U.S. Congress*, House Armed Services Committee, March 2, 2016, p. 3, available at

http://docs.house.gov/meetings/AS/AS29/20160302/104619/HHRG-114-AS29-Wstate-ScherR-20160302.pdf.

⁵⁹ Olga Oliker and Andre Baklitskiy, "The Nuclear Posture Review and Russian 'De-Escalation:' A Dangerous Solution to a Nonexistent Problem," *War on the Rocks*, February 20, 2018,

https://warontherocks.com/2018/02/nuclear-posture-review-russian-de-escalation-dangerous-solution-nonexistent-problem/.

⁶⁰ Quoted in, Secretary of Defense Ash Carter, *Remarks by Secretary Carter to Troops at Minot Air Force Base, North Dakota,* Department of Defense, September 26, 2016, at, https://www.defense.gov/News/Trnscripts/Transcrpt-View/Article/956079/remarks-by-secretary-carter-to-troops-atminot-air -force-base-north-dakota/.

⁶¹ Quoted in, *S Armed Services Hearing on Worldwide Threats, Political Transcript Wire*, May 23, 2017, available at, https://dialog.proquest.com.

⁶² Gen. Philip Breedlove, "Memo to Washington: Reforming National Defense to Meet Emerging Global Challenges," op. cit., p. 5.

⁶³ Kathy Eastwood, "Hogg speaks to cadets on NATO, the challenges it faces," *Army.mil*, September 8, 2015, available at https://www.army.mil/article/155107/Hogg_speaks_to_cadets_on_NATO_the_challenges_it_faces/.



INFORMATION SERIES Issue No. 431 | May 21, 2018

Second, senior Russian military officials have stated explicitly that such details of Russian doctrine are now in classified Russian documents,⁶⁴ which may explain why some skeptical academic commentators find open references to "escalate to de-escalate" too difficult to locate. Third, there are, nevertheless, multiple instances of Russian leaders openly discussing this facet of Russian doctrine, including recently.

For example, in 2008, Colonel General Nikolai Solovtsov, then-Commander of the Strategic Rocket Force, stated that "special actions" could, "prevent the escalation of a high-intensity non-nuclear military conflict against the Russian Federation and its allies" by demonstrating "the high combat potential of Russia's nuclear missile arms and the determination of Russia's military-political leadership as regards their use, so as to compel the aggressor to cease military operations;"⁶⁵ and, "the striking power of the Strategic Missile Forces is most efficient and convincing in the de-escalation actions."⁶⁶ In 2017, President Putin expressed the following in an open decree: "During the escalation of military conflict, demonstration of readiness and determination to employ non-strategic nuclear weapons capabilities is an effective deterrent."⁶⁷

"Escalate-to-de-escalate" appears to be quite real, and effective US deterrence now requires that the United States work to deny Moscow its apparent confidence that it can defeat US and NATO deterrence strategy via limited nuclear first-use escalation threats or employment in crisis or conflict. To do so, however, presumes an understanding of the basis on which Moscow now perceives a gap in the US/NATO deterrence strategy that facilitates Moscow's belief in the possible success of limited nuclear first use threats or actual limited first use.

Fundamental deterrence questions are, what "gaps" does Moscow perceive in Western deterrence strategies, and how can those perceptions be corrected? Answering these questions and closing whatever gaps inspire such Russian confidence is an example of what it means to tailor deterrence to meet the requirements of the times.

Rather than simply denying the reality of the "escalate-to-de-escalate" facet of Russia's military doctrine, some commentators assert that "there is no deterrence gap" because Russia should

⁶⁴ "Army: Closed part of new military doctrine to define legal aspects of forces' employment, nuclear weapon—Gen. Staff," *Interfax*, August 14, 2009 (Transcribed by World News Connection). See also, "Russia Classifies Information on Pre-emptive Nuclear Strikes—Military," BBC Monitoring Former Soviet Union, September 5, 2014, available at, https://dialog.proquest.com.

⁶⁵ "Russia's Strategic Missile Troops chief sees political function of nuclear arms," *BBC Monitoring Former Soviet Union*, September 14, 2008, available at, https://dialog.proquest.com.

⁶⁶ Quoted in Stephen Blank, "The Russian Military Faces the Future," in Richard Weitz, *Can We Manage Declining Russia*? (Washington, D.C.: Hudson Institute, 2011), p. 240.

⁶⁷ Decree of the President of the Russian Federation, FUNDAMENTALS of the State Policy of the Russian Federation in the Field of Naval Operations for the Period until 2030, July 20, 2017, available at http://

dnnlgwick.blobore.windows.net/portals/0/RMSI_RusNavyFundamentalsENG_FINAL%20 (1).pdf?sr=b&si=DNNFileManagerPolicy&sig=i110Z1rxZVzKbB%2BdHJ1CZuTxvwL3N7W34%2FLpksgT1Bs%3D.



INFORMATION SERIES Issue No. 431 | May 21, 2018

not doubt existing US deterrence capabilities. ⁶⁸ Therefore, so goes this argument, the United States need do nothing with regard to its nuclear force posture to close a non-existent gap. In particular, the rebuilding of the US nuclear posture initiated by the Obama Administration and continued by the Trump Administration "should be scaled back."⁶⁹

The existence of such a gap or gaps per Russian perceptions, however, is undeniable.⁷⁰ Moscow now manifestly considers itself to have the freedom to engage in coercive nuclear first-use threats against the United States and allies, and to exercise its forces accordingly. Understanding the basis for that perceived freedom is to identify the West's deterrence gap(s) that the United States must close in order to preserve effective deterrence.

Identifying the reasons why Moscow believes it has the freedom to make coercive nuclear firstuse threats is a challenge because it requires "getting inside" the thinking of senior Russian civilian and military leaders. Nevertheless, on the basis of open Russian writings, it is reasonable to suggest that one underlying reason for Russia's feeling of nuclear license is Moscow's perception of an advantage in will and cohesion.⁷¹

If so, NATO must work to bring to end such disdain for NATO's will and cohesion. Efforts to do so may be seen in the recent public statements by NATO General Secretary, Jens Stoltenberg, including: "We are sending a very clear message: NATO is here, NATO is strong and NATO is united."⁷² NATO activities that reinforce that message by demonstrating alliance cohesion and determination to prevent Russian expansionism are likely to be critical.

In addition, DoD has concluded that "Russia's belief that limited nuclear first use, potentially including low-yield weapons, can provide such an advantage is based, in part, on Moscow's perception that its greater number and variety of non-strategic nuclear systems provide a coercive advantage in crisis and at lower levels of conflict."⁷³ Adversaries will seek out and

⁶⁸ William Perry and Tom Collina, "The US Does Not Need New Tactical Nukes," *Defense One*, April 26, 2018, at https://www.defenseone.com/ideas/2018/04/us-does-not-need-new-tactical-nukes/147757/?oref=d-river. See also, Arms Control Association, et. al, "Letter to Senator McConnell," *Union of Concerned Scientists*, May 4, 2018, available at https://s3.amazonaws.com/ucs-documents/nuclear-weapons/NGO-Low-Yield-D5-Congress.pdf. ⁶⁹ Perry and Collina, "The U.S. Does Not Need New Tactical Nucs," op. cit.

⁷⁰ "Russian views on the utility of nuclear weapons are a sharp departure from most Western thinking and thus

represent a potentially dangerous risk during a crisis. *The more Russian decision-makers believe this gap in perceptions exists,* the more tempted they could be to threaten the use of nuclear weapons during a crisis, or actually employ them to shock Western policymakers into compliance with Russian political objectives." (Emphasis added). Gen. Philip Breedlove, "Memo to Washington: Reforming National Defense to Meet Emerging Global Challenges," op. cit., p. 8.

⁷¹ See U.S. Department of Defense, Nuclear Posture Review (2018), op. cit., pp. xi-xii, 9, 31, 53-55.

⁷² Quoted in, Matt Drake, "NATO Launches New Force in Response to 'Russian aggression' in 'New Cold War' Escalation," *Express*, October 10, 2017, at https://www.express.co.uk/news/world/864337/WW3-new-cold-war-nato-russia-nato-putin-soldiers-crimea-poland-romania.

⁷³ U.S. Department of Defense, Nuclear Posture Review (2018) op. cit., pp. xi-xii.



INFORMATION SERIES Issue No. 431 | May 21, 2018

exploit weaknesses, and Moscow appears to see NATO's relatively much smaller and narrow non-strategic nuclear potential as an exploitable weakness.

This is an important point because an oft-repeated critique of the 2018 NPR is that it is internally contradictory in this regard: to wit, the NPR asserts that Moscow's perceptions of advantage over the West are "mistaken," but then proceeds to recommend "supplements" to the existing US nuclear force posture to correct those perceptions of advantage. But, if the Russian perceptions are in fact mistaken, according to this critique, then the recommended "supplements" advanced in the 2018 NPR are wholly unnecessary. Thus the 2018 NPR supposedly is internally contradictory.⁷⁴

This critique reflects little understanding of deterrence and war causation in general. The 2018 NPR rightly emphasizes that Russia's "mistaken" perceptions must be corrected for US deterrence purposes. Why? Because deterrence is a matter of perceptions shaping decision making. Whether or not Russian perceptions of advantage are valid or vapid does not determine their deterrence significance. If Moscow perceives exploitable advantages, and acts on those perceptions – valid or otherwise – deterrence can fail. Indeed, mistaken perceptions have long been known to be a basis for high-risk ventures and war – it matters only if such perceptions are believed by the adversary, not if those perceptions are accurate or mistaken.⁷⁵

If Moscow perceives an exploitable advantage stemming from its much greater theater nuclear capabilities and options, then the United States must determine the most efficient way to close that perceived "gap." The easiest and most convenient response to a Russian perception of advantage is simply to assert that Moscow surely cannot doubt an enduring claim of the Western deterrence theory canon, i.e., that greater nuclear force numbers provide no deterrence advantage,⁷⁶ and lecture Moscow on the error of its apparent belief that its significantly greater theater nuclear force numbers and options bestow an exploitable advantage. Such a scolding and self-serving US response may well be easy and convenient, but not convince Moscow leaders that their entrenched thinking is in error and restore deterrence.

If not, a key US and NATO deterrence goal must be to take further steps needed specifically to counter Moscow's confidence in its possession of exploitable nuclear advantages that allow it to so threaten the West. Doing so at this point is an excellent example of what it means to "tailor" deterrence.

⁷⁴ Adam Mount and Abigail Stowe-Thurston, "What is US nuclear policy exactly?," *The Bulletin of the Atomic Scientists*, April 18, 2018, available at https://thebulletin.org/what-us-nuclear-policy-exactly11709.

⁷⁵ See for example, John G. Stoessinger, *Why Nations Go To War* (New York: St. Martin's Press, 1993), pp. 205, 213-218. ⁷⁶ This tenet of the deterrence canon is derived from confident statements such as the following by noted academic Robert Jervis: "It does not matter which side has more nuclear weapons…Having a larger nuclear stockpile yields no such gains. Deterrence comes from having enough weapons to destroy the others' cities; this capability is an absolute, not a relative one." "Why Nuclear Superiority Doesn't Matter," *Political Science Quarterly*, Vol. 94, No. 4 (Winter 1979-80), p. 618.



INFORMATION SERIES Issue No. 431 | May 21, 2018

Closing a non-strategic nuclear capability gap almost certainly will not necessitate mimicking the extraordinary Russian theater nuclear arsenal, but it will likely demand an expansion of Western nuclear options with a *focus on their credibility in Russian perception*. Getting this right will be one of the most important deterrence challenges of the coming decade for the United States and NATO. Parallel efforts in Asia in support of Asian allies also will likely be critical.

DoD has decided to "supplement" the existing US nuclear force posture with two added lowyield nuclear capabilities to help ensure the deterrence of adversaries' limited nuclearescalation threats. These supplements are a near-term, low-yield ballistic missile warhead and a later sea-based cruise missile.⁷⁷ The most common criticism of this move, in addition to the demonstrably-fallacious claim that there "is no deterrence gap" to close, is that the pursuit of such low-yield options presumes the unwarranted assumption that nuclear war can be controlled: "Perhaps the biggest fallacy in the whole argument [for added supplements] is the mistaken and dangerous belief that a 'small' nuclear war would somehow stay small. That if Russia used a 'low-yield' weapon, the US would respond in kind, and that things could stay at that level. There is, of course, no experience to support this dubious theory."⁷⁸

This charge – that the US initiative for two low-yield options is based on a US presumption that nuclear war can be controlled – is wholly in error. There is no underlying US assumption that a limited nuclear conflict would reliably stay limited. Indeed, no one knows if nuclear escalation can be controlled; the deterrence value of these low-yield supplements is to help in a credible way to *ensure that revisionist powers understand that they must stand back from limited nuclear escalation threats or attacks because they can have no confidence that they can control escalation to their advantage.* It is to help ensure that such adversaries understand that the United States has *credible* response options to their limited nuclear threats or strikes – and therefore can deter such actions, rather than capitulate to them.⁷⁹

This discussion of deterrence in a new threat environment suggests six broad deterrence "lessons" for the future.

Six Lessons for the Future

First, Clausewitz' emphasis on the extreme value of "prudence" in defensive war applies equally to deterrence.⁸⁰ In a dynamic strategic threat environment of confrontation and uncertainty, the range of US deterrence goals and the nuclear requirements needed to support them can never be considered fixed. They will shift over time. It simply is prudent to pursue

⁷⁷ U.S. Department of Defense, *Nuclear Posture Review* (2018), pp. 52-55.

⁷⁸ William Perry and Tom Collina, op. cit., p. 2

⁷⁹ Secretary of Defense Jim Mattis, *Senate Armed Services Committee, Written Statement for the Record*, April 26, 2018, pp. 6-7.

⁸⁰ Clausewitz, Vom Kreige, op. cit., p. 655.



INFORMATION SERIES Issue No. 431 | May 21, 2018

the flexible and resilient US deterrence capabilities needed to tailor US deterrence strategies as necessary to diverse and shifting adversaries, threats, and contexts.

To be sure, since the early years of the Cold War, successive US presidents have demanded more flexible deterrence strategies and nuclear forces. The sense behind that demand is ever more apparent with the need to tailor deterrence strategies to an expanding number of potential adversaries and highly-lethal threat scenarios—and prospectively to threats now unknown.

Consequently, while the previous US declaratory policy of "no new" nuclear capabilities might have been compatible with an era in which nuclear threats and U.S. deterrence requirements were expected to continually fade,⁸¹ such a policy is ill-suited to contemporary realities. Because the United States must be able to adapt its nuclear deterrence strategies and related capabilities to evolving and shifting threats, and hedge against future risks, "new" types of US nuclear capability may be needed periodically, and sustaining the scientific and industrial infrastructure needed to produce those capabilities is essential. To adopt an *a priori* policy of "no new" capabilities is to presume that deterrence requirements are static, which they are not.

<u>Second</u>, the great deterrence value of the US nuclear triad is the resilience and flexibility inherent in the diversity of the triad's platforms and weapons. That value is not fading, as was claimed often during the immediate post-Cold War years. It is increasing, as has the urgency of advancing the fledgling programs underway to replace all three legs of the US triad that are reaching the ends of their already-extended service lives.⁸² The nuclear infrastructure enabling US nuclear capabilities has suffered decades of very limited investment, and its recapitalization now demands comparable urgency.⁸³

Third, a frequent critique of past and present US nuclear policy initiatives that emphasize the need for nuclear force posture "flexibility" is that this direction is for nuclear "warfighting" and contrary to the goal of deterrence. For example:

Nuclear weapons are not and must not become 'flexible options' for use in nuclear warfighting...Building a new nuclear weapon that provides such flexibility risks undermining deterrence by introducing uncertainty into an adversary's decision-making.⁸⁴

⁸¹ President Obama "disavowed the development of any new nuclear weapons." See, John Caves, "Avoiding a Crisis of Confidence in the U.S. Nuclear Deterrent," *Strategic Forum*, No. 252 (January 2010), p. 4.

⁸² See, U.S. Department of Defense, *Nuclear Posture Review* (2018), op. cit., pp. 44-50. See also, Keith B. Payne and John S. Foster, et. al., *A New Nuclear Review For a New Age* (Fairfax, VA: National Institute Press, 2017), pp. 79-140.

⁸³ See Thomas Scheber and John Harvey, *Assessment of U.S. Readiness To Design, Develop and Produce Nuclear Warheads: Current Status and Some Remedial Steps* (Fairfax, VA: National Institute Press, 2015).

⁸⁴ Dianne Feinstein and Adam Smith, "Cancel the New Nuclear Cruise Missile," in, *10 Big Nuclear Ideas for the Next President, Plough*, edited by Tom Collina and Geoff Wilson, Ploughshares Fund, November 2016, p. 21. This is the



INFORMATION SERIES Issue No. 431 | May 21, 2018

This familiar argument misses the most fundamental point about deterrence: for US nuclear deterrence strategies to provide the desired deterrent effect, the adversary must believe, at some level, that its provocation will elicit a US nuclear response. The 2018 NPR specifies that only the most extreme provocation would do so.⁸⁵ But if the adversary doubts that a US nuclear response would follow an extreme provocation, it will, by definition, doubt the credibility of the US deterrence strategy. The notion that deterrence is undermined by US nuclear weapons that facilitate an adversary's perception that they could, in fact, be "used" under extreme circumstances reflects an elementary misunderstanding of the fundamental requirements for credible deterrence. Indeed, flexibility that facilitates an adversary's perception of a credible response to an extreme provocation is likely to be essential for deterrence in at least some plausible cases. This reality is at the heart of the 2018 NPR's recommendation of "supplements" to the US nuclear force posture. This is about strengthening deterrence, not "nuclear warfighting."

Fourth, "Strategic stability" is a venerable concept from the pioneering work of deterrence theorists in the 1960s. As popularized, it came to mean a condition in which both sides in a bilateral relationship possess survivable nuclear retaliatory capabilities, and thus neither side is expected to have a driving incentive to employ nuclear weapons first given the prospective costs of conflict. An enduring condition of mutual vulnerability to retaliatory strikes is considered the basis for a "stable" mutual deterrence relationship. As the late Thomas Schelling described this relationship, "Human and economic resources were hostages to be left unprotected."⁸⁶

Schelling's conceptual work was particularly significant in emphasizing that few developments other than the "reciprocal fear of a surprise attack" could "destabilize" an otherwise "stable" condition of mutual deterrence.⁸⁷ Such fears in Moscow, Schelling contended, could be triggered by the US deployment of strategic forces that could potentially degrade the retaliatory potential of Soviet strategic offensive forces – thus causing Moscow to question the credibility of its nuclear deterrent and consider striking first itself in a crisis.⁸⁸

same critique that greeted the "Schlesinger Doctrine" in 1974 – which included a move to incorporate flexible options into U.S. nuclear planning. See, Keith B. Payne, "The Schlesinger Shift: Return to Rationality," in, Keith B. Payne, C. Johnson Conover, Bruce William Bennett, *Nuclear Strategy: Flexibility and Stability* (Santa Monica, CA: RAND, 1979), pp. 23-37.

⁸⁵ See U.S. Department of Defense, Nuclear Posture Review (2018), op. cit., p. 21.

⁸⁶ See Thomas Schelling, "What Went Wrong With Arms Control?" *Foreign Affairs*, Vol. 64, No. 2 (Winter 1985/86), p. 222.

⁸⁷ See the classic texts by Thomas Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1960), pp. 207-229, 231-233; and, *Arms and Influence* (New Haven, CT: Yale University Press, 1966), pp. 225-227; see also, Schelling, "Reciprocal Measure for Arms Stabilization," in, *Arms Control, Disarmament and National Security*, Donald Brennan, ed. (New York: George Braziller, 1961), pp. 167, 170.

⁸⁸ See Thomas Schelling, "What Went Wrong With Arms Control?" op. cit., pp. 221-223, 232-234.



INFORMATION SERIES Issue No. 431 | May 21, 2018

This conceptual construct became a guiding principle for US deterrence policy.⁸⁹ Numerous official US statements deemed the survivability and effectiveness of Soviet retaliatory strategic capabilities to be critical for "strategic stability."⁹⁰ Those US strategic forces that might threaten to degrade the effectiveness of the Soviet Union's strategic offensive forces, such as US strategic ballistic missile defense (BMD) and countersilo-capable offensive systems, typically were considered inherently "destabilizing."

However, the great deterrence theorists of the 1960s developed the concept of "strategic stability" in the unique context of the US-Soviet bipolar Cold War, and its applicability outside that now-non-existent context is likely limited. The general Cold War principle that particular types of US forces should be expected to inspire the "fear of a surprise attack" and drive Moscow toward a nuclear first strike against the United States might have pertained in the particular circumstances of the Cold War – although even at the time it was highly speculative. But, in the contemporary era, the spectrum of potential adversaries will have varying and possibly eccentric views regarding their perceived incentives and disincentives to launch an attack given the diversity of worldviews, fears, motivations, capabilities, goals and risk tolerances. The "real world" range of leadership decision making and calculations that might lead to state decisions to attack or to stand down is simply much broader and more variable than the narrowly rational decision-making model presumed in the strategic stability construct.⁹¹

In the contemporary era, there can be no generally-applicable "rule of thumb" derived from the US-Soviet experience for predicting that a particular set of US capabilities will be "stabilizing" or "destabilizing" across a spectrum of potential adversaries and contexts. In some cases, for example, rather than being a source of deterrence "instability" as envisaged in the Cold War construct, US BMD capabilities able to defeat an adversary's prospective missile attack may well be key to denying the political or military value that would underlie an

⁹⁰ This can easily be seen, for example, in the U.S. government's Cold War Arms Control Impact Statements. These identified the "Strategic Stability" framework as a primary basis for judging U.S. force programs and correspondingly placed positive value on the survivability of Soviet strategic nuclear forces. See for example, House of Representatives, Committee on Foreign Affairs, U.S. Senate, Committee on Foreign Relations, Joint Committee Print, *Fiscal Year 1985 Arms Control Impact Statements, Statements Submitted to the Congress by the President Pursuant to Section 36 of the Arms Control and Disarmament Act* (Washington, D.C.: USGPO, 1984), p. 95. House of Representatives, Committee on Foreign Affairs, U.S. Senate, Committee on Foreign Relations, Joint Committee Print, *Fiscal Year 1982 Arms Control and Disarmament Act* (Washington, D.C.: USGPO, 1984), p. 95. House of Representatives, Committee on Foreign Affairs, U.S. Senate, Committee on Foreign Relations, Joint Committee Print, *Fiscal Year 1982 Arms Control and Disarmament to the Congress by the President Pursuant to Section 36 of the Arms Statements, Statements Submitted to the Congress by the President Pursuant to Section 36 of the Arms Control Impact Statements, Statements Submitted to the Congress by the President Pursuant to Section 36 of the Arms Control Impact Statements, Statements, Statements, Statements, Pursuant to Section 36 of the Arms Control Impact Statements, Statements, Pursuant to Section 36 of the Arms Control and Disarmament Act (Washington, D.C.: USGPO, 1981), p. 107.*

⁹¹ This point, and the presentation of evidence supporting it, is presented in, Keith B. Payne, et. al., *Understanding Deterrence* (London: Routledge, 2013). For a discussion of decision-making types known to lie well outside the "strategic stability" rational model see, Yehezkel Dror, "High-Intensity Aggressive Ideologies as an International Threat," *The Jerusalem Journal on International Relations*, Vol. 9, No. 1 (March 1987), and, Dror, *Crazy States: A Counterconventional Strategic Problem* (Lexington, MA: Heath Lexington Books, 1971).

⁸⁹ See the discussion in Keith B. Payne, *The Great American Gamble: Deterrence Theory and Practice From the Cold War To The Twenty-First Century* (Fairfax, VA: National Institute Press, 2008), chapters 3, 4 and 5.



INFORMATION SERIES Issue No. 431 | May 21, 2018

adversary's decision to attack, i.e., missile defense in such a case would rightly be deemed "stabilizing."

This is no small point given the policy significance that has been—and continues to be—attached to the concept of "strategic stability" in the United States. In the contemporary threat environment, and likely in many other possible threat environments dissimilar to the Cold War, US deterrence considerations should be informed and governed by the unique deterrence requirements that pertain to different adversaries and different contexts, *not by the general application of the Cold War concept of "strategic stability" – which may be as misleading as it is useful.*

<u>*Fifth,*</u> US civilian and military leaders need to be active in efforts to improve the understanding of deterrence in general, and the value of and requirements for nuclear deterrence in particular. The public debate on these issues typically is dominated by academic writers and political activists who continue to favor nuclear disarmament or "minimum deterrence."⁹² This enduring condition of the public debate threatens the continuity of US nuclear capabilities and also societal recognition of the value of the service provided by the uniformed and civilian men and women who work to sustain credible US nuclear deterrence capabilities.

Those governmental stakeholders with the greatest authority and professional responsibility to advocate for US nuclear capabilities and the Service personnel involved must, as the 2014 *Independent Review of the Department of Defense Nuclear Enterprise* led by Gen. Larry Welch and Adm. John C. Harvey recommends, "own the mission," and "Establish and support programs that maintain high awareness of verbal and written public declarations that question the need for nuclear forces and respond with equally public declarations."⁹³ This well-reasoned recommendation has not yet led to any apparent fruit. Doing so now is particularly critical as the public debate regarding the initiatives of the 2018 NPR unfolds.

<u>Sixth</u>, for decades the US has been devoted to the process of nuclear arms control. Most discussions of deterrence and nuclear forces must pay homage to the goal of negotiated nuclear reductions lest they seem unsophisticated. Unsurprisingly, there are calls now for further arms control efforts to solve the deterrence challenges that have been created intentionally, indeed eagerly, by foes, including the mounting North Korean nuclear threat and the great theater nuclear force asymmetry in Russia's favor.⁹⁴

⁹² A National Institute study determined that over an eighteen-month period (2015-2016), articles in major US publications expressing approval of or opposition to modernizing US nuclear capabilities ran approximately 5:1 against modernization. For a comprehensive examination of "minimum deterrence" see, Keith B. Payne and James Schlesinger, et. al., *Minimum Deterrence: Examining the Evidence* (Fairfax, VA: National Institute Press, 2013).

⁹³ Larry D. Welch and John C. Harvey, Jr., *Independent Review of the Department of Defense Nuclear Enterprise* (Washington, D.C.: Department of Defense, June 2014), p. 10, available at

https://www.defense.gov/Portals/1/Documents/pubs/Independent-Nuclear-Enterprise-Review-Report-30-June-2014.pdf.

⁹⁴ The New York Times Editorial Board, "Is North Korea's Nuclear Test a Sign of Hope?," *The New York Times*, November 29, 2017, available at https://www.nytimes.com/2017/11/29/opinion/is-north-koreas-nuclear-test-a-



INFORMATION SERIES Issue No. 431 | May 21, 2018

Arms control can, in principle, contribute to US security by establishing restraints on forces and threatening behavior. However, expecting arms control with potential adversaries to solve the US security problems they have purposefully created is naïve in the absence of: 1) serious US verification and enforcement efforts and mechanisms;⁹⁵ and, 2) the types of incentives that make agreements and compliance an adversary's preferred choice, e.g. to gain relief from feared US capabilities. We learned this lesson with the 1987 INF Treaty. As then-Secretary of State George Schultz stated: "If the West did not deploy Pershing II and cruise missiles, there would be no incentive for the Soviets to negotiate seriously for nuclear reductions," and, "strength was recognized as crucial to diplomacy."⁹⁶

For much of a decade, however, the United States appears to have expected nuclear arms control returns without the necessary investment to warrant adversary interest, i.e., a position of US strength to back US diplomacy. The reality that "strength" is necessary for diplomacy was replaced by the idealistic expectation that US self-restraint would be mimicked by others. The result of this US lapse into idealism is contemporary Russian disdain for US arms control enthusiasm, as reflected in the statement by then-Russian Presidential Chief of Staff, Sergei Ivanov: "When I hear our American partners say: 'Let's reduce something else,' I would like to say to them: 'Excuse me, but what we have is relatively new.' They [the US] have not conducted any upgrades for a long time."⁹⁷ The lessons of the past should once again inform US arms control expectations and actions in this new era of intense Great Power competition—whether in prospective diplomatic engagements with Russia, North Korea or Iran.

https://www.pri.org/stories/2017-07-05/case-trump-negotiating-north-korea. See also, Strobe Talbott, "U.S.-Russia arms control was possible once – is it possible still?," *Brookings.edu*, December 12, 2017, available at https://www.brookings.edu/blog/order-from-chaos/2017/12/12/u-s-russia-arms-control-was-possible-once-is-it-possible-still/.

sign-of-hope.html. Joe Cirincione, "North Korea Just Got a Little Scarier," *The Huffington Post*, April 6, 2016, available at https://www.huffingtonpost.com/joe-cirincione/north-korea-just-got-a-li_b_9628268.html. Christopher Woolf, "The case for Trump negotiating with North Korea," *PRI.org*, July 5, 2017, available at

⁹⁵ Ironically, some noted arms control enthusiasts have criticized the 2018 NPR for highlighting the importance of enforcing arms control agreements. Michael Krepon, "The Most Dangerous Word in the Draft Nuclear Posture Review," *Defense One*, January 23, 2018, available at https://www.defenseone.com/ideas/2018/01/most-dangerous-word-draft-nuclear-posture-review/145403/.

⁹⁶ George P. Shultz, *Turmoil and Triumph: My Years as Secretary of State* (New York: Charles Scribner's Sons Macmillan Publishing Company, 1993), pp. 351, 375.

⁹⁷ Interfax, "Russia not interested in U.S.-proposed arms reduction - Russian presidential chief-of-staff," *RBTH.com*, March 5, 2013, available at https://www.rbth.com/news/2013/03/05/russia_not_interested_in_us-proposed_arms_reduction_-russian_presidenti_23504.html.



INFORMATION SERIES Issue No. 431 | May 21, 2018

Conclusion

The international threat environment is in the midst of a significant transition from the immediate post-Cold War period to an era that is much more challenging. During the initial decades following the Cold War, many Western leaders anticipated a "new world order" in which nuclear weapons would play an ever-declining role because nuclear threats had, supposedly, become a thing of the past. With the collapse of the Soviet Union, the US security focus was on regional conflicts and countering terrorism, missions for which nuclear weapons seemed to have little or no role. Correspondingly, the question of nuclear deterrence and the US forces and infrastructure required for nuclear deterrence was not a high priority; indeed, to the extent that US policy focused on nuclear weapons, it was largely on reducing their salience and numbers as milestones toward their elimination.

However, the expected "new world order" never arrived, and potential foes never embraced the US goal of reducing the salience and number of nuclear weapons as milestones toward nuclear disarmament. Indeed, over the past decade and more, they have instead moved in wholly contrary directions in support of their efforts to change established orders in Europe, Asia, and prospectively the Middle East. Consequently, the new security environment of the 21st Century is characterized by: intensified Great Power competition; the renewed prominence of nuclear threats against the West by Great Powers and rogues; and, profound uncertainties about the future. The future may, or may not, include more benign directions and phases, but realization of the earlier-expected "new world order" would require a prior cooperative transformation of the international system – a transformation unknown in history.

Given these harsh realities, the basic nature of deterrence endures, but the character of US deterrence strategies must adapt to a new era. This demands a departure from many of the nuclear policy directions that emerged, on a bipartisan basis, over the past two decades based on the presumption of an increasingly benign future. In short, despite serious efforts to leave nuclear deterrence, forces and thinking in the dustbin of history, the United States must once again confront the world as it is and invest in the thinking, nuclear capabilities and infrastructure critical to the deterrence of strategic attacks, nuclear and non-nuclear. The nature of deterrence endures, but its character must change.

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