

# ALIGNING ARMS CONTROL WITH THE NEW SECURITY ENVIRONMENT

MICHAEL ALBERTSON, EDITOR

Center for Global Security Research  
Lawrence Livermore National Laboratory  
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# Preface

*Michael Albertson*

More and more, people are looking back to history for guidance on how to proceed in the coming period of great power competition, a competition with a strong nuclear component that is unregulated by the types of arms control we have grown comfortable with over the last five decades. The early 1960s in particular was a period of great intellectual challenges, as analysts wondered how the nascent field of arms control, nonproliferation, and risk reduction would cope with the expanding nuclear competition between the United States and Soviet Union, along with the increasing numbers of nuclear states. And one of the key lessons from that period many are relearning today is the pressing need to link arms control and nonproliferation strategy with the broader deterrence, armaments, or national security strategy. Each has positives and negatives. Both work better when in close concert. Each often runs into trouble when pursued alone.

This relinkage is critical because these sets of communities grew apart over the post-Cold War era and broke down further into small distinct tribes. The dissolution of the Arms Control and Disarmament Agency in 1999 resulted in the loss of the major unifying bureaucratic actor in the interagency that handled these issues. Every arms control treaty or nonproliferation mechanism learned to exist in their respective organizational stovepipes. Conventional arms control people rarely interacted with those working on nuclear arms control issues. Biological and chemical experts grew apart. Similarly, nuclear arms control people rarely engaged with their counterparts focused on nuclear nonproliferation.

Few U.S. or allied officials had the position or the breadth of expertise to see the overall arms control and nonproliferation landscape. Fewer still could see the interactions between arms control policy and for the broader regional or global security policy which the regimes were meant to bolster and support. Without the necessary connective tissue within the arms control and non-proliferation worlds or between those worlds and deterrence policy, discussions between the camps became increasingly strained zero-sum conversations along the lines of “My treaty versus your treaty” or “Your legal obligations versus my security requirements.” After failing to adapt to a new security environment and losing their broader coalition of advocates, agreements and treaties began to erode, and then some disappeared entirely.

Dynamics are now pushing these tribes back together. Senior U.S. officials highlight in their speeches the critical interrelationships between deterrence and arms control. The mantra of “integrated deterrence” encourages a renewed focus on bringing disparate pieces to the table to meet new challenges and threats. The first page of the 2022 Nuclear Posture Review highlights that “deterrence alone will not

reduce nuclear dangers. The United States will pursue a comprehensive and balanced approach that places a renewed emphasis on arms control, nonproliferation, and risk reduction to strengthen stability, head off costly arms races, and signal our desire to reduce the salience of nuclear weapons globally.” Likewise, the 2023 Strategic Posture Commission report states in parallel with its recommendations on U.S. nuclear forces that “the Commission believes it is of paramount importance for the United States to work to reduce strategic risks.”

The time is therefore appropriate for some new thinking on how arms control and nonproliferation can align with the new security environment. Hard questions abound. How will strategic stability and arms control fit into the emerged and emerging world of great power competition with Russia and China? What exactly do we want in an arms control agreement with Russia and China? What is the role for organizations like NATO in this landscape? Will the arms control and nonproliferation regimes evolve or die? Where does risk reduction fit into this world? To address these questions, this Occasional Paper has included a selection of essays from people with many decades of professional experience working and thinking across the worlds of arms control, nonproliferation, and deterrence. These are some of the very few who have truly seen both sides of the proverbial coin in the world of deterrence and arms control.



# Strategic Stability, Strategic Rivalry, and Arms Control's Fate

Brad Roberts

A renewal of arms control seems plausible only on the basis of judgments in Moscow, Beijing, and Washington D.C. that some new deal advances equitably the interests of each. Among Western arms control experts there appears to be a common judgment that strategic stability will ultimately suffice for this purpose. That is, many seem to believe that, sooner or later, leaders in Moscow and Beijing will rediscover the importance of cooperating with Washington and exercising some restraint in their nuclear postures so as to reduce crisis and arms race instability. I disagree. In my judgment, Moscow and Beijing are unwilling to join Washington in safeguarding strategic stability as Washington conceives it—and further efforts to persuade them to do so are likely to be as unrewarded as past efforts. Indeed, simply waiting for them to join with us may actually do more harm than good. The renewal of arms control will have to be sought on some other source. And the pursuit of strategic stability will have to proceed on some other basis.

To make my case, this chapter proceeds as follows. It begins with a brief review of the strategic stability concept, beginning with its genesis early in the Cold War. It then elaborates the conventional wisdom that has emerged among arms control experts on the potentially central role of strategic stability in the renewal of arms control. This logic chain is then tested against recent experience. The chapter ends with a discussion of conclusions and implications. These emphasize the need for a strategy for stability in which arms control has a potentially important supporting role, as opposed to an arms control strategy in which strategic stability has a potential supporting role.<sup>1</sup>

## Strategic Stability from 1957 to 1991 and Beyond

The concept of strategic stability was a child of the Cold War. Writing in 2012, Thomas Schelling described “the journey” from 1957 to 1972 as U.S. thinking on strategic stability took shape in response to intensifying U.S.-Soviet rivalry, nuclear competition, and growing concern about the possibility of surprise nuclear attack.<sup>2</sup> He described a two-step process. The first was growing “recognition that deterrence via threat of retaliation depended on the recognized ability of a retaliatory force to survive an attack intended to destroy it and that the U.S. retaliatory force was not able to

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1 The views expressed here are those of the author and should not be attributed to his employer or any of its sponsors. The author is grateful for comments on earlier drafts of this essay by Mike Albertson, Lewis Dunn, Max Hoell, Vince Manzo, and Anna Péczeli.

2 Thomas Schelling, “Foreword,” in Elbridge Colby and Michael Gerson, *Strategic Stability: Contending Interpretations* (Carlisle Barracks, PA: U.S. Army War College Strategic Studies Institute, 2013).

promise its own survival.”<sup>3</sup> Accordingly, the United States took a number of unilateral actions to stabilize deterrence, such as putting a portion of the bomber force on airborne alert, moving to solid-fueled Minuteman missiles capable of quick launch, and developing the sea-based force.

The second step followed the dawning awareness that the fear of surprise attack was reciprocal.<sup>4</sup> Accordingly, experts came to understand that the U.S. interest in avoiding nuclear war required also that the Soviets too have confidence in the ability of their nuclear forces to survive preemptive attack.

When Secretary McNamara testified to the Senate that we were developing invulnerable systems of retaliation and that he was pleased that the Soviets were doing the same, some questioned why he did not prefer the enemy to be susceptible to our attack. He answered that the Soviets could not possibly entertain any idea of attacking the United States unless they thought they were vulnerable to a preventive or preemptive attack.<sup>5</sup>

Thus, the United States reluctantly concluded that mutual assured destruction (MAD) was the only viable basis for a stable nuclear relationship with the Soviet Union. As Schelling observes, “McNamara then persuaded the Soviets that ballistic missile defenses were complementary to pre-emptive attack and contrary to the stability of mutual deterrence.”<sup>6</sup> The Anti-Ballistic Missile Treaty (ABM) was agreed in 1972. It reflected a common interest in reducing pressures to escalate to the nuclear level in an unfolding military confrontation.

But the ABM Treaty did not put a brake on the development of strategic forces that accelerated after the Cuban missile crisis. The Limited Test Ban Treaty of 1963 reflected a shared interest in Washington and Moscow in constraining the large scale nuclear testing programs then underway. It took Washington and Moscow a few more years to find a common interest in capping the competitive effort to build ever more numerous forces. Thus, the Strategic Arms Limitation Treaty (SALT I) was agreed in 1971.

And the journey was complete. Experience, analysis, and dialogue helped to reveal common interests of the United States and Russia in reducing nuclear risks by reducing the risks of unwanted pressures to escalate in crisis and concerns that the

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3 Ibid., p. v. See also Albert Wohlstetter, “The Delicate Balance of Terror,” *Foreign Affairs* (January 1959) (an article based on a RAND product of the same title, 1958).

4 John T. McNaughton, “Arms Restraint in Military Decisions,” *Journal of Conflict Resolution* 17, no. 3 (September 1963), pp. 228-334.

5 Schelling, “Foreword,” p. vii.

6 Ibid., pp. vi-vii.

other might be seeking to escape MAD via an arms race. The ABM Treaty addressed the risks of crisis instability; SALT I addressed the risks of arms race instability.

The period from 1972 to 1990 might be considered the Golden Age of strategic stability. Ongoing dialogue between East and West, both unofficial and official, generated concepts and approaches to safeguard strategic stability in the form of confidence and security-building measures (CSBMs) in Europe and ever more ambitious arms control mechanisms. To be sure, there was some tarnish on the gold, as there were in both the Soviet Union and United States some who dissented strongly from MAD and saw an escape in missile defense.<sup>7</sup> In June 1990, it was still possible, however, for Washington and Moscow to issue a joint statement on strategic stability.<sup>8</sup>

But since then, convergence has given way to divergence and clarity to confusion. As discussed further below, Moscow and Washington have diverged in their assessments of the threats to strategic stability and the needed responses.<sup>9</sup> Washington was the first mover, with its withdrawal in 2001 from the ABM Treaty to gain the flexibility to meet the threat posed by the proliferation of long-range missiles and weapons of mass destruction to regional challengers. Moscow was the second mover but had far greater impact on the legacy regime, which Putin and others believed to be part of the U.S. strategy to keep Russia weak.<sup>10</sup> Though willing to join the New START Treaty in 2010, Moscow turned hostile to the legacy regime, choosing covert non-compliance with multiple treaties over formal withdrawal.<sup>11</sup> Beijing was a resolute bystander that has evolved from skeptic to critic of U.S. concepts and approaches as self serving.

Official and unofficial dialogues have been ineffective at stemming this divergence and even less to the generation of new intellectual capital. Part of the problem is a weakening of the will to cooperate in an era of intensifying rivalry. But part of the problem is also the new complexity of a security environment that is growing more multipolar in character and the spillover of military competition from the nuclear into other domains (e.g., cyberspace and outer space). Surveying this complex new landscape in 2012, Schelling argued as follows:

Now we are in [a] different world, a world so much more complex than the world of the East-West Cold War. It took 12 years to begin to comprehend the “stability” issue after 1945 but once we got it we thought

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7 Keith Payne, *Strategic Defense: “Star Wars” in Perspective* (New York, NY: Hamilton Press, 1986).

8 Signed at the Soviet-U.S. summit (June 1, 1990).

9 For snapshots from 2012, see Matthew Rojansky, “Russia and Strategic Stability” and Lora Saalman, “Placing a Renminbi Sign on Strategic Stability and Nuclear Reductions” in Colby and Gerson, *Strategic Stability*, pp. 295-342 and 343-382.

10 Remarks by President Putin to the Russian Duma on the occasion of the annexation of Crimea (March 18, 2014).

11 See the annual report of the Department of State on *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament and Related Commitments*.

we understood it. Now the world is so much changed, so much more complicated, so multivariate, so unpredictable, involving so many nations and cultures and languages in nuclear relationships, many of them asymmetric, that it is even difficult to know how many meanings there are for “strategic stability” or how many different kinds of stability there may be among so many different international relationships, or what “stable deterrence” is supposed to deter in a world of proliferated weapons.<sup>12</sup>

We may be disappointed that strategic perspectives have diverged as rivalry has intensified—but we should not be surprised.

### **The Envisioned Pathway to Renewal**

In response to this dreary landscape and amidst rising nuclear dangers, the Western arms control community has not been idle. Indeed, it has been broadly engaged in generating new concepts and proposals. This body of work suggests a possible pathway to the renewal of arms control built on three key judgments. These are the judgments that:

- Russia and China can be persuaded to join the United States in dialogue on strategic issues that is substantive, sustained, and high level
- Dialogue will reveal common interests in avoiding nuclear dangers
- This discovery will motivate leaders to cooperate to safeguard those common interests, first with politically binding CSBMs and then with legally binding arms control agreements.

For example, a 2020 report of U.S.-Russian strategic stability published by the Deep Cuts Commission argued that “New dialogue tracks...can help to limit the further erosion of strategic stability while increasing predictability...and serve to facilitate discussion around emerging challenges that traditional arms control architecture was not designed to address.”<sup>13</sup>

As a second example, consider a 2023 paper on U.S.-China strategic stability published by the Arms Control Association:

The United States will have to adopt a more incremental approach to China on the basis of a shared interest in reducing nuclear risks and forestalling a dangerous arms race....Dialogue is an essential first

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12 Schelling, “Foreword,” pp. vii-viii.

13 Andrey Baklitskiy, Sarah Bidgood, and Oliver Meier, *Russian-U.S. Strategic Stability Talks: Where are they and where should they go?* Issue Brief #13, Deep Cuts Commission (October 2020).

step toward transparency and confidence building measures as initial goals and eventually toward arms control agreements. Improved mutual understanding of each other's security perceptions and concerns by itself may help shape the trajectory of China's nuclear expansion.<sup>14</sup>

We too at CGSR have also contributed such arguments. For example, a 2020 Occasional Paper on major power rivalry and risk reduction concluded as follows:

To reduce the risks of crisis mismanagement by the major powers, a broadening of the nuclear dialogue among the five nuclear weapon states would be useful. It also appears possible, given their shared interest in sustaining the taboo against nuclear employment. To help reduce the risks of miscalculation arising from mis-understanding, and to help ensure leadership focus on nuclear risks, strategic dialogue between and among Russia, China, and the United States and its allies should occur on a sustained, substantive, high-level basis.<sup>15</sup>

As Schelling's essay attests, this approach worked well in the Cold War. And it has enjoyed strong advocacy in the decades following the Cold War. For example, in high-profile op-ed from 2007, Henry Kissinger, Sam Nunn, William Perry, and George Schulz made a forceful case for a "bold initiative" by the United States to take the next step toward disarmament, arguing that the "first and foremost" objective should be "to turn the goal of a world without nuclear weapons into a joint enterprise" through high-level dialogue.<sup>16</sup>

Has that "joint enterprise" emerged? Have substantive dialogues been created that revealed common interests and helped create the political will to act upon them? Are Moscow and Beijing today interested in strategic dialogue? Do they perceive common interests with Washington? Are they willing to join in new cooperative measures? Will the war against Ukraine prove a temporary or long-term obstacle to substantive dialogue on these topics?

## **Russia and Strategic Stability**

Is Moscow willing to engage in dialogue on strategic stability? It has certainly been willing to come to the table to present its views. During the Obama administration, Russian and American experts convened at three plenary meetings of the Arms Control and International Security Working Group, along with various

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14 Lynn Rusten and Mark Melamed, "The Three-Competitor Future: U.S. Arms Control with Russia and China," *Arms Control Today* (March 2023). This follows in the mainstream of thinking developed and supported by the Nuclear Threat Initiative.

15 Brad Roberts, editor, *Major Power Rivalry and Nuclear Risk Reduction: Perspectives from Russia, China, and the United States* (Livermore, CA: Center for Global Security Research, 2020), p. 6. See also Christopher S. Chivvis, *Strengthening Strategic Stability with Russia* (Santa Monica, CA: RAND, 2017).

16 Shultz et al., "A World Free of Nuclear Weapons," *The Wall Street Journal* (January 4, 2007).

non-plenary interactions under the U.S.-Russia Bilateral Presidential Commission. During the Trump administration, experts convened five times in a re-branded strategic security dialogue. The Biden administration conducted three more such meetings before all such activities were suspended in reaction to Russia's invasion of Ukraine in winter 2022.

Has dialogue been successful in generating convergence on a set of shared interests? It may have been helpful in the common decision to extend New START, taken in February 2021. Similarly, it may have helped persuade Presidents Biden and Putin to re-launch a strategic stability dialogue, a decision taken in June 2021. As President Biden argued at the time, "We'll find out over the next six months to a year whether we can actually have a strategic dialogue that matters."<sup>17</sup> President Putin argued that "the main result [of dialogue] are these flashes of trust," to which President Biden responded: "This is not about trust. This is about self interest and verification of self interest."<sup>18</sup>

Among the expert community, there has been some noteworthy narrowing of differences. In 2009, experts were far apart in their views of the fundamental nature of the strategic military relationship between the United States and Russia, with U.S. experts generally expecting improving relations and Russian experts generally perceiving a more adversarial relationship; by 2021, the adversarial quality of the relationship was widely recognized by both. There has also been some narrowing of views on the need to update Cold War vintage concepts. Few Americans would disagree with Dmitri Trenin's 2019 observation that the original definition of strategic stability (the absence of incentives for either side to launch a first nuclear strike) "hasn't lost its meaning but is no longer sufficient."<sup>19</sup> But few American experts would agree with the details of "new security equation, taking into account all strategic stability factors and modern military technologies" set out in December 2021 by Foreign Minister Sergei Lavrov.<sup>20</sup> In the words of Valery Gerasimov, this equation "encompasses all types of offensive and defense weapons influencing strategic stability, as well as new spheres of confrontation such as cyberspace, outer space, and artificial intelligence."<sup>21</sup>

At the official level, Washington and Moscow appear to remain very far apart on these issues. Nine months after the launch of a six-month process noted above, a few weeks into the war in Ukraine, Deputy Foreign Minister Sergei Ryabkov brought

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17 From the post-summit press conference (June 16, 2021).

18 Ibid.

19 Dmitri Trenin, "Strategic Stability in the Changing World," Carnegie Moscow Center (2019). See also Dmitry V. Suslov, "Strategic Stability," *Russia and Global Affairs* (2020), pp. 122-128.

20 "Russia's 'Security Equation' can strengthen global stability—General Staff," TASS Russian News Agency (December 9, 2021). See also Sergei A. Karaganov and Dmitry V. Suslov, *The New Understanding and Ways to Strengthen Multilateral Strategic Stability*, report of the Higher School of Economics of the National Research University, Moscow (2019). For an American counterpoint, see *Redefining "Stability" for the New Post-Cold War Era*, Occasional Paper No. 1 (Fairfax, VA: National Institute for Public Policy, 2021).

21 "Russia's 'security equation' can strengthen global stability—general staff," TASS.

into sharp focus the divergence of thinking between Moscow and Washington on many fundamental questions, including strategic stability. In remarks to the Valdai Club, he argued that Russia's traditional concerns about strategic stability remain but are now "of a secondary and even peripheral nature."<sup>22</sup> The mutual interest in strategic stability has been superseded by a higher level Russian interest in "global strategic stability," which the Russian Foreign Ministry has defined as requiring, among other things, "an end to closed bloc structures and opposing camps," an end to NATO's "ideologized Cold War approaches," and an end to the effort "by one particular state...to ensure its security separately from the security of the rest of the world and at the expense of the security of other states."<sup>23</sup>

The sources of Russian grievance can be traced back to the 2000s and the fundamental shift in President Putin's thinking about the needed global security architecture that occurred in his first decade as president. In his 2007 speech to the Munich Security Conference, he argued that U.S. unilateralism and the "almost uncontained hyper use of force...is plunging the world into an abyss of conflicts. We have reached that decisive moment when we must seriously think about the architecture of global security."<sup>24</sup> In spring 2014, he went further. In a speech to the Russian Duma explaining his decision to annex Crimea, he argued that the "infamous policy of containment ...continues today...if you compress the spring all the way to its limit it will snap back hard" (while standing under a banner that read "new rules or no rules").<sup>25</sup>

Trenin went on to elaborate just how wide a gap had developed between Russia and the United States before the Ukraine war:

Before confidence building measures can be agreed, a modicum of decency needs to be restored to U.S.-Russian relations. Decency will not bring trust, but it can instill an element of mutual respect and self-respect to the relationship which is painfully lacking now. Without this, the only basis for strategic stability between Russia and the U.S. will remain fear of nuclear war.<sup>26</sup>

The Ukraine war has in fact driven the two sides further apart on these matters. Russia's aggression against Ukraine and numerous war crimes have made a restoration of mutual and self respect, of the kind Trenin called for, implausible for the

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22 Remarks, Sergei Ryabkov, panel discussion on "A World Without START: What's Next?" Valdai Club (March 22, 2022).

23 See the document released by the Russian Foreign Ministry in the period immediately preceding the February 2022 invasion of Ukraine explaining Russia's draft treaty for a new European security order, the reactions of the United States, and Russia's reactions to those reactions. At this writing in summer 2023 it is no longer accessible electronically.

24 Remarks to the Munich Security Conference (February 10, 2007).

25 President Vladimir Putin, Remarks to the Duma (March 18, 2014).

26 Dmitri Trenin, "Surviving in a Deregulated Strategic World" (December 2, 2020) unpublished discussion paper.

foreseeable future. A political deal with Putin for anything other than an end to the war in Ukraine is politically implausible at this time.

The growing divide is also a result of further changes in relevant Russian strategic thought driven by the war. As Alexei Arbatov argued in 2022,

President Putin presented an expanded interpretation of a “threat to the existence of the state.” Speaking about NATO’s possible expansion into Ukraine, he pointed out that “for the United States and its allies, it is a policy of containing Russia...For our country, it is a matter of life and death, a matter of our historical future as a nation. This is not an exaggeration”....These steps and statements...imply a broader interpretation of nuclear deterrence and thus affect strategic stability.... The Ukrainian conflict became the acutest and potentially bloodiest crisis in Europe since 1945....and it deeply wrecked the political foundations of Russia-U.S. strategic stability.<sup>27</sup>

The Russian war against Ukraine has also brought into better focus the current of thinking in Russia favoring nuclear employment in Ukraine, with a large debate erupting around the opinions of Sergei Karagnov in favor of “a difficult but necessary decision”:

The creation of nuclear weapons was the result of divine intervention— God handed a weapon of Armageddon to humanity to remind those who had lost the fear of hell that it exists. That fear is now gone. It needs to be revived....We delayed our preemptive strike and thoughtless set too high a threshold for the use of nuclear weapons...By breaking the West’s will to continue its aggression, we will save humanity...We must go up the escalation ladder quickly enough to achieve the needed Western catharsis...in the end, winners are not judged. And saviors are thanked.<sup>28</sup>

Such arguments are clearly intended to provoke strong reactions, mostly, in this case, within the Russian expert community. Whether they have influenced President Putin’s thinking cannot be known. But we do know that President Putin and his inner circle have gone to great lengths to cast a dangerous nuclear shadow over his war against Ukraine.<sup>29</sup>

In sum, although Moscow is interested in dialogue, that dialogue has been substantively and politically unrewarding from a U.S. perspective. There is no evidence suggesting that Putin’s government has modified any of its views or decided to

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27 A.G. Arbatov, “The Ukrainian Crisis and Strategic Stability,” *POLIS (Political Studies)* 4, pp. 10-31.

28 Sergei Karaganov, “A Difficult but Necessary Decision,” *Profile Magazine* (June 13, 2023).

29 Mary Chesnut, *US/NATO-Russian Strategic Stability and the War in Ukraine* (Alexandria, VA: Center for Naval Analyses, 2023).



reprioritize strategic stability with the United States. There is plenty to remind us of the “treasuring of grievances” that mark Russia’s strategic culture.<sup>30</sup>

In the absence of a convergence of thinking about shared interests, it is hardly surprising that Moscow and Washington have not been able to agree to new cooperative measures. The distance between them 15 years ago already made New START the exception to the new rule. Furthermore, the Obama administration failed to secure the hoped-for follow-on to New START with much deeper reductions in nuclear forces. Its proposals for CSBMs on missile defense in Europe were also rejected [on the argument that the United States “already has too much of both” (confidence and security)].<sup>31</sup>

Today, they are much farther apart. In early June, Jake Sullivan set out the U.S. position as follows: “Rather than waiting to resolve all of our bilateral differences, the United States is ready to engage Russia now to manage nuclear risks and develop a post-2026 arms control framework. We are prepared to enter into those discussions.”<sup>32</sup>

A few weeks later, Lavrov replied:

The START Treaty is a Russian-American agreement that was concluded in completely different conditions in the international arena in relations between Moscow and Washington than those that have developed now due to the West’s declaration of war on Russia through Ukraine in order to inflict a “strategic defeat” on Russia. Under these conditions, there can be no talk of any negotiations on the implementation of the current agreement or new negotiations on strategic stability.<sup>33</sup>

Russia’s war against Ukraine has made it even less likely that Moscow and Washington will soon find common cause in the safeguarding of strategic stability.

## **China and Strategic Stability**

For decades, leaders of the United States have been very interested in strategic dialogue with China. Motivated by China’s military modernization, every U.S. president since George H.W. Bush has sought strategic-level dialogue with China of a sustained, substantive, and high-level kind. And every administration was frustrated in this effort. The George W. Bush administration succeeded in arranging senior-level visits to the relevant military commands but little else. The Obama, Trump, and Biden

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30 Michael Albertson, *Negotiating with Putin’s Russia: Lessons from a Lost Decade of Bilateral Arms Control*, Livermore Paper No. 9 (Livermore, CA: Center for Global Security Research, 2021).

31 Robert M. Gates, *Duty: Memoirs of a Secretary at War* (New York, NY: Knopf, 2014), pp. 157-162, 402-405. The quoted remark was made in a not-for-attribution Track 2 discussion.

32 Remarks by the National Security Advisor to the Arms Control Association (June 2, 2023).

33 Remarks by the Russian foreign minister following the G20 summit (September 10, 2023).

administrations all made repeated high-level proposals for dialogue—all rejected by China. So, are China’s leaders interested in strategic dialogue? The answer is a resounding no—at the official level.

However, China has been willing to engage substantively at the unofficial Track 1.5 level. For about 20 years from the late 1990s, this dialogue process generated a lot of useful content for both sides.<sup>34</sup> At the start, neither side had many experts on the bilateral nuclear relationship and the two communities had little in the way of a common vocabulary. But progress was evident and the dialogue became more substantive. For various reasons, the 1.5 process was essentially terminated in 2019 by both parties, albeit for different reasons.<sup>35</sup> Today, the Chinese expert community in universities and think tanks is increasingly isolated from government and pressured, as in Russia, to toe the Party line.<sup>36</sup>

Has there been any notable convergence of thinking on strategic stability between Beijing and Washington? There are a few encouraging signs. For example, an influential People’s Liberation Army (PLA) expert, Yu Lin, has argued that while “a new strategic stability framework cannot be established overnight...both parties can adopt a number of steps. They should continue to cooperate...”<sup>37</sup>

But at the official level, the convergence that is most striking is between Beijing and Moscow, not Beijing and Washington. Moscow has embraced the longstanding Chinese argument that the United States is pursuing Absolute Security (in the form of freedom from attack and freedom to attack) at the expense of all other countries, including especially those who have sought the protection of nuclear weapons. This complaint about perceived U.S. insults to strategic stability have become a standard element of Russian and Chinese information campaigns and feature prominently in the joint statements on strategic stability of 2016 and 2020. Accordingly, at both the official and unofficial levels, China’s experts have robustly criticized the U.S. pursuit of missile defenses and conventional prompt global strike capabilities as a direct threat to the credibility of China’s nuclear deterrent.<sup>38</sup>

This Sino-Russian convergence reflects shifts in Chinese leadership perspective comparable to those driving Russian policy. The third Taiwan Strait crisis of 1996 awakened China’s leadership to the possibility of war with the United States. The 1999 U.S. bombing of the Chinese embassy in Belgrade was deemed “a barbarous act.” The 2010 Defense White Paper argued that:

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34 Brad Roberts, ed., *Taking Stock: U.S.-China Track 1.5 Nuclear Dialogue* (Livermore, CA: Center for Global Security Research, 2020).

35 See *Ibid.*

36 Ian Johnson, “Xi’s Age of Stagnation: The Great Walling Off of China,” *Foreign Affairs* 102, no. 5 (September-October 2023), pp. 102-117.

37 Lu Yin, “Reflections on Strategic Stability,” in Li Bin and Tong Zhao, editors, *Understanding Chinese Nuclear Thinking* (Washington DC: Carnegie Endowment for International Peace, 2016), pp. 127-147.

38 For more, see Alison A. Kaufman and Brian Waidelich, *PRC Writings on Strategic Deterrence* (Alexandria, VA: Center for Naval Analyses, 2022).

The international situation is currently undergoing profound and complex changes. The advancement toward economic globalization and a multipolar world is irreversible. But international strategic competition is intensifying, global challenges are becoming more prominent, and security threats are becoming increasingly integrated, complex, and volatile.<sup>39</sup>

In 2019, a senior official of the Ministry of Foreign Affairs offered an elaboration of China's views:

The global strategic security situation has dramatically worsened over the past few years. Unilateralism and hegemonism are rising in international relations...Returning to the cold war mentality, the U.S. has withdrawn from or reneged on a host of multilateral arms control agreements, with the aim of seeking unilateral and overwhelming military superiority. These actions...will not only bring about strategic security dilemmas for other countries but will eventually harm the U.S.'s own national security interests.<sup>40</sup>

These ideas were reiterated four years later in a working paper on nuclear risk reduction.<sup>41</sup>

Given Beijing's rejection of official dialogue and the absence of convergence in strategic perspective, it is hardly surprising that China has rejected cooperative measures. China rejects arms control at this stage in its military development. In an argument widely accepted among China's experts, officials assert that arms control is part of a U.S. plan to trick China into a competitive, Cold War-like nuclear relationship and an arms race that the U.S. plans to win. China's experts also argue that the obligations to disarm still fall heavily on the United States and Russia and that China will join at a later time when rough numerical parity has been reached (a shifting goal post).<sup>42</sup>

Like Russia, China has also not seen a benefit in mutual CSBMs related to strategic capabilities. It advocates instead for unilateral transparency measures by the United States, on the argument that the stronger of two adversaries has the duty to persuade the weaker that its vulnerabilities will not be exploited to the stronger power's advantage. China's experts also argue that there is a fundamental difference

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39 *Defense White Paper 2010*, Ministry of Defense, Beijing.

40 Fu Cong, director general of the Department of Arms Control, Ministry of Foreign Affairs, 16<sup>th</sup> PIIC Beijing Seminar on International Security, Shenzhen, China (October 16, 2019).

41 Working Paper on Nuclear Risk Reduction submitted by China to the Preparatory Committee for the 2026 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (August 8, 2023).

42 Henrik Stahlhane Hiim and Magnus Langset Troan, "Hardening Chinese Realpolitik in the 21<sup>st</sup> Century: The Evolution of Beijing's Thinking about Arms Control," *Journal of Contemporary China* (2021), pp. 1-15. See also David Santoro, "Getting Past No: Developing a Nuclear Arms Control Relationship with China," *Journal for Peace and Nuclear Disarmament* 6, no. 1 (2023), pp. 68-86.

in the way confidence and trust are generated in Chinese and Western societies. In the West, the process is bottom-up; that is, confidence is built with the experience of cooperating to solve common problems, which then percolates up to embolden leaders to attempt more ambitious forms of cooperation. In China, they argue, the process is top-down; that is, leaders must first agree to trust one another and then technical cooperation can follow. China's experience with the U.S.-backed Cooperative Threat Reduction (CTR) Program of the 1990s is sometimes discussed in this context. That program was abruptly terminated in 1997 following allegations that Chinese spies operating within the CTR framework had stolen weapons designs from U.S. nuclear facilities. Chinese experts judge that the experience validates their top-down views of confidence and trust building: in the absence of political agreement at the top (in the United States), cooperation at the technical level produced not trust but distrust. As one senior Chinese official put it to me, "The entire experience set us back two or more decades in building our nuclear cooperation."<sup>43</sup>

### **The U.S. and Strategic Stability**

Is there something more or different that the United States might have done to secure a better result?

The United States might have chosen to accept mutual nuclear vulnerability as the basis of the strategic relationship with North Korea and other regional challengers. The commitment to try escape such a relationship was the primary driver of the U.S. decision to withdraw from the Anti-Ballistic Missile Treaty in 2001. But it rejected this choice for good reason—mutual deterrence with such states would be unreliable and destabilizing.

The United States might have relinquished some of its freedom of maneuver vis-à-vis regional challengers in a bid to gain more stable strategic relations with Russia and China. A U.S. offer to put legal constraints back on its development of missile defenses would likely bring Moscow and Beijing back to the arms control table.<sup>44</sup> But these are anathema to the bipartisan commitment to as much missile defense as technology and money make possible.

The United States might have paid more and earlier attention to Russian and Chinese security perceptions and to their adjustments to their military strategies and postures. While reassuring Russia and China that the U.S. pursuit of missile defense and deep precision strike capabilities were not intended to undermine their strategic deterrents, Washington worried little about the adaptations Russia and China began to make to ensure that their deterrents would remain credible in the eyes of the United States and its allies. Only slowly and grudgingly over the last decade has U.S. policy attention returned to the challenges of deterring and, if necessary, defeating Russia

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43 The remark was made in a not-for-attribution Track 1.5 discussion in Beijing in 2008.

44 In a little noticed but important policy shift, the Biden administration's *Missile Defense Review* does not include a statement ruling out missile limitations as a matter of policy—a statement found in the reviews of the two preceding administrations.

or China in a war under the nuclear shadow. It is only now beginning to understand their new ways of war and to think through the challenges of facing two nuclear peers simultaneously.<sup>45</sup> But the lack of attention is well explained by the singular focus until 2014 or so on the war on terror, insurgencies in Iraq and Afghanistan, and the effort to quash the violent Islamic State.

The United States might also have chosen to offer a definitive answer to a core question posed by China. Noting that the United States accepts MAD with Russia but rejects it with rogue states, China wants to know where it stands. Does the United States accept mutual vulnerability as the basis of the strategic relationship with China? And as it appears to do so, why is it unwilling to say that it does? The case for accepting mutual vulnerability is strong. But the risk that such a message would be received in Beijing as a message of appeasement is high, thereby weakening deterrence.<sup>46</sup> So Washington has been mute.

The United States might have better aligned its stability strategies and defense strategies. U.S. defense strategies and officials have sought full spectrum ambitions, strategic overmatch, and enduring strategic advantages. Of course, these ambitions made alarm bells ring in Moscow and Beijing. Dmitry Trenin spoke for many with the argument that “the United States will continue to strive for strategic superiority over Russia and China.”<sup>47</sup> But there is no basis for thinking that U.S. restraint would have been reciprocated.

The United States might have done these things but didn't, and generally for good reason. In any case, there is no going back. Moreover, it's not clear that doing any of these things differently would have put us in a substantially better place. As argued above, the major drivers in changes in strategic policy in Moscow and Beijing were their perceived vulnerability in the post-Cold War “unipolar moment” and the ambition to accelerate the arrival of a more multipolar system.

Despite decades of disappointment, the United States has remained steadfast in its pursuit of strategic stability through dialogue and cooperation. Each new administration seems to have arrived confident that its new approach could finally set the right things in motion. It has been patient and persistent, like the two characters in the famous Samuel Beckett play *Waiting for Godot* (who never turns up, thus leaving them unfulfilled in their purpose in life).

In my judgment, the time for waiting for Godot has passed. While the United States has waited for opportunities to cooperate with Russia and China on strategic stability, it has given at best episodic attention to what else it might do about strategic stability

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45 Brad Roberts, *On Theories of Victory, Red and Blue*, Livermore Paper No. 7 (Livermore, CA: Center for Global Security Research, 2020) and Roberts, study group chair, *China's Emergence as a Second Nuclear Peer: Implications for U.S. Nuclear Deterrence Strategy* (Livermore, CA: Center for Global Security Research, 2023).

46 David Santoro, ed., “US-China Mutual Vulnerability: Perspectives on the Debate,” Special Issue of *Issues and Insights*, Pacific Forum International 22, SR2 (May 2022).

47 Trenin, “Surviving in a Deregulated Strategic World.”

and instability. Only infrequently has it considered what it is necessary and possible to do without their cooperation.

Moreover, the patient and persistent search for cooperative measures may well have been received in Moscow and Beijing not as intended (as a message of conciliation and restraint) but as confirmatory proof of a preexisting judgment that the United States is in decline and retreat and too divided politically to respond to the adjustments in military policy and posture taken by Russia and China in preparation for conflict with the United States.

A recent analysis of U.S.-Chinese strategic relations illuminates the risks of too much of the wrong kind of dialogue: Writing in *Foreign Affairs*, Michael Beckley has argued as follows:

Talk enough, some analysts contend, and the United States and China might even strike a grand bargain...From this perspective, the dismal state of U.S.-Chinese relations is not an inevitable result of two ideologically opposed great powers clashing over vital interests. Rather, it is a mix-up between partners, blown out of proportion by the United States's overreaction to counter China's overreach...The history of great power rivalry, and of U.S.-Chinese relations in particular, suggests that greater engagement is unlikely to mend ties between the countries and, if performed hastily, could actually catalyze violent conflict. Of the more than two dozen great power rivalries over the past 200 years, none ended with the sides talking their way out of trouble....The United States and China are unlikely to buck this pattern. Their vital interests conflict and are rooted firmly in their respective political systems, geographies, and national experiences....When conflicts of interest between rivals are severe, overeager efforts to induce détente can be destabilizing... The bottom line is that great power rivalries cannot be papered over with memorandums of understanding. Diplomacy is necessary but insufficient to resolve disputes nonviolently. Sustainable settlements also require stable balances of power, which usually emerge not through happy talk but after one side realizes it can no longer compete.<sup>48</sup>

## Conclusions

First, conditions are not ripe for a breakthrough in dialogue on strategic stability with Russia and China. While dialogues with one or both may resume at some point, there is no reason to expect a substantive, sustained, and high-level process with either for the foreseeable future.

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48 Michael Beckley, "Delusions of Détente: Why America and China Will Be Enduring Rivals," *Foreign Affairs* 102, no. 5 (September/October 2021), pp. 11, 15.

Second, some common interests in avoiding unwanted nuclear dangers remain, but different capitals prioritize them differently. The three capitals all seek strategic stability but have different conceptions and agendas for doing so. Dialogue has not brought Moscow and Beijing closer to U.S. concepts and agendas; rather, it has brought Moscow and Beijing closer in their opposition to Washington's preferences.

Third, Russia and China are not prepared to join in CSBMs that increase the confidence and security of the United States, even if there might be some benefit to them. They judge a confident and secure United States to be a source of danger.

Fourth, they are also not prepared to join the United States in arms control deals aligned with U.S. preferences and conditions. They judge U.S. arms control preference as favoring U.S. hegemonism and overwhelming strategic advantage.

Fifth, these conditions appear enduring. They are deeply rooted in the worldviews of the current leaders of Russia and China. In the more multipolar security environment in which they all now live, they have different perspectives and seek stability on their own terms. A return to the Golden Era is implausible.

Sixth, the pathway to a renewal of arms control envisioned by the Western expert community appears very unpromising. This does not mean that the United States shouldn't try; it should make a good faith effort. A new willingness to cooperate may take shape at some future time in Moscow and/or Beijing and the United States should be ready to seize the opportunity with a well-reasoned approach. In the interim, it should not cede to Russia or China the competition for the narrative or the claim to the moral high ground. In any case, it owes Western publics and other stakeholders a vision of what cooperation could produce in the way of improved security, not least because such a vision makes it easier to muster the political support to strengthen deterrence.

Seventh, the failure to adjust U.S. approaches to these new realities comes with certain costs and risks of its own. The principal cost is that instabilities and nuclear risk will continue to grow. The principal risk is that the Waiting-for-Godot strategy is received in Moscow and Beijing, and perhaps allied capitals as well, as confirmatory proof of their conviction that the United States is in decline and retreat and is too paralyzed politically to defend its interests when they are insulted or attacked.

## **Implications**

This line of argument suggests two macro-level adjustments to U.S. strategy. The United States should be exploring bases for future arms control other than strategic stability. These might include, for example, shared interests in avoiding the financial costs of future arms races or in preserving the global non-proliferation and disarmament regimes. And the United States should have a strategy for strategic stability that isn't heavily reliant on success in generating the desired dialogue and cooperation. Such a strategy should be guided by the following first principles.

Prioritize managing instability over eradicating it. The inescapable fact is that the current era is marked by a great deal of strategic instability and complexity that cannot be eliminated.

Prioritize unilateral actions over cooperative ones. In its policy statements and in the design and operation of its military forces, nuclear and otherwise, there is much the United States can do to mitigate sources of instability. The United States must maintain a credible capacity for assured retaliation.<sup>49</sup>

Prioritize allies over adversaries as partners. Adversaries are unwilling to partner on U.S. terms but allies are generally eager to do so. There is much that they can contribute to the “unilateral actions” noted above.

Don’t entirely neglect the de-prioritized factors. Generate lines of effort focused on safeguarding the remaining elements of strategic stability, laying the foundations for future cooperative measures, and cooperating with Russia and China. This should include a line of effort aimed at developing a credible, defensible proposal for replacing New START. But align the level of effort with reasonable expectations—which must be quite modest for the foreseeable future.

Develop more intellectual capital for the new strategic stability challenges in the new era. Schelling’s 2012 essay illuminated the ways in which analysts at RAND generated key insights that propelled decisionmakers along “the journey” to MAD. Today, the new journey across the much more complex landscape Schelling described is being conducted without a great deal of new work by the analytic community on relevant questions—other than by those focused on a renewal of arms control. At the very least, the U.S. government should set out publicly a comprehensive, clear, and compelling U.S. response to Russia’s view of “the new security equation”—and invite work on it.

Re-think the measure of self-restraint that is necessary and appropriate in current circumstances. For the last 30 years, the United States has practiced a great deal of self-restraint, complaints from Moscow and Beijing notwithstanding. It has chosen not to pursue new nuclear military capabilities. It has adhered to an interpretation of the Comprehensive Test Ban Treaty that reportedly constrains it in ways Russia and China are not.<sup>50</sup> It limits its missile defense protection of the American homeland so as not to jeopardize the confidence of leaders in Moscow and Beijing in their strategic deterrents. It has not adapted its strategic nuclear deterrent posture in response to adaptations in the deterrents of Russia and/or China. It has not countered Russia’s buildup of theater nuclear forces in Europe<sup>51</sup> and has no plans to counter China’s

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49 See for example the recommendations on this topic included in the *Report on the Nature of Multilateral Strategic Stability*, International Security Advisory Board, Department of State (April 27, 2016). See also McNaughton, “Arms Restraint in Military Decisions.”

50 From the 2023 arms control compliance report of the Department of State.

51 The exception to this statement is the deployment (during the Trump administration) of a small number of reduced yield warheads (the W76-2) aboard U.S. submarine-launched ballistic missiles. See “Statement on the fielding of the W76-2 low-yield submarined launch ballistic missile warhead” issued by the U.S. Department of Defense (February 4, 2020).



buildup of theater-range missiles. It has not followed Russia and China in assembling the industrial infrastructure for a large-scale future nuclear buildup.<sup>52</sup> It has not developed long-range precision conventional strike capabilities with the urgency of Russia and China. In choosing these forms of self-restraint, U.S. policymakers apparently hoped to inspire similar restraint by others. It hasn't worked. Some analysts advocate for the adoption of additional forms of self-restraint;<sup>53</sup> others argue for a more competitive response. This debate is certain to rise in salience in the immediate future.

*Waiting for Godot* closes with a final exchange between the two protagonists:

- “Well, shall we go?”
- “Yes, let's go.”
- (They do not move.)

On strategic stability, it's time to move out on a new course of action. In an era of mounting nuclear danger, our purpose (to reduce those dangers) must be fulfilled.

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<sup>52</sup> Brad Roberts, ed., *Stockpile Stewardship in an Era of Renewed Strategic Competition* (Livermore, CA: Center for Global Security Research, 2022).

<sup>53</sup> Samuel Charap et al., *Mitigating Challenges to U.S.-Russia Strategic Stability* (Santa Monica, CA: RAND, 2022).

# Dead or Deferred? Nuclear Arms Control in an Age of Revisionism

*Christopher A. Ford*

With Russia engaged in a war of territorial aggression in Europe, China engaged in an enormous nuclear weapons buildup, and neither seeming to have any particular interest in arms control engagement with the United States, the odds of any new arms control arrangement emerging in the near future would seem slim. Despite that, U.S. officials promise “a continued and strengthened commitment to pursuing enhanced security through arms control.”<sup>54</sup>

In this context, therefore, it is important to understand the dynamics of when such progress might be expected, which includes doing more to think systematically about when would-be arms control counterparties might be willing to sit down with each other to negotiate an agreement, and when they might not. This paper hopes to contribute to the scholarship of arms control by exploring some of the dynamics that may lie behind countries’ willingness to engage in arms control talks with each other—and in particular, the way in which mutual perceptions can color such decisions.

The first nuclear arms control agreement ever actually signed and entered into force was the Limited Test Ban Treaty (LTBT) of August 1963.<sup>55</sup> The most recent is the New Strategic Arms Reduction Treaty (a.k.a. “New START”) of 2010,<sup>56</sup> which arrived at a time when a U.S. president was still proclaiming that such a new arms treaty would “set the stage for further cuts” as the United States worked to “lead” progress toward “a world without nuclear weapons.”<sup>57</sup>

Today, by contrast, the current U.S. president—a man of the political left and longtime believer in arms control and the dream of nuclear disarmament<sup>58</sup>—has a starkly different assessment of the security environment and the prospects for arms control and U.S.-led disarmament therein. As I have noted elsewhere, the Biden

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54 U.S. Department of Defense, 2022 National Defense Strategy of the United States of America, Including the 2022 Nuclear Posture Review and the 2022 Missile Defense Review (October 2022) [hereinafter “2022 NPR”], p. 8, <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF> (accessed January 17, 2024). (The NPR is the second of the three documents published in this compilation.)

55 Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space, and Under Water (signed August 5, 1963) (entered into force October 10, 1963), <https://2009-2017.state.gov/t/avc/trty/199116.htm> (accessed January 17, 2024).

56 Treaty Between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (signed April 8, 2010) (entered into force February 5, 2011), <https://2009-2017.state.gov/documents/organization/140035.pdf> (accessed January 17, 2024).

57 Barack Obama, “Remarks By President Obama in Prague as Delivered” (April 5, 2009) [hereinafter “Prague Speech”], <https://obamawhitehouse.archives.gov/the-press-office/remarks-president-barack-obama-prague-delivered> (accessed January 20, 2024).

58 See, e.g., Joe Biden, “Remarks by the Vice President on Nuclear Security” (January 11, 2017), <https://obamawhitehouse.archives.gov/the-press-office/2017/01/12/remarks-vice-president-nuclear-security>, (accessed January 17, 2024).

administration's 2022 Nuclear Posture Review (NPR)<sup>59</sup> sounds a very different note, making clear, in effect, that

nobody should wait by the phone for any particular progress in this regard, and also that the United States has lost patience with trying to “lead” a world so obviously unwilling to follow us toward disarmament.

Any resumed progress toward disarmament, the NPR notes, would require major changes in the “security environment.” Specifically, “major changes in the role of nuclear weapons in our strategies for the [People’s Republic of China] and Russia will require verifiable reductions or constraints on their nuclear forces.” ... If there is to be a chance for resuming post-Cold War progress disarmament, in other words, the burden now lies upon China and Russia to turn things around by stopping their escalatory provocations. That is, alas, exactly correct, but it’s worth highlighting how far this is from the rhetoric even of 2009.<sup>60</sup>

Today, there indeed seems to be very little optimism left in the policy community that arms control has a viable future, at least for some time. Money for arms control-related scholarship has been drying up, with multiple foundations that previously funded nuclear-related policy studies having now ended such support.<sup>61</sup> Today, even fervent supporters are now wondering whether arms control is “dead.”<sup>62</sup>

The following pages thus represent something of an autopsy of arms control as we have known it since the late years of the Cold War. Herein, I attempt to set forth a framework through which to think about the availability of arms control, with particular focus upon how would-be arms control counterparties view each other as potential counterparties. As will be explained hereinafter, this paper suggests a heuristic for thinking through when would-be counterparties might be willing to sit down with each other to negotiate—and, correlatively, when they might not.

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59 2022 NPR, *supra*.

60 Christopher Ford, “Assessing the Biden Administration’s ‘Big Four’ National Security Guidance Documents,” National Institute for Public Policy Occasional Papers 3, no. 1 (January 2023), pp. 17-18 (internal footnote omitted), <https://irp.cdn-website.com/ce29b4c3/files/uploaded/Ford%20NIPP%20paper%20on%20NSS-NDS-NPR.pdf> (accessed January 17, 2024). Bracketed page citations are in the original, and refer to the 2022 Nuclear Posture Review.

61 See, e.g., Ward Wilson, “Why nuclear arms control is dead,” *The Hill* (July 9, 2021) (discussing withdrawal of support for such work by MacArthur Foundation, the John Merck Fund, the Rockefeller Foundation, the Ford Foundation, the W. Alton Jones Foundation, the Compton Foundation, the William and Flora Hewlett Foundation, and the Skoll Foundation), <https://thehill.com/opinion/national-security/561786-why-nuclear-arms-control-is-dead/> (accessed January 17, 2024).

62 See, e.g., Ulrich Kühn, “Why Arms Control is (Almost) Dead,” Carnegie Europe (March 5, 2020), <https://carnegieeurope.eu/strategieurope/81209> (accessed January 17, 2024); Wilson, “Why nuclear arms control is dead,” *supra*; and Alexei Arbatov et al., “Expert Survey: Is Nuclear Arms Control Dead or Can New Principles Guide It?” Belfer Center (July 30, 2019), <https://www.belfercenter.org/publication/expert-survey-nuclear-arms-control-dead-or-can-new-principles-guide-it> (accessed January 17, 2024).

In particular, this conceptual framework explores the relationship between perceptions of the security environment and the opportunities available for arms control. This can be a contentious issue. This study does not contest, and in some respects may be taken to support, the idea that progress in arms control can have a beneficial effect upon threat perceptions, and help moderate competitive pressures in the security environment. This, one might argue, is to some extent what occurred once the United States and the Soviet Union first began to make progress in nuclear force reductions with the Intermediate-range Nuclear Forces (INF) Treaty of 1987.<sup>63</sup> Conversely, it would hardly seem controversial to suggest that the violation of arms control agreements and collapse of arms control institutions can worsen threat perceptions and degrade the security environment—as certainly seems to have occurred with Russia’s cascade of arms control violations in recent years (see below).

At the same time, however, it is more sensitive, at least in some quarters, to assert that the availability of arms control is to some extent also conditioned by perceptions of the security environment, making that relationship reciprocal. Perhaps most obviously, improvements in the security environment may help make arms control and disarmament agreements easier. But it also may be the case that worsening problems in the security environment can make arms negotiation more difficult, perhaps sometimes to the point of unavailability.

As a matter of everyday common sense, it is not obvious why this last proposition should be controversial, for it is at least the case that in interpersonal affairs, perceptions of the trustworthiness and character of one’s would-be counterparty are important to how one evaluates the wisdom (or unwisdom) of negotiating with that person. Why would this not be all the more true in international affairs, particularly since—in contrast with domestic legal contexts—one cannot in the international arena rely upon law enforcement and judicial remedies for noncompliance? Yet this assertion sometimes is indeed contested, with many in the disarmament community resisting it for fear of lending credibility to the idea that much more geopolitical progress in “the easing of international tension and the strengthening of trust between States”<sup>64</sup> will be needed before significant new movement toward disarmament could occur.

To help shed light upon such issues and contribute to wiser policy formation in response to arms control and disarmament challenges, this chapter looks at

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63 Treaty Between The United States Of America And The Union Of Soviet Socialist Republics On The Elimination Of Their Intermediate-Range And Shorter-Range Missiles (INF Treaty) (December 8, 1987), <https://2009-2017.state.gov/t/avc/trty/102360.htm> (accessed January 17, 2024).

64 The phrase comes from the Treaty on the Non-Proliferation of Nuclear Weapons (opened for signature July 1, 1968) (entered into force March 5, 1970), from the Preamble, <https://disarmament.unoda.org/wmd/nuclear/npt/text/> (accessed January 17, 2024), which notes specifically that such easing and strengthening are needed “in order to facilitate” ending the arms race and reaching disarmament agreements. Perhaps not surprisingly, therefore, this wording has sometimes been invoked precisely in the context of pointing out that disarmament will be difficult to achieve in direct proportion to the degree that states still distrust, hate, and fear each other. See, e.g., Christopher Ford, “NPT Wisdom for a New Disarmament Discourse,” remarks to the Ploughshares Fund Conference “Nuclear Weapons Policy in a Time of Crisis,” in Washington DC. (October 26, 2017), <http://www.newparadigmsforum.com/NPFTestsites/?p=2041> (accessed January 17, 2024).

the relationship between the mutual threat perceptions of would-be arms control counterparties and their degree of willingness to seek, and success in negotiating, arms control agreements. It supports the conclusion that threat perceptions rooted in geopolitical rivalries matter a great deal in conditioning the availability of arms control.

It is sometimes said that arms control is needed not despite problems between geopolitical rivals but in fact because of them, and this is not wrong. But this study also points to the possibility that when the relationship between two would-be counterparties becomes too bad, arms control may not always be available even though it might be sorely needed indeed. In assessing the odds of arms control success, in other words, the security environment and geopolitical threat perceptions are very important; sometimes, in fact, a relationship can be so poisonous and untrusting that, for all practical purposes, arms negotiation ceases to be available at all.

As will be detailed hereinafter, this may well have become the case with the United States and Russian President Vladimir Putin. It is not merely, in this respect, that modern Russia is characterized by geopolitical revisionism and engages in brutal wars of territorial aggression, annexation, and empire building. It is also that Putin has engaged in a years-long campaign to systematically weaponize arms control institutions in service of that agenda, using arms control, using the West's commitment and fidelity to arms control institutions, and using the West's commitment to a presumed teleology of inevitable nuclear reductions and fear of nuclear arms racing in order to facilitate Russian aggression and conquest.

The following pages will first explore the idea that along the continuum of reciprocal perceptions in any relationship between would-be negotiating counterparties, there exists an "arms control zone" within which such negotiation is feasible. It will then detail how Russian policy has helped push the Russo-American relationship outside of that zone, into territory where it is very hard to imagine such talks even beginning, much less succeeding.

## **I. Sketching a Conceptual Framework**

To be clear, when discussing the potential availability of arms control, I do not mean its technical availability, in the sense of potential arms control arrangements being imaginable that could objectively reduce risks and help manage the nuclear-weapons-related manifestations of competitive rivalry between counterparties. For present purposes, I am less concerned with whether parties could reach an agreement—or what terms such an agreement might contain—than with how likely the parties are willing to try to reach one, and with how likely it would be (if they did) that they would be able to come to terms. And in those respects, alas, the question goes far beyond simply issues of whether technocratic arms control experts can imagine and articulate ideas for some mutually beneficial arrangement.

In handicapping the odds of agreement, as it were, I posit that broader questions of the nature and intensity of their geopolitical rivalry, and how would-be arms control

counterparties view each other in this context, will have an important impact upon outcomes. Specifically, I posit that the degree to which would-be counterparties trust each other, the degree to which see their security interests as being in at least some respect congruent, and the degree to which they have some sense of shared “community”—a term I use loosely here, to include questions such as whether or not they see themselves as being collectively engaged in some broader endeavor in the world—help shape the de facto availability of arms control.

This is in no way an argument that high degrees of trust, shared security interests, and sense of affinity are requirements for arms control success. As will be explained below, I do not think this. Rather, my argument is fourfold, and focuses upon how would-be arms control counterparties view each other along what might be termed a “continuum of community.”

After outlining that framework, the following pages will explore how well it seems to apply to the real-world history of U.S. arms control engagement with the Soviet Union and the Russian Federation since the late 1980s. Drawing upon authoritative U.S. and Russian expressions conveying leaders’ assessments of the international security environment and each other and articulating their desires and expectations for arms control policy, I will evaluate the two countries’ evolving perceptions and understandings of each other, and compare these perceptions to the actual state of their arms control and disarmament negotiating during this period.

Broadly speaking, I will show that my “continuum of community” construct has utility in understanding the willingness and ability of leaders in Washington and Moscow to engage with each other in arms control negotiation, and that these expressions of trust, security interest, and affinity (or disaffinity) correlate well with real-world arms control outcomes (or the lack thereof). Tracking the would-be counterparties’ perceptions of each other and the factors behind this degradation also provides something of an autopsy of the post-Cold War arms control enterprise, shedding light on why arms control engagement has become so problematic in the current security environment. The final section of this paper will offer some tentative thoughts for U.S. policymakers about the implications that may flow from these analytical conclusions.

## **II. The “Continuum of Community”**

To appreciate the ways in which the contemporary global security environment bodes ill for a continuation of traditional arms control, it is useful to abstract out from specific agreements enough to glimpse the types of circumstances in which arms control is both necessary and possible. To explore this question, I build here

upon a concept that I first broached in 2019 when performing the duties of the under secretary for Arms Control and International Security: the “continuum of community.”<sup>65</sup>

### **A. Arms Control Along the Continuum**

Arms control, in this conception, is a tool that is both necessary and possible only within a specific range along a notional “continuum of community” for describing two would-be counterparties’ relationship—a continuum that stretches “from a sort of amoral Hobbesian anarchy[,], on the one hand, to a quasi-familiar social structure on the other.” How useful arms control can be depends upon where along this continuum their relationship falls:

At one salutary extreme of community, no arms control is necessary to help manage the threats states present to each other at all, for the very good reason that there are no such threats. At this point in our history, for instance, we in the United States neither have nor need that kind of arms control relationship with Britain, Australia, or Canada: there is no “arms problem” in need of solution, and in that context the very idea seems silly.<sup>66</sup>

On this benign end of this continuum—on the figurative left-hand side, if you will—arms control is therefore unnecessary. Here, the sense of community is high, nuclear-related security interests are not seen as conflicting, and inter-governmental trust is strong in ways that create no need for arms control. Indeed, even to suggest the need for an arms limitation treaty vis-à-vis friends might be considered offensive.

Arms control comes into its own, however, as one moves “rightward” along the continuum of community into zones where security interests are more oppositional and trust declines—that is, where there is much less sense of community and more sense of antagonism. There, the structure and formalities of an institutional arms control framework might indeed be useful in helping to channel dangerous competitive energies and manage nuclear risks between rivals.

In this zone, arms control counterparties generally regard each other with considerable worry and concern—which is why arms race and nuclear escalation concerns arise in the first place, making arms control potentially useful—but they retain at least enough minimal sense of community and trust that they regard it as possible (albeit carefully) to make deals with each other. There is no love between such partners, in other words, but this is the territory of what Ronald Reagan—quoting

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65 See Christopher Ford, “Rules, Norms, and Community: Arms Control Discourses in a Changing World,” remarks to the European Union Conference on Nonproliferation (Brussels, Belgium) (December 19, 2019), <https://2017-2021.state.gov/rules-norms-and-community-arms-control-discourses-in-a-changing-world/index.html> (accessed January 17, 2024).

66 Ford, “Rules, Norms, and Community,” *supra*.

a Russian proverb—termed “trust but verify” approaches,<sup>67</sup> in which at least limited agreements are possible if accompanied by appropriate safeguards.

But here’s the rub. So far, in this analysis, I’ve only walked us part of the way along the aforementioned continuum of community—into a zone in which trust is relatively low and security interests conflict, but in which this is not maximally the case. The far right-hand end of the continuum represents circumstances in which there really is no sense of community, interests are felt to conflict perhaps even existentially, and trust is almost entirely lacking. Arms control here at the ugly asymptote, I would suggest, becomes much more problematic, to the point of impossibility, because the parties regard each other with such distrust and antagonism that there is virtually no way that any agreement would really be trusted, and indeed it would be unclear that both parties would actually fully comply with it in the first place.

Hence we have a continuum that stretches both “good” and “bad” extremes, with arms control being able to exist, and perhaps succeed, in the middle. Arms control, one might thus say, is something that is unneeded when things are very good, necessary (but possible) when things are fairly problematic, and likely unavailable (even if needed) when things are very bad.

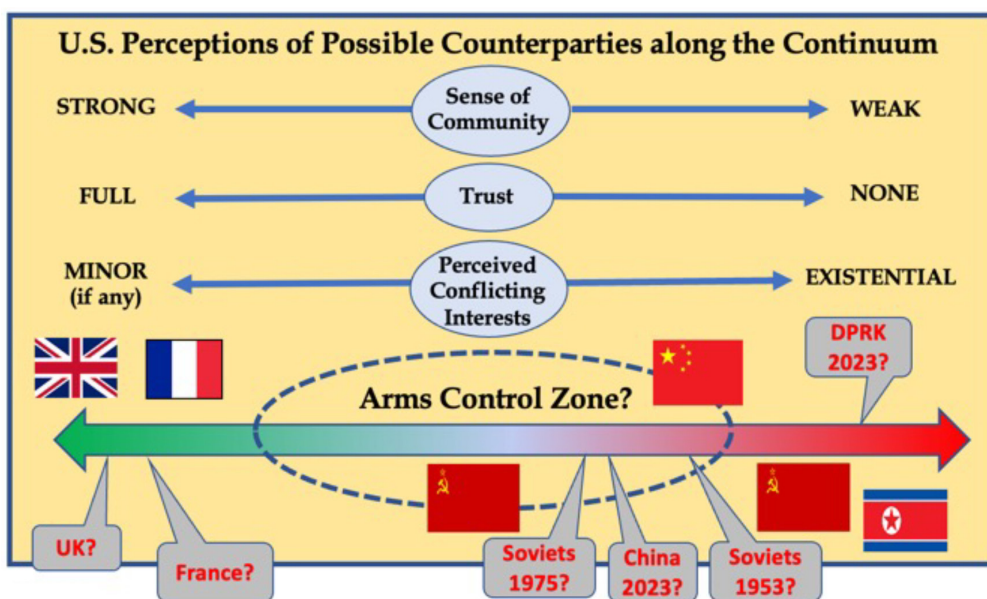


Figure 1.

67 Cf. Nikolai Shevchenko, “Did Reagan really coin the term ‘Trust but verify,’ a proverb revived by HBO’s Chernobyl?” *Russia Beyond* (June 17, 2019) (“This proverb rhymes in Russian – *Doveryai, no proveryai* – and literally means that a responsible person always verifies everything before committing himself to a common business with anyone, even if that anyone is totally trustworthy.”), <https://www.rbth.com/lifestyle/330521-reagan-trust-but-verify-chernobyl> (accessed January 17, 2024). A step beyond “trust but verify,” one might say, is the unofficial motto of the former East German Stasi secret police: “trust is good, but surveillance is better.” Mark Phythian, “Cultures of National Intelligence,” in *Routledge Companion to Intelligence Studies*, Robert Dover, Michael S. Goodman, and Claudia Hellebrand, eds. (New York: Routledge, 2015), p. 36.



One might perhaps offer a graphic representation of this conceptual framework as set forth in Figure 1 above. It image depicts a “continuum of community” along which the sense of affinity between potential arms control partners—here envisioned as the United States (as the perceiver) and one or more other nuclear weapons possessors (as the would-be counterparties perceived)—varies from strong (at the left) to weak (at the right). The degree to which a potential partner possesses sense of community also affects the would-be arms control negotiating parties’ (a) sense of trust in each other’s willingness to abide by agreements reached and (b) perception of conflicting security interests between them. (These things are hypothesized to move in tandem, as distrust, conflicting security interests, and weak sense of community tend to be associated with each other—just as are strong trust, congruent interests, and communal solidarity.)

The availability and utility of arms control as an institutional response to international security problems is represented by the oval area in the middle of the continuum circumscribed by a dotted line: it is in this area that arms control is both needed (due to arms-related tensions between parties) and still possible. To the left of that oval, arms control is unneeded, and its pursuit might actually sour otherwise good relationships. To the right of that oval along the continuum—where trust is minimal, interests are perceived to conflict most dramatically, and there is essentially no sense of common identity—arms control may not be available. Even there, much restraint might actually be needed in the interests of international peace and security, but one should probably not count actual negotiated agreements to provide it.

## **B. Identifying the “Arms Control Zone”**

Figure 1 also attempts—notionally, for discussion purposes, rather than necessarily as the result of extensive study and analysis—to locate various potential U.S. arms control counterparties along this continuum. The United Kingdom and France, for instance, are over toward the far left-hand margin, on the theory that Anglo-American strategic relations have been extraordinarily warm, close, and cooperative since the very beginning of the nuclear age. Moreover, even though France for decades had a famously ambivalent relationship to NATO, Paris and Washington today see very much eye to eye on nuclear-related security issues.

More in the middle, and, notably, within the “arms control zone,” are cases represented by the Soviet Union around 1975, when tensions still ran high between the superpowers—and each, in theory, still believed its own socio-economic “operating system” represented the future of mankind and saw that of the other as anathema—but both capitals had come to accept the idea of geopolitical détente and had also begun to acquire experience in negotiating agreements (e.g., the Strategic Arms

Limitation Treaty [SALT] of 1972<sup>68</sup>) to impose at least some limits on their nuclear arms race.

Perhaps more analytically interesting is the notional location of the Soviet Union in 1953 (the year of Stalin’s death) and contemporary China (under Xi Jinping) somewhat farther along this continuum, near the outer edge of the “arms control zone.” In both cases, perceptions of shared community are weak with the United States, strategic distrust is high, and interests are perceived to conflict sharply. In all three cases, this is largely grounded in structural problems of how these two countries’ geopolitically revisionist ambitions rub up against the predominantly status quo attitudes of the United States and the mutual perception of diametrically opposed ideological interests. I have opted not to place either of these countries at that point beyond the outer perimeter of the “arms control zone” because it is not clear to me that viable agreements are effectively impossible; nevertheless, they are both arguably at or near the limit of the degree of mutual antagonism and distrust vis-à-vis the United States that arms control negotiating could hope to manage without collapse.

### III. Moscow through American Eyes

Rather than locating the contemporary Russian Federation along the continuum merely impressionistically, however, the following pages will attempt to situate Moscow as a would-be counterparty (in U.S. eyes) with a bit more analytical rigor—and to track changes in these perceptions over time—on the basis of a qualitative analysis of what U.S. leaders have actually said about their views. The following pages will thus explore how successive American administrations have viewed Moscow—and the arms control enterprise—through the prism of the trust, security interests, and “community” factors discussed above.

#### A. From Reagan Through Clinton

This study did investigate the evolution of U.S. attitudes from President Ronald Reagan’s 1988 National Security Strategy (NSS)<sup>69</sup> through the George H.W. Bush administration,<sup>70</sup> and then through the multiple National Security Strategies

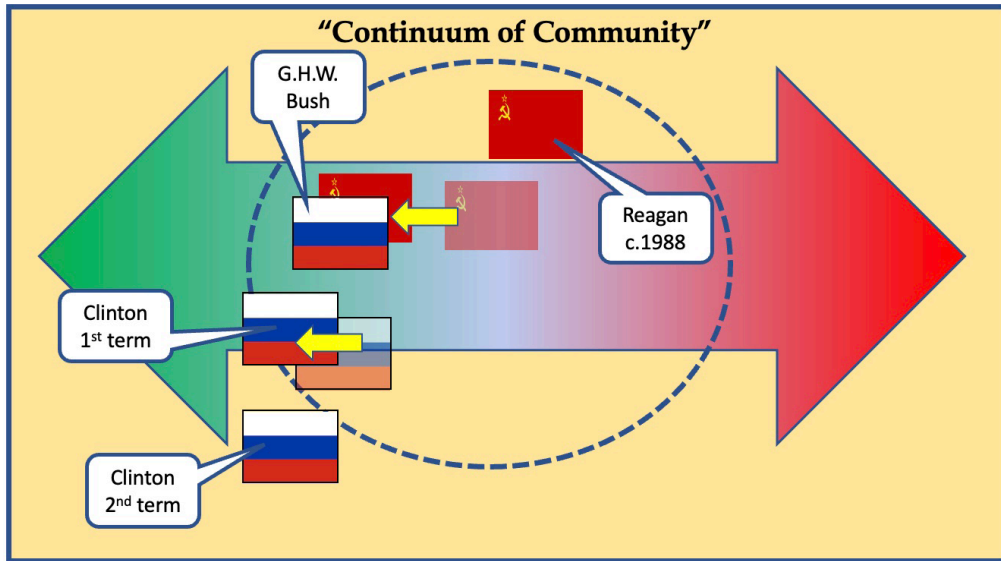
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68 Interim Agreement on certain measures with respect to the limitation of strategic offensive arms (with protocol) (signed May 26, 1972), U.N. Treaty Series No. 13345 (1974), p. 3, <https://treaties.un.org/doc/Publication/UNTS/Volume%20944/volume-944-I-13445-English.pdf> (accessed January 17, 2024).

69 *National Security Strategy of the United States* (January 1988) [hereinafter “1988 NSS”], <https://history.defense.gov/Portals/70/Documents/nss/nss1988.pdf?ver=uXpmo-mTOTKzq2Ut6PmfjA%3d%3d> (accessed January 17, 2024).

70 See, e.g., *National Security Strategy of the United States* (March 1990) [hereinafter “1990 NSS”], <https://history.defense.gov/Portals/70/Documents/nss/nss1990.pdf?ver=x5cw00ez0oak2BjhXekM-Q%3d%3d>; (accessed January 17, 2024); *National Security Strategy of the United States* (August 1991), <https://history.defense.gov/Portals/70/Documents/nss/nss1991.pdf?ver=3slpLiQwmkn0-RplyPeAHw%3d%3d> (accessed January 17, 2024); and *National Security Strategy of the United States* (January 1993) [hereinafter “1993 NSS”], <https://history.defense.gov/Portals/70/Documents/nss/nss1993.pdf?ver=Dulx2wRKDaQ-ZrswRPRX9g%3d%3d> (accessed January 17, 2024).

promulgated by Bill Clinton’s administration.<sup>71</sup> For purposes of brevity here, however, I will merely summarize the progression of U.S. attitudes toward the Soviets and the Russian Federation over that period—a progression notionally depicted in Figure 2.



### Reagan, George H.W. Bush, & Clinton Administrations

Figure 2

In the last years of the Cold War, U.S. perceptions were not nearly as hostile toward the Union of Soviet Socialist Republics (USSR) as they had been even a few years earlier, and over the course of the following few years—as the Soviet Union collapsed and was replaced by a kaleidoscope of successor states—American perceptions evolved from a perspective of cautious optimism to a posture of genuine enthusiasm for engagement with a new geopolitical partner.

Ronald Reagan’s 1988 National Security Strategy had welcomed Soviet “talk of ‘new thinking’ and of basic changes,” while remaining carefully committed to “judg[ing] the Soviets by their actions.”<sup>72</sup> In George H.W. Bush’s administration, however, U.S. talk was full of optimism about further arms control negotiations, which were soon indeed already underway and expected to continue. As early as 1993, in fact, the United States proclaimed that “[o]ur former nemesis the Soviet Union ... [and] [w]e have entered a new era.”<sup>73</sup> In this new environment, helping the Russians

71 There were several such documents, ranging from National Security Strategy of the United States (August 1991), <https://history.defense.gov/Portals/70/Documents/nss/nss1991.pdf?ver=3slpLiQwmknO-RplyPeAHw%3d%3d> (accessed January 17, 2024), through A National Security Strategy for a Global Age (December 2000), <https://history.defense.gov/Portals/70/Documents/nss/nss2000.pdf?ver=vuu1vGikFVV1HusDPL21Aw%3d%3d> (accessed January 17, 2024).

72 1988 NSS, *supra*, pp. v, 27.

73 1993 NSS, *supra*, pp. 1, 1.

was now the order of the day in order “to extend the ‘zone of peace’ and enhance the forces of integration that are evident in the new world.”<sup>74</sup>

These trends advanced further under President Bill Clinton. During his administration, there was almost no articulated sense of threat from Russia, and U.S. leaders’ language and agenda points were focused heavily on finding avenues for cooperation against problems elsewhere—including by collaboratively creating arms control- or disarmament-related institutional frameworks to reduce or preclude the development of threats in the rest of the world. In the eyes of the United States during this period, the two former superpower adversaries were clearly viewed as partners who would be able to work together on “global problem solving.”

In fact, said Clinton in his 2000 State of the Union address, the United States had never before faced “so few external threats.”<sup>75</sup> At this point, the U.S. security agenda had shifted from one of managing security threats from Moscow to one working “to help Russia ... through [its] epic transformations.” Now, the objective was to “integrate all the former Communist countries into a Europe ... unified for the first time in its entire history.”<sup>76</sup>

## **B. George W. Bush Administration**

The second Clinton administration probably represents the high tide of such sweepingly halcyon pronouncements about the benignity of the international environment. Nonetheless, despite the often grimly security-focused discourse that would emerge under the George W. Bush administration in response to terrorist threats, it is still striking how much sense of community, shared interests, and trust there appears to have been vis-à-vis Russia in the younger Bush’s first term.

According to the Bush administration’s 2002 National Security Strategy, for instance, the United States had “moved from confrontation to cooperation ... with Russia” and that it was “building a new strategic relationship based on a central reality of the twenty-first century: the United States and Russia are no longer strategic adversaries.” Indeed, according to the 2002 NSS, Russia was declared to be “a partner in the war on terror,” since shared threats from terrorism had “fundamentally changed the context for relations between the United States and other main centers of global power,” with the result that all the great powers were now “on the same side—united by common dangers of terrorist violence and chaos.”<sup>77</sup> In this context, it

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74 *Ibid.*, p. 6.

75 William J. Clinton, State of the Union Address (January 27, 2000). <https://www.presidency.ucsb.edu/documents/address-before-joint-session-the-congress-the-state-the-union-7> (accessed January 17, 2024).

76 William J. Clinton, State of the Union Address (January 25, 1994). <https://www.presidency.ucsb.edu/documents/address-before-joint-session-the-congress-the-state-the-union-12> (accessed January 17, 2024).

77 *National Security Strategy of the United States of America* (September 2002) [hereinafter “2002 NSS”], from the introductory letter, pp. 13, 26-28, [https://history.defense.gov/Portals/70/Documents/nss/nss2002.pdf?ver=oyVN99aEnrAWijAc\\_05eiQ%3d%3d](https://history.defense.gov/Portals/70/Documents/nss/nss2002.pdf?ver=oyVN99aEnrAWijAc_05eiQ%3d%3d) (accessed January 17, 2024).

was seen as being in America’s interest that Russia be stronger and more powerful, since “Russia’s very weakness limits the opportunities for cooperation” in these respects.<sup>78</sup> This further shift into an American sense of trust, security congruence, and affinity with Russia is depicted in Figure 3.

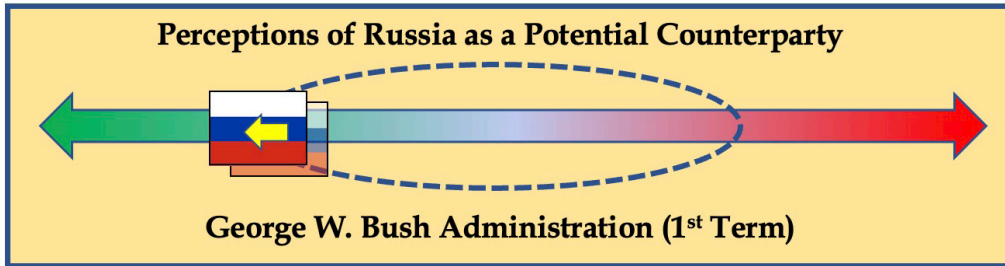


Figure 3

Arguably, the Moscow Treaty of 2002—that is, the Strategic Offensive Reductions Treaty (SORT)<sup>79</sup>—signified the peak of the seemingly post-competitive strategic dynamics U.S. leaders perceived to exist during the post-Cold War period, for that treaty could be said not really to have been “negotiated” at all, as it primarily represented the codification of unilateral nuclear arms reduction decisions that had already been made by each country.<sup>80</sup> (In fact, SORT’s reductions were only made into a treaty at the insistence of Russian officials, who seem to have wanted such codification not because they perceived any danger of U.S. nuclear expansion, but rather because they valued the political symbolism of signaling that Russia remained a superpower entitled to engage formally with the mighty Americans on such matters.<sup>81</sup>) One might say, in other words, that from Washington’s perspective in 2002, at least, it was not really necessary to do any real arms negotiating with Russia anymore at all, for the two powers could each be expected, unilaterally, to wish to reduce armaments in ways befitting their relationship as friends and partners.

The second term of President George W. Bush presents a slightly more complicated picture, for during that period Russia was obviously beginning to slip back into thuggish authoritarianism under Vladimir Putin, even as the United States stepped up its at times almost messianic rhetoric about promoting democracy and defeating “tyranny” worldwide. On the whole, the theme remained one of great power

78 Ibid., p. 27.

79 Treaty Between the United States of America and the Russian Federation On Strategic Offensive Reductions (May 24, 2002). <https://2009-2017.state.gov/t/isn/18016.htm> (accessed January 17, 2024).

80 See, e.g., Colin L. Powell, Moscow Treaty letter of submittal (undated), <https://2001-2009.state.gov/t/ac/trt/18016.htm> (accessed January 17, 2024); see also, generally, 2002 NSS, *supra*, pp. 26-27 (discussing SORT).

81 See, e.g., “Nuclear Arms Control: The Strategic Offensive Reductions Treaty,” Congressional Research Service (February 7, 2011), from the summary. [https://www.everycrsreport.com/files/20110207\\_RL31448\\_bd1c6cee57542178d8ac403eb729970056e8b799.pdf](https://www.everycrsreport.com/files/20110207_RL31448_bd1c6cee57542178d8ac403eb729970056e8b799.pdf) (accessed January 17, 2024).

cooperation and partnership.<sup>82</sup> Nevertheless, the growing prevalence of democracy-promotion themes in American discourse (growing out of enthusiasm for “nation building” in Afghanistan and Iraq) fit only uneasily with such cooperative postures vis-à-vis Putin’s increasingly authoritarian Russia.

The 2006 NSS proclaimed America’s policy to that of ending tyranny and promoting democracy everywhere as “the best way to provide enduring security for the American people,”<sup>83</sup> and while there is still is little or no sign of any significant U.S. perception of threat from Moscow during these years, an awkward dissonance between partnership with Putin and a commitment to “ending tyranny in our world” was becoming apparent. The 2006 NSS, in fact, openly expressed concern about democratic progress in Russia, though it refrained from taking much of an oppositional tone.<sup>84</sup> The result of this awkwardness is depicted in Figure 4 below, in which the flag icon for Russia has drifted at bit back toward the right.

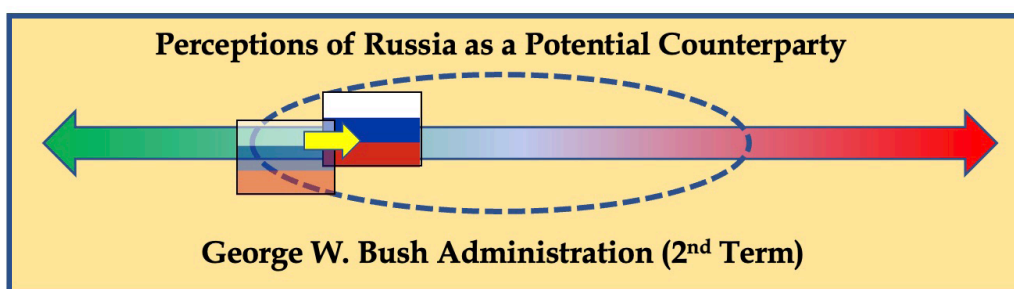


Figure 4

### C. Obama Administration

Russia’s emergent revisionism, visible at least by August 2008 in Putin’s attack upon the Republic of Georgia,<sup>85</sup> signaled the advent of a new phase of bald-faced geopolitical revisionism, but the structural challenges this presented were not initially recognized. Obama administration officials seem to have expected that a change of leadership and tone in Washington would be enough to “press the reset button” in

82 *National Security Strategy of the United States of America* (March 2006) [hereinafter “2006 NSS”], from Part VIII(C) & Part V(C)(1). <https://georgewbush-whitehouse.archives.gov/nsc/nss/2006/>, (accessed January 17, 2024).

83 2006 NSS, *supra*, from the overview.

84 *Ibid.*, from Part VIII(C)(5).

85 See, e.g., “Russia Invades Georgia,” *The Guardian* (August 8, 2008), <https://www.theguardian.com/world/gallery/2008/aug/08/georgia.russia> (accessed January 17, 2024).

America’s relationship with the Kremlin.<sup>86</sup> Obama’s 2010 National Security Strategy, for instance, emphasized that “[w]e are working to build deeper and more effective partnerships” with Moscow so that the two powers “can cooperate on issues of bilateral and global concern.”<sup>87</sup> The United States, it was said, wanted a “stable, substantive, multidimensional relationship with Russia, based on mutual interests,” and desired Russia to be “strong, peaceful, and prosperous” and respect global norms.<sup>88</sup> Accordingly, I have attempted to depict these U.S. attitudes in Figure 5, where the Russian flag icon remains in favorable territory without having significantly moved from its location in Figure 4.

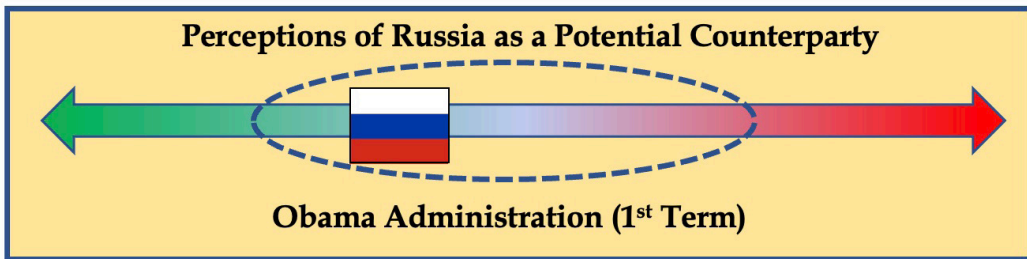


Figure 5

Clearly, in this vision, arms control with Russia remained both desirable and possible. And, indeed, the Obama administration did negotiate with Moscow the New Strategic Arms Reduction Treaty (New START) in 2010,<sup>89</sup> which continued the post-Cold War process of negotiated nuclear reductions. The era of merely codifying easily-undertaken unilateral promises of arms reduction, however—which we saw arrive with the 1991-92 Presidential Nuclear Initiatives (PNIs) for dismantling shorter-range nuclear weapons<sup>90</sup> and then peak with the Moscow Treaty in 2002—had clearly ended. By 2010, slippage in the strategic relationship had now occurred, and a great deal

86 See James Blitz, “Biden proposes to ‘press reset button’ with Moscow,” *Financial Times* (February 7, 2009). <https://www.ft.com/content/21cb9768-f525-11dd-9e2e-0000779fd2ac> (accessed January 17, 2024). The symbolism of the “reset button,” however, did not go too well. When Secretary of State Hillary Clinton first met with Russian Foreign Minister Sergei Lavrov, the label on the symbolic red object she presented Lavrov was mistranslated into Russian not as “reset button” but as “overcharge.” See, e.g., “Clinton, Lavrov press the wrong reset button on ties,” *Reuters* (May 7, 2009). <https://www.reuters.com/article/idUSN06402140> (accessed January 17, 2024).

87 *National Security Strategy* (May 2010) [hereinafter “2010 NSS”], p. 3, [https://history.defense.gov/Portals/70/Documents/nss/NSS2010.pdf?ver=Zt7leSPX2uNQ0t00\\_7wq6Hg%3d%3d](https://history.defense.gov/Portals/70/Documents/nss/NSS2010.pdf?ver=Zt7leSPX2uNQ0t00_7wq6Hg%3d%3d) (accessed January 17, 2024).

88 *Ibid.*, p. 44.

89 Treaty Between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (signed April 8, 2010), <https://2009-2017.state.gov/documents/organization/140035.pdf> (accessed January 17, 2024).

90 See generally, e.g., Susan J. Koch, “The Presidential Nuclear Initiatives of 1991-1992,” National Defense University, Case Study Series no. 5 (September 2012), [https://ndupress.ndu.edu/portals/68/documents/casestudies/cswmd\\_casestudy-5.pdf](https://ndupress.ndu.edu/portals/68/documents/casestudies/cswmd_casestudy-5.pdf) (accessed January 17, 2024). It has been estimated that the United States previously had nearly 5,000 tactical nuclear weapons deployed overseas. See, e.g., “The Presidential Nuclear Initiatives (PNIs) on Tactical Nuclear Weapons at a Glance,” Arms Control Association (July 2017), <https://www.armscontrol.org/factsheets/pniglance> (accessed January 17, 2024).

of challenging and genuinely adversarial negotiation was now once again necessary in order to reach New START.<sup>91</sup> The relationship was felt to remain relatively good, in other words, but they were certainly no longer easy.

Further retrograde motion in American perceptions of Russia as would-be arms control counterparty occurred during the Obama administration's second term, especially after Putin's first invasion of Ukraine in 2014; however, Russian revisionism clearly came to be seen as stressing the whole global order. In pronouncements during Obama's second term, U.S. officials still listed no threat related to a great power adversary (e.g., Russia) among the eight challenges said to be the "top strategic risks to our interests."<sup>92</sup> Nevertheless, Vladimir Putin's revisionist geopolitical agenda was by this point becoming a major complication for the Obama administration's dreams of a benign world moving inexorably toward generalized multilateral cooperation and nuclear weapons abolition.

Though apparently not among the "top" risks, as noted above, "aggression by Russia" was nonetheless described as among the "serious challenges to our national security."<sup>93</sup> Obama officials declared themselves to be "upholding the principle that bigger nations can't bully the small—by opposing Russian aggression and supporting Ukraine's democracy,"<sup>94</sup> and said that they had "mobilized and are leading global efforts to impose costs to counter Russia's aggression" of 2014.<sup>95</sup> On the whole, a pessimistic mood of distrust, divergent interests, and oppositional senses of community was clearly creeping into American perceptions of the Russo-American relationship. By January 2016, in fact, Obama felt compelled to note grimly that "the international system we built after World War II is now struggling to keep pace with this new reality"<sup>96</sup> of Russia's aggressive geopolitical agenda. This retrograde movement is depicted in Figure 6.

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91 See, e.g., Melissa Morgan, "Policy Impact Spotlight: Rose Gottemoeller and Negotiations for a Safer World," Freeman Spogli Institute for International Studies (December 15, 2022), <https://fsi.stanford.edu/news/policy-impact-spotlight-rose-gottemoeller-and-negotiations-safer-world> (accessed January 17, 2024).

92 *National Security Strategy* (February 2015) [hereinafter "2015 NSS"], p. 2, <https://history.defense.gov/Portals/70/Documents/nss/NSS2015.pdf?ver=TJJ2QfM0McCqL-pNtKHtVQ%3d%3d> (accessed January 17, 2024).

93 2015 NSS, *supra*, from introductory letter; see also *ibid.*, p. 11.

94 Barack H. Obama, State of the Union Address (January 20, 2015), <https://obamawhitehouse.archives.gov/the-press-office/2015/01/20/remarks-president-state-union-address-january-20-2015> (accessed January 17, 2024).

95 2015 NSS, *supra*, p. 2.

96 Barack H. Obama, State of the Union Address (January 13, 2016), <https://obamawhitehouse.archives.gov/the-press-office/2016/01/12/remarks-president-barack-obama-prepared-delivery-state-union-address> (accessed January 17, 2024).



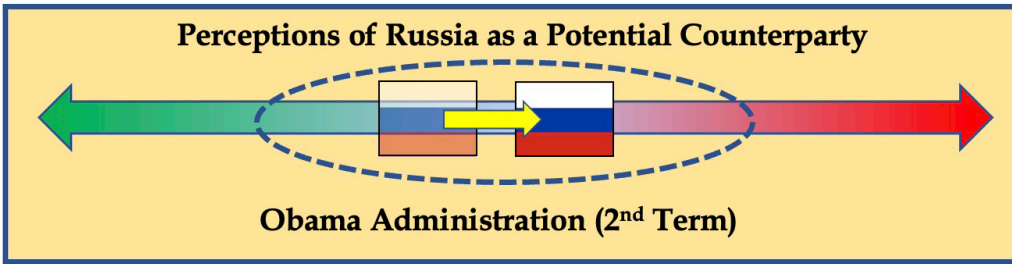


Figure 6

#### D. Trump Administration

Obama’s successor, Donald Trump, was not precisely—to put things rather delicately—known for any kind of personal antagonism toward Putin.<sup>97</sup> Nevertheless, it is also significant that it was Trump’s 2017 National Security Strategy that first formally reoriented U.S. thinking toward great power competition with both China and Russia. The American approach during this period was thus notably ambivalent.

Breaking with years of post-Cold War strategic optimism, the 2017 NSS focused emphatically upon strategic competition, arguing strongly that “the revisionist powers of China and Russia ... are actively competing against the United States and our allies and partners” and are “developing advanced weapons and capabilities” that threaten America.<sup>98</sup> The 2018 National Defense Strategy was, if anything, even more explicit about this shift, arguing that “[i]nter-state strategic competition, not terrorism, is now the primary concern in U.S. national security.”<sup>99</sup>

While this clearly signaled a more adversarial posture toward both Russia and China, however, the Trump administration was peculiar—in terms of my “continuum of community” heuristic—in that there did not appear to have been much U.S. sense of real trust, community, or shared interests with anyone in the international arena, including our closest friends and allies. As Trump put it in his first address to Congress, “[m]y job is not to represent the world. My job is to represent the United States of America.” International engagements were thus to be merely transactional, with no sense of shared affinity or common endeavor at all. Even the closest of U.S.

97 See, e.g., Maya Yang, “Trump ‘admired’ Putin’s ability to ‘kill whoever,’ says Stephanie Grisham,” *The Guardian* (March 9, 2022) (quoting former Trump press secretary that “I think [Trump] feared [Putin]. I think he was afraid of him. I think that the man intimidated him. Because Putin is a scary man, just frankly, I think he was afraid of him. ... I also think he admired him greatly. I think he wanted to be able to kill whoever spoke out against him. So I think it was a lot of that. In my experience with him, he loved the dictators, he loved the people who could kill anyone, including the press.”), <https://www.theguardian.com/us-news/2022/mar/09/donald-trump-vladimir-putin-stephanie-grisham> (accessed January 17, 2024).

98 *National Security Strategy of the United States of America* (December 2017) [hereinafter “2017 NSS”], pp. 8, 25, <https://trumpwhitehouse.archives.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf> (accessed January 17, 2024).

99 U.S. Department of Defense, “Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military’s Competitive Edge”, p. 1, <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf> (accessed January 17, 2024).

military alliances, in fact, were deemed acceptable only if allies “pay their fair share of the cost.”<sup>100</sup> “The days of our country being used, taken advantage of, and even scorned by other nations,” Trump proclaimed later in his term, “are long behind us.”<sup>101</sup>

With regard to arms control issues, the 2017 NSS declared that the United States would “consider new arms control arrangements if they contribute to strategic stability and if they are verifiable.”<sup>102</sup> Nevertheless, the Trump administration also proved quite willing—unlike its predecessor<sup>103</sup>—to leave negotiated agreements or arrangements that it believed did not advance U.S. security interests, or (especially) where it felt the other side to have been violating an agreement. During Trump’s term in office, for instance, the United States abandoned the Joint Comprehensive Plan of Action (JCPOA) nuclear deal with Iran on the grounds that it did not advance U.S. security interests.<sup>104</sup> It thereafter also left both the INF Treaty (as a result of ongoing Russian violations)<sup>105</sup> and the Open Skies Treaty (as a result of Russian violations, as well as Moscow’s efforts to weaponize treaty implementation to provide seeming legitimacy

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100 Donald J. Trump, Address to Congress (February 28, 2017), <https://time.com/4686621/trump-congress-address-transcript/> (accessed January 17, 2024).

101 Donald J. Trump, State of the Union Address (February 5, 2020), <https://www.nytimes.com/2020/02/05/us/politics/state-of-union-transcript.html> (accessed January 17, 2024).

102 *National Security Strategy of the United States of America* (December 2017), p. 31. <https://trumpwhitehouse.archives.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf> (accessed January 17, 2024).

103 Russian violations of the INF Treaty, for instance, apparently began in 2008, see e.g., “Carroll: The enduring nuclear threat,” interview with Gottemoeller, *Denver Post* (November 6, 2015) (quoting comments by Obama’s New START chief negotiator), <https://www.denverpost.com/2015/11/06/carroll-the-enduring-nuclear-threat/> (accessed January 17, 2024), and the Obama administration found Russia to be in violation in 2014. See, e.g., Michael R. Gordon, “U.S. Says Russia Tested Cruise Missile, Violating Treaty,” *The New York Times* (July 28, 2014), <https://www.nytimes.com/2014/07/29/world/europe/us-says-russia-tested-cruise-missile-in-violation-of-treaty.html> (accessed January 17, 2024). During its time in office, however, the Obama administration did not do more than complain about the Russian violation and urge Moscow to return to compliance.

104 See “President Donald J. Trump is Ending United States Participation in an Unacceptable Iran Deal,” White House Fact Sheet (May 8, 2018), <https://trumpwhitehouse.archives.gov/briefings-statements/president-donald-j-trump-ending-united-states-participation-unacceptable-iran-deal/> (accessed January 17, 2024).

105 See, e.g., Anne Gearan, Paul Sonne, and Carol Morello, “U.S. to withdraw from nuclear arms control treaty with Russia, raising fears of a new arms race,” *The Washington Post* (February 1, 2019) (Intermediate-range Nuclear Forces [INF] Treaty), [https://www.washingtonpost.com/world/national-security/us-to-withdraw-from-nuclear-arms-control-treaty-with-russia-says-russian-violations-render-the-cold-war-agreement-moot/2019/02/01/84dc0db6-261f-11e9-ad53-824486280311\\_story.html](https://www.washingtonpost.com/world/national-security/us-to-withdraw-from-nuclear-arms-control-treaty-with-russia-says-russian-violations-render-the-cold-war-agreement-moot/2019/02/01/84dc0db6-261f-11e9-ad53-824486280311_story.html) (accessed January 17, 2024).

for territorial aggression against Georgia and Ukraine).<sup>106</sup> The Trump administration still pursued strategic arms control on a trilateral basis—that is, with both Russia and China<sup>107</sup>—but this did not bear fruit.

The Trump administration also had a much more skeptical approach to nuclear disarmament than the Obama administration. U.S. officials during this period concluded that “the post-Cold War U.S. approach to disarmament seems to have run out of steam,”<sup>108</sup> and while they undertook some new initiatives focused upon encouraging the disarmament community to focus upon alleviating challenges in the security environment that made disarmament infeasible,<sup>109</sup> the overall tone toward Barack Obama’s “Prague Agenda” was distinctly chilly.

Despite Trump’s apparent personal affinity with Putin himself, one should probably thus depict American views of Russia during the Trump years as set forth in Figure 7. The flag icon for the Russian Federation there is still located well within the hypothesized “arms control zone” of our notional “continuum of community,” but with U.S. recognition of the resurrection of great power competitive rivalry and Washington’s newfound focus upon Russian arms control violations, the Kremlin is clearly viewed in a more negative light than before.

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106 See, e.g., Ryan Browne, “US formally withdraws from Open Skies Treaty that bolstered European security,” CNN (November 22, 2020), <https://www.cnn.com/2020/11/22/politics/us-withdrawal-open-skies/index.html> (accessed January 17, 2024). The Open Skies Treaty was a multilateral agreement pursuant to which various participating European countries—and the United States and the Russian Federation—could conduct photographic imagery collection flights over each other’s territories. See Treaty on Open Skies (signed March 24, 1992), <https://2009-2017.state.gov/t/avc/trty/102337.htm> (accessed January 17, 2024). In addition to unlawfully restricting some overflights (e.g., over the enclave region of Kaliningrad), restricted flights as if the Russian-backed proxy territories of Abkhazia and South Ossetia in Georgia were independent states not party to the Treaty. For an account of Russian violations, see, e.g., U.S. Department of State, *Adherence to and Compliance With Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (2020), p. 65, <https://www.state.gov/wp-content/uploads/2020/06/2020-Adherence-to-and-Compliance-with-Arms-Control-Nonproliferation-and-Disarmament-Agreements-and-Commitments-Compliance-Report-1.pdf> (accessed January 17, 2024); see also Assistant Secretary of State Christopher Ford and Special Presidential Envoy for Arms Control Marshall Billingslea, “Special Briefing on Open Skies” (May 21, 2020), <https://2017-2021.state.gov/briefing-with-special-presidential-envoy-for-arms-control-marshall-billingslea-and-assistant-secretary-for-international-security-and-nonproliferation-dr-christopher-a-ford-on-the-treaty-on-open-skies/index.html> (accessed January 17, 2024).

107 See, e.g., Christopher Ford, “U.S. Priorities for ‘Next-Generation’ Arms Control,” *Arms Control and International Security Papers* 1, no. 1 (April 6, 2020), <https://www.state.gov/wp-content/uploads/2020/04/T-paper-series-1-Arms-Control-2.pdf> (accessed January 17, 2024); and Jack Detsch, “Trump Wants China on Board with New Arms Control Pact,” *Foreign Policy* (July 23, 2020), <https://foreignpolicy.com/2020/07/23/trump-china-russia-new-arms-control-agreement-start/> (accessed January 17, 2024).

108 Christopher Ford, “NPT Wisdom for a New Disarmament Discourse,” remarks to the Ploughshares Fund (October 26, 2017), <https://www.newparadigmsforum.com/p2041> (accessed January 17, 2024).

109 See, e.g., Christopher Ford, “Reframing Disarmament Discourse,” remarks to the Leadership Group for the Creating an Environment for Nuclear Disarmament (CEND) Initiative (September 3, 2020), <https://www.newparadigmsforum.com/p2755> (accessed January 17, 2024).

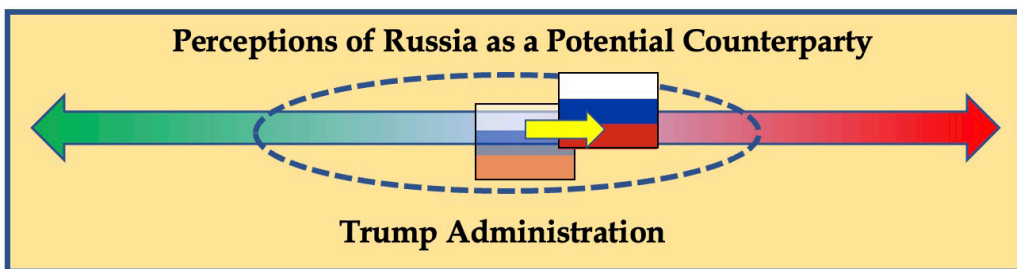


Figure 7

### E. Biden Administration

After arriving in office, the administration of President Joe Biden professed a strong interest in arms control, and indeed immediately extended the New START strategic arms treaty by a full five years.<sup>110</sup> Nevertheless, Russia’s continued slide into despotism, and especially its horrific escalation of aggression against Ukraine in 2022,<sup>111</sup> shifted U.S.-Russian relations into territory far out onto the problematic end of our “continuum of community” where trust no longer exists, security interests are felt to conflict in all but existential ways, and there is more an oppositional than a shared perception of community with one’s potential arms control counterparty.

Particularly as a result of Russian moves against Ukraine, the Biden administration came to perceive the Russo-American relationship in almost apocalyptic, existentially conflictual terms. By early 2022, just after Russia’s full-scale attempt to conquer and annex Ukraine had begun, President Biden described the conflict over that country’s fate as demonstrating the existence of an epochal “battle between democracy and autocracies.”<sup>112</sup> In his 2022 National Security Strategy, the U.S. relationship with Russia (and with China) was depicted as “a strategic competition to shape the future of the international order.”<sup>113</sup> This conflict, in effect, was structurally systemic, and existential: Russia’s aggression “sought to shake the very foundations of the free world.”<sup>114</sup>

Especially when contrasted with the optimism of previous administrations about where the relationship with Russia was—or at least where each successive president thought that he could take it—the Biden administration by late 2022 had arrived at

110 See, e.g., Antony J. Blinken, “On the Extension of the New START Treaty with the Russian Federation,” U.S. Department of State press statement (February 3, 2021), <https://www.state.gov/on-the-extension-of-the-new-start-treaty-with-the-russian-federation/> (accessed January 17, 2024).

111 See, e.g., Council on Foreign Relations, Center for Preventative Action, “War in Ukraine” (March 16, 2023), <https://www.cfr.org/global-conflict-tracker/conflict/conflict-ukraine> (accessed January 17, 2024).

112 Joseph Biden, State of the Union Address (March 1, 2022) [hereinafter “2022 SOTU”], <https://www.whitehouse.gov/state-of-the-union-2022/> (accessed January 17, 2024).

113 National Security Strategy (October 2022) [hereinafter “2022 NSS”], from the introductory letter, <https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf> (accessed January 17, 2024).

114 2022 SOTU, *supra*.

very grim conclusions. Not only was negotiation and cooperative engagement with Russia impossible, it would appear, but it would continue to be impossible for so long as Putin was in charge in the Kremlin. “President Putin,” Biden declared, had “spurned [all prior U.S. efforts at constructive engagement] and it is now clear he will not change. Russia now poses an immediate and persistent threat to international peace and security.”<sup>115</sup>

Thus, in terms of our “continuum of community,” U.S.-Russia relations—in American eyes—had arrived at a nadir of trust, a perception of radically counterpoised security interests, and a powerful sense of antithetically opposed communities. In this context, seems easy to locate the Russian flag icon where it appears in Figure 8: in very negative territory, and perhaps indeed outside the “arms control zone” in which negotiated outcomes still seem possible.

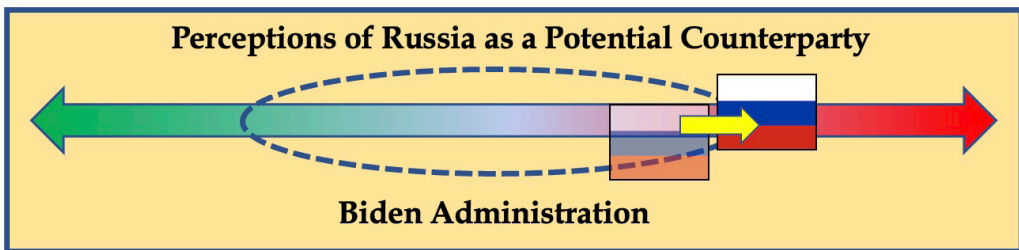


Figure 8

#### IV. Washington through Russian Eyes

This perceptual path, from warm post-Cold War optimism in the 1990s to grim distrust and bitter oppositionalism in the early 2020s, also seems to be one that leaders in Moscow traveled. On the whole, during the post-Soviet and pre-Putin period of President Boris Yeltsin, Russian officials voiced a strong sense of trust, congruent security interests, and shared sense of community with the United States. On the basis of such assumptions, Russia professed itself eager to engage in arms control, with Yeltsin repeatedly stressing the idea of partnership, rather than rivalry or antagonism. “Russia,” he said, “considers the United States and the West not as mere partners but rather as allies.”<sup>116</sup> And, as can be seen by the litany of negotiated arms control and disarmament agreements from the 1990s, Russia was clearly, on the whole, a willing partner.

After Vladimir Putin’s arrival at the helm of the Russian government from 2000, however, Moscow’s perceptions of the United States as a viable negotiating counterparty steadily soured. By the time of Putin’s famously anti-Western speech

<sup>115</sup> 2022 NSS, *supra*, p. 26 (emphasis added).

<sup>116</sup> Boris Yeltsin, remarks to the U.N. Security Council (January 31, 1992) [hereinafter “Yeltsin UNSC”], <https://www.govinfo.gov/content/pkg/PPP-1992-book1/html/PPP-1992-book1-doc-pg175.htm> (accessed January 17, 2024).

at the Munich Security Conference in 2007, things were clearly taking a turn for the worse in the Kremlin’s eyes.<sup>117</sup> In his view, the problem with the world was precisely that the United States had too much power in it, and he bitterly denounced the post-Cold War security environment of “unipolarity.”<sup>118</sup>

This unipolarity—and the expansion of NATO, which Putin also resented<sup>119</sup>—did not entirely rule out engagement and negotiation with America. It was still the case, Putin said, that “Russia supports the renewal of dialogue” on arms control,<sup>120</sup> but his anti-Western pronouncements were becoming more strident. All in all, these perceptual shifts of the United States as a would-be arms control counterparty are depicted with the rightward movement of the American flag icon in Figure 9.

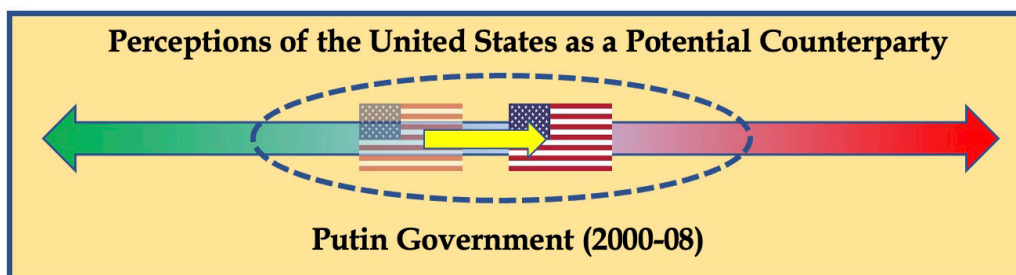


Figure 9

These trends in Russia’s perception of the United States continued after 2008.<sup>121</sup> Pushing back against malevolent outside pressures orchestrated by the West, in fact, was essentially seen as Russia’s holy duty as “a state-civilization, reinforced by the Russian people, Russian language, Russian culture, [the] Russian Orthodox Church and the country’s other traditional religions.”<sup>122</sup> This sense of civilizational oppositionalism and conflict with the West (the United States in particular) and is depicted in the degradation of Russian views of America in Figure 10.

117 Vladimir Putin, remarks in Munich (February 10, 2007) [hereinafter “Putin Munich 2007”], <http://en.kremlin.ru/events/president/transcripts/copy/24034> (accessed January 17, 2024).

118 Putin Munich 2007, *supra*.

119 *Ibid.*

120 Putin Munich 2007, *supra*.

121 Vladimir Putin, remarks at the 10th Meeting of the Valdai Discussion Club (September 19, 2013) [hereinafter “Putin 10th Valdai”] (“[W]e were promised at one point that NATO would not expand beyond ... Germany’s eastern border. ... We got cheated ....”), <http://en.kremlin.ru/events/president/news/19243> (accessed January 17, 2024).

122 *Ibid.*

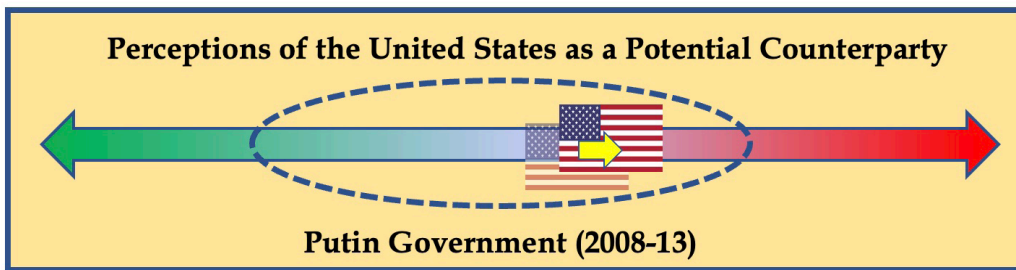


Figure 10

President Putin’s critique of and antagonism toward the West sharpened further from 2014 in the wake of his annexation of Crimea. Putin laid the worsening problems of the international security system at America’s feet, claiming that after the end of the Cold War, “[i]nstead of establishing a new balance of power,” the United States “threw the system into ... imbalance”<sup>123</sup> through its unipolar arrogance. Geopolitical unipolarity, Putin declared, was nothing less than global tyranny: “the unipolar world is simply a means of justifying dictatorship over people and countries,”<sup>124</sup> and the United States had been “interfering in the affairs of sovereign states, and exporting democracy.”<sup>125</sup>

Putin’s rhetoric increasingly turned toward dark and revisionist themes not just of betrayal but of an implied (and eventually to become explicit) existentially urgent conception of revanchiste national duty. In 2015, for instance, he proclaimed that preserving one’s national territory was the “eternal, fundamental value[] for a country,<sup>126</sup> but that the collapse of the Soviet Union had in Russia’s eyes left this duty unfulfilled, because the “Soviet collapse left 25 million Russians abroad.”<sup>127</sup>

In his mind, Vladimir Putin was thus clearly preparing to solve this problem of “national” division by reclaiming control over the territories of which he felt Russia had been robbed in 1991. And his attitude toward the United States and the West worsened accordingly, for their policies stood in the way of his revisionist dream. The reader can see this depicted in Figure 11, in which the American icon has slipped yet farther to the right in Russian eyes.

123 Vladimir Putin, remarks at the 11th Meeting of the Valdai Discussion Club (October 24, 2014) [hereinafter “Putin 11th Valdai”], <http://en.kremlin.ru/events/president/news/46860> (accessed January 17, 2024).

124 Ibid.

125 Vladimir Putin, remarks at the 14th Meeting of the Valdai Discussion Club (October 19, 2017) [hereinafter “Putin 14th Valdai”], <http://en.kremlin.ru/events/president/news/55882> (accessed January 17, 2024).

126 Putin 14th Valdai, supra.

127 Vladimir Putin, remarks at the 12th Meeting of the Valdai Discussion Club (October 23, 2015), <https://valdaiclub.com/events/posts/articles/vladimir-putin-meets-with-members-of-the-valdai-discussion-club-transcript-of-the-final-plenary-sess/> (accessed January 17, 2024).

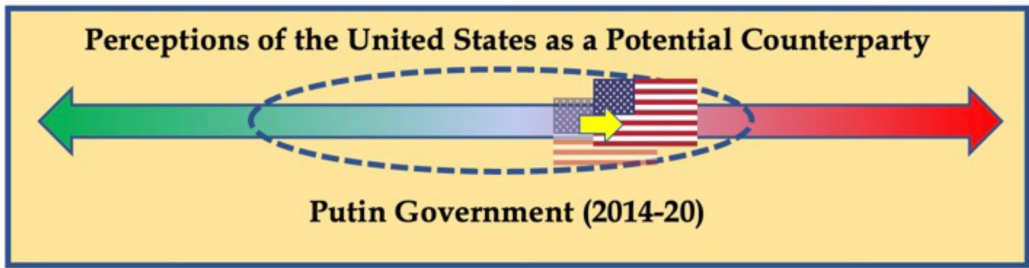


Figure 11

By the 2021-22 period, Putin anti-Western rhetoric had become almost feverish. The West, he declared in 2022, was “racist and neocolonial” and “always seek[ing] to aggravate matters.”<sup>128</sup> For many years, he said, the West’s objective had been “to make Russia more vulnerable,” to “slander Russia, to humiliate it, or to ignore its interests,” and it had subverted Russia by “support[ing] the opposition” to his government. American power was, in other words, “‘boundless despotism.’” Putin accordingly viewed it as his sacred civilizational duty to defend Russian “traditional values” against the West’s efforts to “deny the very existence of the culture, art, and science of other peoples ... eradicating everything that is alive and creative.”<sup>129</sup>

So obsessed with ethno-national revisionist aggression did Putin become, in fact, that by 2021 he had come to view Ukraine’s very existence as a mortal threat to everything that he held dear about Russia. In a remarkable essay published that year, Putin wrote that “an ethnically pure Ukraine, aggressive towards Russia, is comparable in its consequences to the use of weapons of mass destruction against us.”<sup>130</sup> This ferocity, and the special anger against America—Ukraine’s supporter—with which it was associated, is reflected in Figure 12, in which the American flag symbol has shifted still farther to the right, now arguably leaving the “arms control zone” entirely.

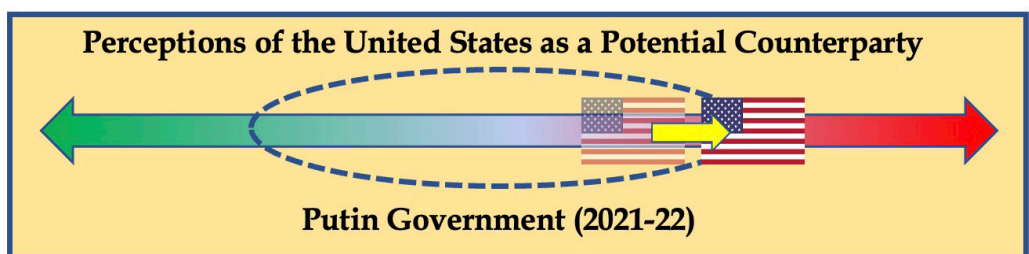


Figure 12

128 Vladimir Putin, remarks at the 19th Meeting of the Valdai Discussion Club (October 27, 2022) [hereinafter “Putin 19th Valdai”], <http://en.kremlin.ru/events/president/news/69695> (accessed January 17, 2024).

129 Putin 19th Valdai, supra.

130 Vladimir Putin, “On the Historical Unity of Russians and Ukrainians” (July 12, 2021), <http://en.kremlin.ru/events/president/news/66181> (accessed January 17, 2024).



Not surprisingly, when it came to arms control or any other sort of diplomatic engagement, this attitude of profound oppositionalism—devoid of trust, perceiving existentially antithetical security interests, and rejecting any shared sense of community—led Putin to feel “mistrust in [the West’s] ability to negotiate in general.”<sup>131</sup> Not long thereafter, and surely not by coincidence, Russia abandoned the last remaining strategic arms treaty with the United States, New START.<sup>132</sup> We would indeed seem here to be at the malign outer right-hand margin of our “continuum of community.”

## V. Detailing Russia’s Revisionist Turn

This reciprocal plotting of U.S. and Russian perceptions of each other suggests how our notion of a “continuum of community” can be used to help understand first the rise, and then the collapse, of the arms control enterprise since the late days of the Cold War. During periods in which the two would-be counterparties had a view of each other that ranged merely from warm and optimistic to cautiously wary, negotiation was often possible, and a range of arms-limiting or -reducing agreements and arrangements were indeed reached (e.g., START, the reciprocal promises of the PNIs, SORT, and New START).

Problems arose, however, as the two countries’ reciprocal perceptions degraded more significantly, particularly in connection with Vladimir Putin’s violation of multiple arms control agreements and his revisionist territorial ambitions in Eastern Europe. By the early 2020s, as we have seen, the prospects of arms control between Washington and Moscow had reached approximately zero, with each would-be counterparty viewing the other as inhabiting a place grimly far out on the right-hand end of our hypothesized “continuum of community,” outside what I have termed the “arms control zone.”

It is thus worth setting forth in more detail the specific ways in which the rise of Russian revisionism under Vladimir Putin has helped drive the relationship into its current position of reciprocal antagonism and impasse. Specifically, a key part of the problem for future arms control with Russia lies in the way in which Vladimir Putin has systematically weaponized arms control institutions themselves in service of his agenda of bellicose strategic revisionism.

Russia has pursued an aggressive geopolitical agenda of attempting to “re-litigate the post-Cold War settlement that left Moscow shorn of most of the Soviet Union’s former imperial sphere of influence,”<sup>133</sup> despite the existence of a latticework of arms

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131 Putin 19th Valdai, supra.

132 See, e.g., Edward Wong, “U.S. Says Russia Fails To Comply With Nuclear Arms Control Treaty,” *The New York Times* (January 31, 2023), <https://www.nytimes.com/2023/01/31/us/politics/us-russia-nuclear-treat.html> (accessed January 17, 2024); Michael Callahan, Jennifer Hansler, Haley Britzky, and Kylie Atwood, “US says Russia is violating key nuclear arms control agreement,” CNN (January 31, 2023), <https://www.cnn.com/2023/01/31/politics/us-russia-nuclear-arms-control-treaty/index.html> (accessed January 17, 2024).

133 Christopher Ford, “Russian Arms Control Compliance: A Report Card, 1984-2000,” *Arms Control and International Security Papers* 1, no. 10 (June 18, 2020), p. 6. <https://irp-cdn.multiscreensite.com/ce29b4c3/files/uploaded/ACIS%20Paper%2010%20-%20Russian%20Arms%20Control%20Compliance.pdf> (accessed January 17, 2024).

control measures that had been created in order to help stabilize and perpetuate the strategically benign post-Cold War environment. The brutal wars of imperial territorial expansion the Putin regime has carried out against its neighbors—first against Georgia in 2008, then against Ukraine in 2014, and most recently in its attempt to seize and annex the rest of Ukraine from 2022—has been carried out under what the Biden administration has called a “shield” of nuclear saber-rattling.<sup>134</sup> Not insignificantly, key aspects of this revisionist aggression have been facilitated by Russia’s exploitation of Western commitment to and compliance with arms control instruments.

While the United States carried out its promises under the PNIs of 1991 and 1992 by decommissioning and dismantling almost its entire Cold War arsenal of short- and theater-range nuclear weapons, Russia never fully complied with its own PNI promises.<sup>135</sup> As a result of this, it retained, and today maintains, thousands of sub-strategic-range nuclear weapons<sup>136</sup> for which there exist no U.S. or other Western counterparts, and with which it periodically threatens Western Europe.<sup>137</sup>

Though the United States and the Soviet Union had agreed to the INF Treaty of 1987 and the U.S. had complied by eliminating all of its INF-class systems, the Putin regime began violating the INF Treaty in 2008, with the flight testing of a new cruise missile.<sup>138</sup> By the time the United States reacted to these violations by withdrawing from INF in 2019,<sup>139</sup> the Russians had taken advantage of U.S. compliance—and the political reticence of NATO allies to admit inconvenient facts that would lead to the

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134 See 2022 Nuclear Posture Review, *supra*, p. 1.

135 See, e.g., Ford, “Russian Arms Control Compliance,” *supra*, p. 7.

136 See, e.g., Karoun Dimerjian, “Here are the nuclear weapons Russia has in its arsenal,” *The Washington Post* (October 6, 2022), <https://www.washingtonpost.com/world/2022/10/05/russia-nuclear-weapons-military-arsenal/> (accessed January 17, 2024).

137 See, e.g., “Russia Simulates Nuclear Strikes near EU,” *Moscow Times* (May 11, 2022), <https://www.themoscowtimes.com/2022/05/05/annexed-crimea-says-breaches-ukraines-blockade-with-captured-regions-a77585> (accessed January 17, 2024); Grzegorz Kuczynski, “Russia Threatens Nuclear Weapons Use,” Warsaw Institute (September 28, 2022), <https://warsawinstitute.org/russia-threatens-nuclear-weapons-use/> (accessed January 17, 2024); Julian Borger, “Kaliningrad photos appear to show Russia upgrading nuclear weapons bunker,” *The Guardian* (June 18, 2018); Zachary Keck, “Russia Threatens Nuclear Strikes Over Crimea,” *The Diplomat* (July 11, 2014), <https://thediplomat.com/2014/07/russia-threatens-nuclear-strikes-over-crimea/> (accessed January 17, 2024); and Ian Traynor, Luke Harding, and Helen Womack, “Moscow warns it could strike Poland over U.S. missile shield,” *The Guardian* (August 15, 2008), <https://www.theguardian.com/world/2008/aug/15/russia.poland.nuclear.missiles.threat> (accessed January 17, 2024).

138 According to former U.S. Under Secretary of State for Arms Control and International Security Rose Gottemoeller, “Russia tested starting in 2008 a ground-launched cruise missile that flies to ranges banned by the treaty. . . . We are quite sure they have tested a capable missile that flies to those ranges, and they tried to get away with it.” “Carroll: The enduring nuclear threat,” *supra*. Other U.S. sources tend to be less specific. See, e.g., U.S. Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (2019) [hereinafter “2019 Compliance Report”], p. 13 [“Russia began the covert development of an intermediate-range, ground-launched cruise missile (the SSC-8/9M729) probably by the mid-2000s. . . . Russia was ready to test the SSC-8/9M729 cruise missile in the mid- to late 2000s . . . .”], <https://2017-2021.state.gov/wp-content/uploads/2019/08/Compliance-Report-2019-August-19-Unclassified-Final.pdf> (accessed January 17, 2024).

139 See, e.g., Secretary of State Mike Pompeo, “U.S. Withdrawal from the INF Treaty on August 2, 2019,” press release (August 2, 2019), <https://2017-2021.state.gov/u-s-withdrawal-from-the-inf-treaty-on-august-2-2019/index.html> (accessed January 17, 2024); see also 2019 Compliance Report, *supra*, p. 11.

collapse of any arms control agreement<sup>140</sup>—to deploy multiple battalions of their new SSC-8 missile,<sup>141</sup> which were countered in the field by the deployment of exactly zero analogous U.S. weapons.

At the same time, Putin was engaged in the development of “exotic” strategic nuclear delivery systems that were designed to escape New START limits, in the form of a nuclear-powered cruise missile and a nuclear-powered underwater drone<sup>142</sup>—new systems Putin all but gleefully revealed to the world in March 2018,<sup>143</sup> with little consequence. Russia may also have been violating its own policy moratorium on nuclear testing by conducting secret low-yield tests.<sup>144</sup> (The United States, by contrast, complied with its own test moratorium—thus, by definition, foregoing whatever nuclear weapons knowledge it might have acquired by following Russia’s example.)

Even in terms of conventional forces, the Putin regime showed contempt for its legal obligations as it leveraged Western treaty compliance for its own strategic advantage. With regard to the Conventional Forces in Europe (CFE) Treaty, for instance—which had been established to fix in place cross-cutting European regional force limits and provide transparency measures that would reassure countries against the massing of troops that could signal impending attack<sup>145</sup>—Russia announced its “suspension” of compliance with that Treaty in 2007, the year before Putin’s invasion of Georgia.<sup>146</sup>

As for the transparency-focused Open Skies Treaty (OST), Russia never actually complied fully with its OST obligations after entry into force. Moreover, after its wars against Georgia in 2008 and Ukraine in 2014, the Kremlin sought to use OST flight planning to secure de facto Western acknowledgment of its spurious claims that the proxy territories of Abkhazia and South Ossetia were sovereign countries, and that Crimea was part of the Russian Federation.<sup>147</sup> At the same time, beginning with its attacks on Ukraine in 2014, Russia broke its promise to respect Ukraine’s territorial

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140 See, e.g., Christopher Ford, “Conceptualizing Cyberspace Security Diplomacy,” *Cyber Defense Review* (Spring 2022), pp. 44-45 (discussing U.S. diplomatic efforts to persuade the United Kingdom, France, and Germany that Russia had violated the INF Treaty, and noting how “the perceived political consequences of agreeing to Moscow’s violation were uncomfortably high” for these allies because admitting an ongoing Russian breach would lead to “the likely collapse of an arms control agreement”) [https://cyberdefensereview.army.mil/Portals/6/Documents/2022\\_spring/03\\_Ford\\_CDR\\_V7N2.pdf?ver=jPNxXAqiUZX7kFHLgxwpUw%3d%3d](https://cyberdefensereview.army.mil/Portals/6/Documents/2022_spring/03_Ford_CDR_V7N2.pdf?ver=jPNxXAqiUZX7kFHLgxwpUw%3d%3d) (accessed January 17, 2024).

141 See, e.g., Ford, “Russian Arms Control Compliance,” *supra*, p. 4.

142 See, e.g., Matthew Kroenig, Mark J. Massa, and Christian Trotti, “Russia’s exotic nuclear weapons and implications for the United States and NATO,” *Atlantic Council* (March 6, 2020), <https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/russias-exotic-nuclear-weapons-and-implications-for-the-united-states-and-nato/> (accessed January 17, 2024).

143 See, e.g., Neil MacFarquhar and David E. Sanger, “Putin’s ‘Invincible’ Missile Is Aimed at U.S. Vulnerabilities,” *The New York Times* (March 1, 2018), <https://www.nytimes.com/2018/03/01/world/europe/russia-putin-speech.html> (accessed January 20, 2024).

144 See, e.g., Ford, “Russian Arms Control Compliance,” *supra*, p. 8.

145 See, e.g., “The Conventional Armed Forces in Europe (CFE) Treaty and Adapted CFE Treaty at a Glance,” *Arms Control Association* (August 2017), <https://www.armscontrol.org/factsheet/cfe> (accessed January 17, 2024).

146 See, e.g., Ford, “Russian Arms Control Compliance,” *supra*, p. 6.

147 *Ibid.*, pp. 6-7.

integrity in the Budapest Declaration of 1994—an assurance which had been critical to securing Kiev’s agreement to relinquish the nuclear weapons stranded on its territory upon the USSR’s collapse.<sup>148</sup>

Meanwhile, Russia continued to violate its obligations under the Chemical Weapons Convention (CWC)<sup>149</sup> and the Biological Weapons Convention (BWC)<sup>150</sup> by maintaining illegal chemical and biological weapons programs<sup>151</sup>—as well as by using banned chemical agents in multiple assassination attempts.<sup>152</sup> In what would appear to be a clear effort not merely to kill expatriate dissidents but also to threaten and intimidate the United States’ closest NATO ally, Putin’s agents even used a deadly radioactive substance<sup>153</sup> and a banned nerve agent<sup>154</sup> on British soil. (In late 2023, moreover, Russia’s Black Sea Fleet openly admitted it had used chemical riot control

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148 “Letter dated 7 December 1994 from the Permanent Representatives of the Russian Federation, Ukraine, the United Kingdom of Great Britain and Northern Ireland and the United States of America to the United Nations addressed to the Secretary-General” (transmitting the text of the Memorandum on Security Assurances in Connection with Ukraine’s Accession to the Treaty on the Non-Proliferation of Nuclear Weapons (December 5, 1994)), A/49/765, S/1994/1339 (December 19, 1994), at Arts. 1 & 2 (noting that “[t]he Russian Federation [and the other signatories] . . . reaffirm their commitment to Ukraine . . . to respect the independence and sovereignty and the existing borders of Ukraine [and] . . . to refrain from the threat or use of force against the territorial integrity or political independence of Ukraine, and that none of their weapons will ever be used against Ukraine except in self-defence or otherwise in accordance with the Charter of the United Nations”), [https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s\\_1994\\_1399.pdf](https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_1994_1399.pdf) (accessed January 17, 2024).

149 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (signed January 13, 1993) (entered into force April 29, 1997), <https://www.opcw.org/chemical-weapons-convention/download-convention> (accessed January 17, 2024).

150 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (signed April 10, 1972) (entered into force March 26, 1975), <https://front.un-arm.org/wp-content/uploads/2020/12/BWC-text-English-1.pdf> (accessed January 17, 2024).

151 See, e.g., U.S. Department of State, Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments (April 2022), pp. 38-40 (finding Russia “maintains an offensive BW program and is in violation of its obligations under Articles I and II of the [Biological Weapons Convention]”), <https://www.state.gov/wp-content/uploads/2022/04/2022-Adherence-to-and-Compliance-with-Arms-Control-Nonproliferation-and-Disarmament-Agreements-and-Commitments-1.pdf> (accessed January 17, 2024); U.S. Department of State, Compliance with the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (Condition 10(C) Report) (April 2021), pp. 16-22 (detailing Russian violations of Chemical Weapons Convention), <https://www.state.gov/wp-content/uploads/2021/04/2021-Condition-10-c-Report.pdf> (accessed January 17, 2024).

152 See, e.g., J.P. Zanders, “History of nerve agent assassinations,” Arms Control Law (September 9, 2020), <https://armscontrolaw.com/2020/09/09/history-of-nerve-agent-assassinations/> (accessed January 17, 2024).

153 See Scott Neuman, “Russia Fatally Poisoned A Prominent Defector in London, A Court Rules,” NPR (September 22, 2021), <https://www.npr.org/2021/09/21/1039224996/russia-alexander-litvinenko-european-court-human-rights-putin> (accessed January 17, 2024).

154 See Bill Chappell, “2 Russian Agents Carried Out Skripal Poison Attack, U.K. Says; Arrest Warrants Issued,” NPR (September 5, 2018), <https://www.npr.org/2018/09/05/644782096/u-k-charges-2-russians-suspected-of-poison-attack-on-skripals> (accessed January 17, 2024).

agents against Ukrainian forces in combat – a violation of the CWC, which permits the use of such agents only in domestic law enforcement contexts.<sup>155</sup>)

Most recently, after Putin’s full-scale invasion of Ukraine in 2022 began to go badly for him, Russian officials and commentators tried to leverage Western European and American anti-nuclear and pro-arms control sentiment to support his aggressive war by using nuclear saber-rattling in an attempt to deter Western provision of advanced arms to Ukraine<sup>156</sup> and by threatening to abandon all strategic arms control with the United States if NATO did not allow Putin to win there.<sup>157</sup> By early 2023, Russia had actually begun to violate the only arms control agreement that still remained in force, refusing to permit New START missile inspections or to convene Treaty-required meetings as long as the United States kept supplying arms to the Ukrainian resistance.<sup>158</sup>

In all of these ways, therefore, the “offensive nuclear umbrella”<sup>159</sup> of nuclear weapons threats—under which Putin is today waging a war of annihilation against the sovereign country of Ukraine—was built through the circumvention of arms control limitations and a cynical reliance upon Western treaty compliance and fidelity to the ideal of arms control to prevent countervailing U.S. nuclear deployments. Through this policy of strategic lawfare, Putin worked to turn the well-intentioned instruments and norms of the arms control community into tools for facilitating his own imperialist aggression. Putin succeeded, in other words, in taking advantage of the West’s commitment and fidelity to the arms control enterprise, weaponizing that commitment to his strategic advantage.

This litany of provocations makes it easy to understand why the Biden administration seems to locate Russia so far out on the right-hand end of the “continuum of community” as depicted in Figure 8, and why future arms control with Russia presently seems so difficult to imagine. In nearly every imaginable way, Putin’s policies have had the effect of poisoning the prospects for future arms negotiation.

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155 See Alia Shoib, “A Russian brigade admits dropping tear gas on Ukrainian troops, which would violate the UN Chemical Weapons Convention,” *Business Insider* (December 24, 2023), <https://www.businessinsider.com/russia-admits-to-using-tear-gas-chemical-weapons-on-ukrainian-troops-2023-12> (accessed January 17, 2024); and Organization for the Prohibition of Chemical Weapons, “What is a Chemical Weapon?” (2024) (“A riot control agent is defined as any chemical not listed in a schedule which can produce sensory irritation or disabling physical effects rapidly in humans and which disappear within a short time following termination or exposure. The use of riot control agents as a method of warfare is prohibited by the CWC.”), <https://www.opcw.org/our-work/what-chemical-weapon#:~:text=A%20riot%20control%20agent%20is,is%20prohibited%20by%20the%20CWC> (accessed January 17, 2024).

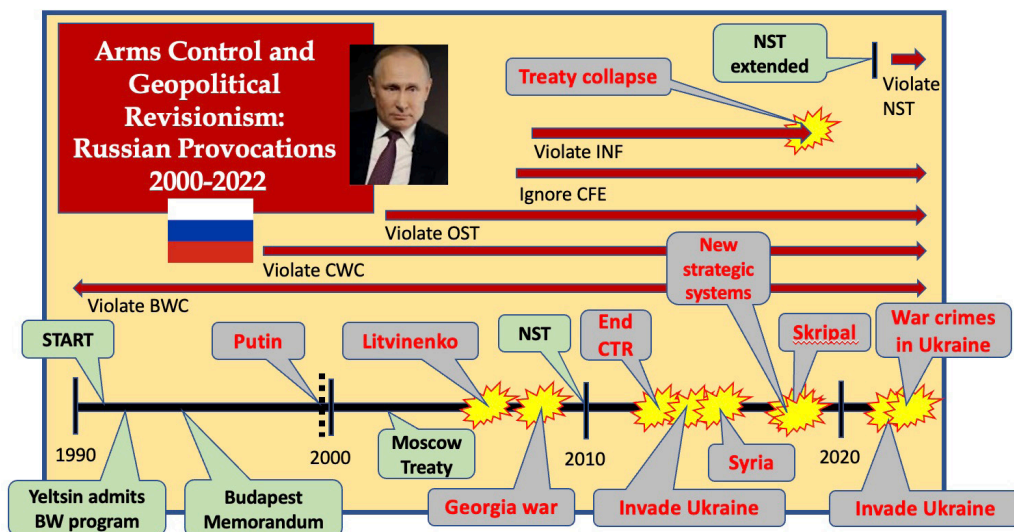
156 See, e.g., “As U.S. and allies arm Ukraine, Russia warns that losing a conventional war ‘can trigger a nuclear war,’” *CBS News* (January 19, 2023), <https://www.cbsnews.com/news/ukraine-russia-nuclear-war-threat-us-nato-weapons-tanks/> (accessed January 17, 2024).

157 See, e.g., Guy Faulconbridge, “Russia warns the United States: the end of nuclear arms control may be nigh,” *Yahoo News* (January 30, 2023), <https://news.yahoo.com/russia-says-nuclear-arms-treaty-061934329.html> (accessed January 17, 2024).

158 See, e.g., Wong, *supra*; Callahan, Britzky, and Atwood, *supra*.

159 See, e.g., Christopher Ford, “Offensive Nuclear Umbrellas and the Modern Challenge of Strategic Thinking,” remarks to a Nuclear Security Working Group Congressional Seminar (February 10, 2016), <https://www.newparadigmsforum.com/p2007> (accessed January 17, 2024).

This concatenation of problems is summarized in Figure 13, which plots events on a timeline of the post-Cold War period, depicting both steps involving U.S. and Russian cooperation in arms control and Russian moves that have stressed or undermined it. Alas, the latter have predominated in recent years.



## VI. What about China?

There have certainly been significant shifts in official U.S. perceptions of China, too. For decades, U.S. leaders felt it was in their interest to promote the growth of Chinese power and influence. In this regard, China was prized first as a counterweight against the Soviet Union and later on the assumption that China would, with economic development, gradually liberalize and become a productive partner in the post-Cold War international system.<sup>160</sup>

Under the Clinton administration, U.S. efforts to promote China’s development kicked into high gear, with the United States explicitly “delinking” economic engagement from human rights concerns, facilitating “China’s development of a more open, market economy that accepts international trade practices,”<sup>161</sup> and (not incidentally) boosting U.S. exports.<sup>162</sup> “The more we bring China into the world,” said

160 *National Security Strategy of the United States* (January 1988), p. 31, <https://history.defense.gov/Portals/70/Documents/nss/nss1988.pdf?ver=uXpmo-mTOTKzq2Ut6PmfjA%3d%3d> (accessed January 17, 2024); *National Security Strategy of the United States* (March 1990), p. 12, <https://history.defense.gov/Portals/70/Documents/nss/nss1990.pdf?ver=x5cw00ez2oak2BjhXekM-Q%3d%3d> (accessed January 17, 2024); and *National Security Strategy of the United States* (August 1991), p. 9, <https://history.defense.gov/Portals/70/Documents/nss/nss1991.pdf?ver=3slpLiQwmkn0-RplyPeAHw%3d%3d> (accessed January 17, 2024).

161 “A National Security Strategy of Engagement and Enlargement” (February 1994), p. 24, <https://history.defense.gov/Portals/70/Documents/nss/nss1994.pdf?ver=YPdbschbfpPz3tyQQxalG%3d%3d> (accessed January 17, 2024).

162 “A National Security Strategy of Engagement and Enlargement” (February 1996) [hereinafter “1996 NSS”], p. 27, <https://history.defense.gov/Portals/70/Documents/nss/nss1996.pdf?ver=4f8riCrLnHIA-H0itYUp6A%3d%3d> (accessed January 17, 2024).

President Clinton, “the more the world will bring change and freedom to China.”<sup>163</sup> The George W. Bush administration expressed a bit more caution, but still remained optimistic about “the emergence of a strong, peaceful, and prosperous China”<sup>164</sup> as a “responsible stakeholder” in the global system.<sup>165</sup>

Nevertheless, perceptions of China as a national security challenge did grow in the mid-2010s, producing, among other things, the Obama administration’s “pivot to Asia.”<sup>166</sup> Especially when combined with a growing U.S. focus on Beijing not just as an economic competitor but as a locus of grievance for economic decline—a key point of President Donald Trump’s rhetoric about lost jobs<sup>167</sup>—this led to significantly more antagonistic threat perceptions.

The Trump administration’s 2017 NSS, for instance, decried the “complacency” of the prior U.S. administration in the face of the growing determination of “China and Russia [to] challenge American power, influence, and interests, attempting to erode American security and prosperity.” China, in particular, was called out as a “revisionist power” that was trying “to displace the United States in the Indo-Pacific region, expand the reaches of its state-driven economic model, and reorder the region in its favor.”<sup>168</sup>

Such threat perceptions by the United States did not abate under the Biden administration, which, as we have seen, saw a global “battle between democracy and autocracies”<sup>169</sup> in a “contest for the future of our world.”<sup>170</sup> In this vision, China was “the most comprehensive and serious challenge to U.S. national security”<sup>171</sup> as it “work[ed] overtime to undermine democracy and export a model of governance marked by repression at home and coercion abroad.”<sup>172</sup>

For all this growing focus upon Chinese threats, however, these worsening threat perceptions did not seem to tip U.S. perceptions of the relationship into conclusions that arms control with Beijing was impossible. To the contrary, the Obama, Trump,

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163 William J. Clinton, State of the Union Address (January 19, 1999), <https://clintonwhitehouse4.archives.gov/WH/New/html/19990119-2656.html> (accessed January 17, 2024).

164 2002 NSS, *supra*, pp. 26, 28.

165 2006 NSS, *supra*, at Part VIII(c)(7).

166 See generally Kenneth G. Lieberthal, “The American Pivot to Asia,” Brookings Institution (December 21, 2011), <https://www.brookings.edu/articles/the-american-pivot-to-asia/> (accessed January 17, 2024).

167 See, e.g., “Donald Trump’s Address to Congress (full text),” CNN (March 1, 2017) (“For too long, we’ve watched our middle class shrink as we’ve exported our jobs and wealth to foreign countries.”) <https://www.cnn.com/2017/02/28/politics/donald-trump-speech-transcript-full-text/index.html> (accessed January 20, 2024).

168 2017 NSS, *supra*, pp. 2, 25.

169 2022 SOTU, *supra*.

170 2022 NSS, *supra*, from the introductory letter.

171 U.S. Department of Defense, 2022 National Defense Strategy of the United States of America, Including the 2022 Nuclear Posture Review and the 2022 Missile Defense Review (October 2022) [hereinafter 2022 NDS], p. 4, <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF> (accessed January 17, 2024). (The NDS is the second of the three documents published in this compilation.)

172 2022 NSS, *supra*, from the introductory letter.

and Biden administrations all stressed that they remained committed to engaging with China, as indicated by Obama seeking a new “Strategic and Economic Dialogue” with Beijing,<sup>173</sup> Trump proposing a “trilateral” arms control deal with China and Russia that would have involved a de facto “freeze” on nuclear force expansion through an “unprecedented overall warhead cap,”<sup>174</sup> and Biden, as we have seen, professing “a continued and strengthened commitment to pursuing enhanced security through arms control.”<sup>175</sup> Accordingly, the Sino-American relationship seemed to remain within what we have been calling the “arms control zone”— at least from the U.S. perspective.

In this sense, U.S.-China “arms control zone” dynamics in recent years may be more interesting when viewed from the Chinese side, for notwithstanding repeated U.S. efforts to engage on such issues, Beijing has consistently rejected all American arms control overtures.<sup>176</sup> Exploring the complexities of this asymmetry in assessments of each other’s suitability as an arms control counterparty, however, is a topic for another day. For now, it suffices to point out that the heuristic of the “continuum of community” and its embedded “arms control zone” may help illuminate aspects of the Sino-American arms control relationship as well.

## VII. Conclusion: Start with Statecraft

All this suggests that arms control can face insuperable structural problems when one or more parties in the international system are committed to agendas of violent geopolitical revisionism. Arms control, at its most fundamental, is a tool of stability: for limiting arms competitions and managing risks in the service of an at least somewhat more peaceful form of continued co-existence. Yet a diehard revisionist, by definition, does not really want stability; it wants not to stabilize but rather to upend the international system, recrafting that system in ways that will allow it to fulfil its ambitions of seizing greater power and status vis-à-vis other players.

The prospects for arms control, and especially for disarmament, are generally derivative of the strategic environment. Whether or not agreements are possible

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173 2010 NSS, *supra*, p. 43.

174 See generally, Christopher Ford, “U.S. Priorities for ‘Next-Generation’ Arms Control,” *Arms Control and International Security Papers* 1, no. 1 (April 6, 2020), pp. 2-3, <https://irp-cdn.multiscreensite.com/ce29b4c3/files/uploaded/ACIS%20Paper%201%20-%20Next-Gen%20Arms%20Control.pdf> (accessed January 17, 2024); and Christopher Ford, “Four Years of Innovation and Continuity in U.S. Policy: Arms Control and International Security Since 2017,” *Arms Control and International Security Papers* 1, no. 25 (January 8, 2021), p. 4 n.3, <https://irp-cdn.multiscreensite.com/ce29b4c3/files/uploaded/ACIS%20Paper%2025%20--%20Looking%20Back%20at%20the%20Last%20Four%20Years.pdf> (accessed January 17, 2024).

175 2022 NPR, *supra*, p. 8.

176 See, e.g., Steven Jiang and Ben Wescott, “China says it won’t joint nuclear talks until the US reduces its arsenal,” *CNN* (July 8, 2020), <https://www.cnn.com/2020/07/08/asia/china-us-nuclear-treaty-intl-hnk/index.html> (accessed January 17, 2024); and U.S. Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2023* (Washington, DC: October 2023), pp. i, 173-76 (“[During 2022,] the PRC largely denied, cancelled, and ignored recurring bilateral defense engagements, as well as DOD requests for military-to-military communication at multiple levels.”), <https://media.defense.gov/2023/Oct/19/2003323409/-1/-1/1/2023-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF> (accessed January 17, 2024).



depends upon perceptions of and trends in that environment, and negotiating success tends to result from rather than make possible the amelioration of geopolitical tensions.

This helps explain the structural toxicity of geopolitical revisionism, and why it is especially challenging to imagine modern-day Russia as a viable counterparty in the arms control enterprise. With the security environment indeed today having “moved into a ... [new] ‘era of revisionism’” as Russia has undermined the institutional frameworks through which the international community for decades tried to consolidate and maintain the post-Cold War peace,<sup>177</sup> the arms control enterprise has suffered accordingly.

This all suggests some key lessons about the role of the underlying security environment in conditioning the availability of arms control. For one thing, the availability of arms control at any given time is not simply a function of whether reasonable arms limits can be conceived, whether effective verification methods can be devised, or how good one’s diplomats are at negotiations tradecraft. It is also influenced—and is perhaps more powerfully influenced—by the underlying circumstances of the security environment, including would-be counterparties’ geopolitical objectives and perceptions of each other’s motives and trustworthiness. Both the availability and the effectiveness of arms control are thus unavoidably linked to and affected by non-arms control questions—e.g., geopolitical agendas, security policy, regime type, leadership trust, and third-party threats and relationships—and cannot be understood (or pursued) in a vacuum. And arms control and disarmament progress may more often result from changes in the security environment than drive such changes.

From this it also would seem to follow that when perceptions of distrust, conflicting interests, and disaffinity are too strong, arms control ceases to be available, even if it is actually needed. Moreover, where the relationship between two would-be counterparties is one located on the far right-hand side of our hypothesized “continuum of community,” the initial task for those hoping to reduce arms race and escalatory risks (let alone for those hoping to reduce arms inventories themselves) is not one for diplomats and negotiators directly seeking arms control at all.

Rather, in such circumstances, the most pressing need may instead be for statesmen and defense planners doing strategy, deterrence, and geopolitics. On that end of our hypothesized continuum, the job becomes one of working to change the security environment, the relationship between the would-be parties, or their perception of their security interests, in ways that move the situation in a more congenial direction along the spectrum to where arms negotiators can find gainful employment.

And here it may perhaps be useful to remember one of the lessons suggested in the Reagan administration’s 1988 National Security Strategy in connection with the INF Treaty.<sup>178</sup> Specifically, that landmark agreement abolishing an entire class of nuclear delivery systems became possible because the United States and its NATO

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177 Ford, “Lessons from past arms control design,” *supra*, p. 23.

178 See, e.g., 1988 NSS, *supra*, p. 4.

allies had responded to provocative Soviet deployments of SS-20 missiles in Eastern Europe<sup>179</sup> with the deployment of countervailing American systems.<sup>180</sup> Those Western deployments in Europe of “Gryphon” nuclear-armed Tomahawk land-based cruise missiles and Pershing II intermediate-range ballistic missiles were deeply controversial in the West,<sup>181</sup> but they also worried Moscow enough<sup>182</sup> to make a negotiated agreement suddenly seem attractive to the Kremlin.<sup>183</sup>

The pedigree for Reagan’s “zero-zero” approach to INF goes back at least to the late 1970s, when President Jimmy Carter initially hoped to use the U.S. development of the Enhanced Radiation Weapon (ERW)— the so-called “neutron bomb” — to provide the Kremlin with an incentive to negotiate over the SS-20 missiles.<sup>184</sup> Carter thereafter fatally undermined his own effort in this respect by unilaterally cancelling that device, but as his successor showed, the concept was remarkably sound.

Ronald Reagan explored the broader use of such a “zero-zero” approach as well, such as suggesting in a 1984 speech the possibility of “a zero option for all nuclear arms.”<sup>185</sup> The concept also lay behind the Trump administration’s idea (voiced in the 2018 Nuclear Posture Review) that development of a new, nuclear-armed submarine-launched cruise missile (SLCM-N) might provide the necessary incentive for Russia to negotiate seriously a reduction of its non-strategic nuclear weapons, just as the prior Western deployment of intermediate-range nuclear forces in Europe led to the 1987 INF Treaty.<sup>186</sup>

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179 See, e.g., Center for Strategic and International Studies, “RSD-10 Pioneer (SS-20)” (August 2, 2021), <https://missilethreat.csis.org/missile/ss-20-saber-rsd-10/> (accessed January 17, 2024).

180 See, e.g., John T. Correll, “The Euromissile Showdown,” *Air Force Magazine* (February 1, 2020), <https://www.airandspaceforces.com/article/the-euromissile-showdown/> (accessed January 17, 2024).

181 See, e.g., Susan Colbourn, *Euromissiles: The Nuclear Weapons that Nearly Destroyed NATO* (Ithaca, NY: Cornell University Press, 2022).

182 See, e.g., Michael Getler, “Pershing II Missile: Why It Alarms Soviets,” *The Washington Post* (March 17, 1982), <https://www.washingtonpost.com/archive/politics/1982/03/17/pershing-ii-missile-why-it-alarms-soviets/20eca6f0-3a64-4bdf-9957-ae54261b6ca6/> (accessed January 17, 2024). The NATO deployments also helped accelerate what has been called “by far the largest, longest, and most expensive disinformation campaign in intelligence history”— the effort by Soviet Union and its allies to subvert Western peace movements. As described in a 1981 memo from East Germany’s Stasi secret police, for example, a key objective of this Soviet-led disinformation campaign was “thwarting NATO’s plans to deploy qualitatively new atomic medium-range ballistic missiles by the year 1983.” Thomas Rid, *Active Measures: The Secret History of Disinformation and Political Warfare* (New York: Picador, 2020), pp. 197, 269.

183 See generally, e.g., U.S. Department of State, “Treaty Between The United States Of America And The Union Of Soviet Socialist Republics On The Elimination Of Their Intermediate-Range And Shorter-Range Missiles (INF Treaty),” State Department (undated) (describing negotiations), <https://2009-2017.state.gov/t/avc/trty/102360.htm> (accessed January 17, 2024); Lawrence S. Wittner, *A History of the World Nuclear Disarmament Movement, Volume Three: A History of the World Nuclear Disarmament Movement, 1971 to the Present* (Stanford: Stanford University Press, 2003), p. 314.

184 See, e.g., Wittner, *supra*, p. 48.

185 See, e.g., *ibid.*, p. 319.

186 U.S. Department of Defense, *Nuclear Posture Review 2018* (February 2018), p. 55, <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF> (accessed January 17, 2024).

Especially in light of the abovementioned analysis of U.S. and Russian perceptions of each other as a would-be arms control counterparty, the conceptual model of the Reagan administration's INF example may be instructive today. It suggests that where one's counterparty is a dangerous revisionist such as Russia, the approach most conducive to arms control may not necessarily actually involve directly pursuing arms control agreements, in the first instance, at all, but rather facing down that revisionist's expansionism and demonstrating that negotiation (rather than further provocation) is in its interest.

Perhaps, therefore, we now need to start the arms control enterprise all over again from scratch, beginning not with agreement-seeking but instead with resolute statecraft and counterstrategy. Such an approach would focus less on pursuing arms agreements per se than upon changing the decision calculus in Moscow and Beijing in ways that give them concrete incentives to engage with the United States on these issues notwithstanding their dislike and distrust for Washington, and for reasons of specific security interest in which equally distrustful American leaders can place some reliance even while utterly discounting any notion of Russian or Chinese good faith.

It is not a given that such an approach—pursuant to which, inter alia, one develops and potentially deploys countervailing forces in hopes of using them as “trade bait” to catalyze negotiation—can fully make up for a relationship between would-be arms control counterparties that has gone conspicuously bad. For a truly poisonous relationship over on the right-hand end of our “continuum of community,” there may not be much that can be done in the short term except to work to handle the challenges of deterrence and crisis management in non-catastrophic ways until things begin to change for some arms-exogenous reason.

Yet a “countervailing posture” approach to negotiation nonetheless has much to be said for it. First, even in a very bad relationship, it may provide the “best available” chance of convincing a deeply distrustful and antagonistic counterparty that there really is something to be gained by negotiation. Second, provided that deployment as potential “trade bait” really is a countervailing deployment in response to one the other side has already undertaken—rather than the provocative move of fielding a significant new capability—such an approach would tend to “fail safe,” at least in relative terms, even if it fails to catalyze interest in arms control restraint from one's counterparty. In such circumstances, one's diplomats would be disappointed, but at least there would now be a countervailing deployment rectifying what could otherwise be a destabilizing asymmetry in force posture.

In any event, the primary lesson of this study is perhaps this: when the relationship between would-be counterparties is particularly bad, one may need to look for solutions first to the statesmanship of deterrence and counterstrategy, and only secondarily to the diplomacy of arms control.

# What is the Future for Arms Control at NATO?

*Bettina Cadenbach and Eirini Lemos-Maniati*

The global security landscape is competitive and dangerous. The rise of strategic competition and cross-domain risks are exacerbating old challenges and creating new challenges to the arms control, disarmament, and non-proliferation architecture that has kept the Euro-Atlantic region safe for decades.

Russia's war of aggression against Ukraine has undermined the foundations of the rules-based international order, of which arms control, disarmament, and non-proliferation constitute an essential component. New technologies, which come with great potential, have already and will continue to reshape the strategic environment with significant impact on the character of warfare. Rising regional powers as well as an array of non-state actors vie for dominance in the global order, competing to set the emerging rules that will shape that order for future decades.<sup>187</sup>

Arms control, disarmament and nonproliferation have always played a role in complementing deterrence and defense policies. NATO has always leveraged its role in shaping and supporting arms control, disarmament, and nonproliferation efforts with the aim of preserving peace while maintaining Allied security objectives.

This paper examines NATO's unique role in strengthening and shaping arms control, disarmament, and nonproliferation, through a brief exploration of Alliance history. It recognizes the importance of these tools for global security. It also notes that we cannot return to the past trajectory of arms control, disarmament, and nonproliferation by simply trying harder to negotiate more of the same. It closes by suggesting a process of adaptation towards a holistic, integrated approach to arms control tools, domains, and actors, complementing NATO's deterrence and defense. Now is a moment of opportunity—a chance to assess, and to consider how NATO can contribute to the new future of arms control.

## **ADN is in NATO's DNA**

Arms control, disarmament, and nonproliferation (ADN) have played an important role in complementing NATO's deterrence and defense policies since the first NATO summit in Paris in 1957, where Allies decided to seek disarmament with the Soviet Union while ensuring Allied security. Although the Soviet Union refused the offer, and Cold War tensions rose, Allies started to develop disarmament expertise.

Ten years later, Allies reflected on the core functions of the Alliance and agreed the Harmel Report, which spelled out the “*dual-track*” approach of strong deterrence and defense combined with dialogue. The rationale was that safety from external

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<sup>187</sup> Director of National Intelligence, *Annual Threat Assessment of the U.S. Intelligence Community* (February 6, 2023).

threats through strong deterrence freed resources to resolve the political conflicts of the day and create an environment that would allow an end to the East-West arms race. The same rationale permeated the 1989 *Alliance's Comprehensive Concept of Arms Control and Disarmament*, in which Allies noted that deterrence and defense policy and arms control should be complementary and interactive within an integrated approach. It also coined the guiding principles of security, stability, and verification that have underpinned NATO's work on arms control ever since. It also reflected the importance of shared interest from all parties involved in order to achieve satisfactory and effective results.

NATO's Strategic Concepts of 1991 and 2010 echoed the same rationale, further stressing the implicit link between deterrence and defense and arms control. In the same fashion, yet against an entirely different security environment, the 2022 Strategic Concept reflects the role of arms control, disarmament, and nonproliferation as tools that complement deterrence and defense. Their particular contributions, when implemented effectively, are to reduce strategic risk, enhance dialogue, prevent and manage crisis, and encourage responsible behaviors. At the 2023 Vilnius Summit, NATO Allies committed to pursuing all elements of strategic risk reduction, including promoting confidence building and predictability through dialogue, increasing understanding, and establishing effective crisis management and prevention tools, taking into account the prevailing security environment and the security of all Allies.<sup>188</sup>

In this context, the Alliance, over the years, has facilitated ADN treaties and conventions, served as a clearinghouse to reconcile Allies' positions, and helped forge consensus on major bilateral and global arms control treaties. These include, but are not limited to, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Vienna Document, the Treaty on Conventional Armed Forces in Europe (CFE), the Treaty on Open Skies, the Chemical Weapons Convention (CWC), and the Biological Weapons Convention (BWC). NATO has also supported the Strategic Arms Limitation Talks in the 1970s between the United States and the Soviet Union; the Strategic Arms Reduction Treaties (START); and the Treaty on Intermediate-range Nuclear Forces (INF).

While NATO itself is not a signatory to any arms control, disarmament, or non-proliferation treaties, it has offered its members a unique and indispensable forum for consultations on arms control, disarmament, and non-proliferation matters throughout the years. Through its dedicated and specialized structures that bring together military, intelligence, and political expertise, NATO has shaped efforts and its "stamp of authority" has influenced wider discussions on specific aspects of arms control.

How should NATO approach ADN in the evolving security environment? In the current security environment, there are new challenges and several additional complicating factors. These include:

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188 Vilnius Summit Communiqué, paragraph 49: [https://www.nato.int/cps/en/natohq/official\\_texts\\_217320.htm](https://www.nato.int/cps/en/natohq/official_texts_217320.htm)

- Unprecedented nuclear saber-rattling intended to intimidate and coerce Allies and to mask intentions. In particular, Russia’s unprecedented nuclear saber-rattling, with repeated threats by President Putin and other senior officials, using irresponsible nuclear rhetoric, threatening a “nuclear war with the West,” as well as the announcement to deploy tactical nuclear weapons in neighboring Belarus, during Russia’s war of aggression against Ukraine.
- Heightened risk of nuclear proliferation is greater now than it has been at any point since the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) was signed in 1968, with intensifying risks of proliferation cascades in regions of importance to the Alliance. Iran and the Democratic People’s Republic of Korea’s (DPRK) are blatantly pursuing their nuclear ambitions.
- China’s opaque military modernization, including the expansion of its nuclear capabilities without meaningful transparency on its nuclear doctrine and a stated disinterest in engaging in international arms control talks.
- Emerging and disruptive technologies (EDTs), such as Artificial Intelligence (AI) and autonomous weapons systems,<sup>189</sup> that risk accelerating the decisionmaking cycles of conflict but also offer a wide range of useful applications, if implemented in line with our values and principles.
- The impact of the information environment as a vector to subvert, discredit, destabilize, and disrupt, thus attempting to raise doubts regarding purpose and intention. Since February 2022, we have witnessed an unprecedented escalation in Russia’s longstanding information operations, including, but not limited to the area of weapons of mass destruction (WMD).

These challenges, and the current security environment, increase the complexity of arms control, disarmament, and nonproliferation efforts, and risk significantly undercutting the mutual trust required for effective arms control.

### **What are the Prospects for ADN?**

New, legally binding arms control agreements are not on the immediate horizon, yet remaining idle is not an option. There is a dire necessity to keep seeking risk reduction and increased predictability. This can be pursued through arms control, through the creation of norms and principles of responsible behavior, including for new weapons systems and technologies.

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189 NATO has approved an established set of emerging and disruptive technologies (EDTs), which has increased over time, and currently includes: 1) Big Data, Information and Communication Technologies; 2) Artificial Intelligence; 3) Robotics and Autonomous Systems; 4) Space Technologies; 5) Hypersonic Technologies; 6) Quantum Technologies; 7) Bio and Human Enhancement Technologies; 8) Materials and Advanced Manufacturing; 9) Energy and Propulsion; and 10) Electronic and Electromagnetic Technologies.

There is a need to think holistically about how NATO can adapt to reduce risks and ensure security and stability. There is not one agreement that is one-size-fits-all. Rather, some of these challenges can be addressed through old and tested measures; others will require innovative approaches. Some may be addressed by agreements, others by focusing on norm-building and identifying responsible behaviors. We need to “mix and match”—maintaining existing concepts while developing new approaches.

Taking these prospects into account, here is where we should focus our efforts in the short, medium, and long terms:

### **Short Term Priorities**

The existing global arms control regimes that are key pillars of the arms control architecture must be protected and, where possible, strengthened. The NPT remains the cornerstone of the global nuclear nonproliferation and disarmament architecture.<sup>190</sup> Therefore, negotiations for the treaty banning the production of fissile material for use in nuclear weapons must start in earnest. We must bring the Comprehensive Nuclear Test Ban Treaty into force. The CWC and the BWC must be fully implemented and preserved.

There are also ongoing initiatives such as Creating an Environment for Nuclear Disarmament (CEND), and the International Partnership for Nuclear Disarmament Verification (IPNDV), which can provide avenues for comprehensive and forward-looking approach towards improving the security environment. Such Allied initiatives are all the more important against the backdrop of Russia’s irresponsible nuclear rhetoric and are evidence of NATO Allies’ support to the ultimate goal of a world without nuclear weapons, in full accordance with all provisions of the NPT. NATO and Allies have remained calm and confident throughout Russia’s aggression against Ukraine and have conveyed a clear message: A nuclear war cannot be won and should never be fought (recall that Russia joined in renewing this declaration in January 2022).<sup>191</sup>

We must actively explain the values and principles guiding our policies vis-à-vis the NPT, CWC, and BWC to set our ADN record straight and fight disinformation. We should aim at substantive conversations outside the Alliance and our existing partnerships, including with stakeholders among the Non-Aligned Movement. We must also expand our engagement with civil society.

Allies must also become more resilient against ongoing disinformation campaigns. There is a continued need to understand, assess, and counter any disinformation efforts that aim to undermine the credibility of our efforts and to cast doubt on the objectives of the rules-based international order. We need to improve the information resiliency of the Allies and of NATO. Over the years, NATO has made significant

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190 Since the height of the Cold War, NATO alone has reduced the size of its land-based nuclear weapons stockpile by over 90, reducing the number of nuclear weapons stationed in Europe and its reliance on nuclear weapons in strategy.

191 Joint Statement of the Leaders of the Five Nuclear-Weapon States on Preventing Nuclear War and Avoiding Arms Races (January 3, 2022). <https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/03/p5-statement-on-preventing-nuclear-war-and-avoiding-arms-races/>.

headway in strengthening that resilience. Therefore, an effort to increase dialogue with the public and third parties is essential to shaping the information environment and combating hostile information activities. In this context, we must continue to explain what the Alliance stands for, its values and principles.

We must take all necessary steps to strengthen and adapt NATO's deterrence and defense to the new security environment, with the new regional plans, designated forces and capabilities, demonstrating our commitment to protect every inch of Allied territory against any threat.

### **Medium Term Priorities**

The development and use of new military technologies does not take place in a legal or moral vacuum. We should therefore ensure full implementation of international law and contribute to shaping norms, standards, and principles of responsible behaviour in strategic areas, such as Artificial Intelligence, biotechnologies, and space. While these norm- and standard-setting efforts would be of political nature at first, these multi-faceted solutions could eventually become building blocks for future agreements—if not on arms control, then on transparency, risk reduction, and predictability.

NATO should continue to use its convening power to play a key role in establishing standards for military use of emerging and disruptive technologies (EDT). Promising efforts to build norms and principles for responsible behaviour for EDTs are already underway, including at NATO. Specifically, NATO has adopted an Artificial Intelligence Strategy, which contains principles for responsible use.

Allies have also been at the forefront of international efforts to govern EDTs, for example, the UK-led Open-Ended Working Group on reducing space threats through norms of responsible behavior and the U.S. initiative for a moratorium on Destructive Direct-Ascent Anti-Satellite Missile Testing.

Outside of the multilateral negotiating fora, Allies have engaged in other activities that bring together a variety of stakeholders, which is particularly important when talking about EDTs since the private sector is at the forefront in developing these technologies. For instance, Germany has held a series of conferences on “Capturing Technology-Rethinking Arms Control,” and the Netherlands with the Republic of Korea held a Summit on “Responsible Artificial Intelligence in the Military Domain” (ReAIM) in February 2023, which brought together an unprecedented group of actors from the private, academia, and government sectors to engage in new thinking.

All of these efforts already have positive spillover effects to other international fora, highlighting NATO's and Allies' continuous commitment to our values and principles, as well as to transparency and risk reduction.

Risk reduction, confidence building, transparency, verification, and compliance must be built into these norm-setting and behavioral approaches from the start, paving the way for their integration into future agreements. This is all the more important



since some new technologies, such as artificial intelligence, provide great potential to increase capabilities in various fields including in verification.

### **Long Term Priorities**

We must critically examine the existing arms control, disarmament and non-proliferation toolbox and ascertain what continues to serve as a complement to the Alliance's deterrence and defense, what can be adapted to develop guardrails in the new domains, such as cyber and space, and what no longer advances the Alliance's security objectives.

We need to understand the opportunities and implications of the emerging disruptive technologies. While arms control, disarmament, and nonproliferation efforts do not traditionally involve the private sector and industry, new technologies show that we need to be far better connected and think about governance through a broader and cross-cutting prism, including integration of human security and gender perspectives. The private sector is becoming more and more relevant in our reflections on the future. We need to ensure that EDTs are adopted in line with our values and principles, not only but especially in military contexts. Governing these fields will be critical to preserve and strengthen the rules-based international order, which is indispensable to our security.

We need to invest in the development of the next civilian and military cadres of arms control, disarmament, and nonproliferation experts, for they will harness the opportunities in the future. NATO has a unique role, experience, and network to substantially contribute to this effort and reap the benefits of a new thinking.

### **Conclusions**

We must not allow ourselves to forget what arms control is and what it is not. It is not an end in itself. It is a means of managing and mitigating some of the greatest threats to our security and to humanity itself. It is a tool to shape the security landscape and manage competition. It can create the conditions necessary for the next generation of successful agreements. It is an indispensable tool to complement our deterrence and defense and contribute to strategic stability.

Nearly all of the elements of the arms control, disarmament, and nonproliferation architecture that served Allies' security for many decades are crumbling. The security environment has become more complex and challenging. Military capabilities and technological progress risk accelerating the risk of conflict, while offering important opportunities and unprecedented capabilities. These are considerable challenges to the creation of any fully-fledged arms control regime. The prospects appear grim and may take years to materialize. Faced with these challenges, we must not be idle. We must prioritize new efforts to reduce risks and to develop new norms and rules of the road that can become the guardrails for future endeavors.

NATO is a unique convening platform for political consultations, provision of expertise, and standard setting for Allies and, as appropriate, for partners on arms

control, disarmament, and nonproliferation issues. This is because NATO brings together military, intelligence, and political experts, diplomats, and planners supported by the Alliance's scientific and technical expertise, including through the NATO Science and Technology Organization. In the context of EDTs, for example, NATO has demonstrated how it can leverage this expertise to adapt and develop the guardrails that will govern these technologies and contribute to our security.

The 2022 Strategic Concept and the Vilnius Summit have paved the way for a renewed thinking, an impetus for renewed reflection that will position us better for the future as we are approaching our 75<sup>th</sup> anniversary. Adaptation is not about reinventing the wheel, but about building on the long legacy of successful and effective arms control agreements, while adapting them to reflect current and future realities and opportunities.

# Moving from the Abstract to the Concrete in U.S. Arms Control with Russia and China

*Michael Albertson*

Much has happened in arms control over the last year as this chapter has been in development. The prospects for arms control as a viable national security tool have, if anything, grown darker. Russia has falsely equated tearing down the remaining arms control edifice with creating potential leverage vis-à-vis its actions in Ukraine. China has failed to update its talking points on being a responsible arms control actor with its massive nuclear force expansion. The United States has stated clearly that it is open for business on arms control and risk reduction, but it unfortunately has no customers in Russia and China. It remains unclear what specifically the United States is selling in terms of what it wants in a potential agreement. Competitive dynamics and an atmosphere of great power competition are driving all parties further away from the table.

Many proposals made over the past decade—either gradual steps toward further nuclear reductions or revolutionary departures into new domains—no longer fit the security environment. Few analysts have outlined concrete proposals that fit an emerged security environment shaped by China's force expansion and Russia's war in Ukraine, or the emerging security environment of tomorrow dominated by the new complexities of the two-peer environment and the continued rupture in U.S.-Russian relations.

People have valid questions about arms control's forms and functions in these environments. Given the difficulties and complexities in the security environment, it is easy to tie oneself in knots to find the perfect U.S.-proposed solution to all the identified problems. It is, however, counterproductive to try and do so. Any agreement will ultimately be a negotiation, a give and take between varying parties with different interests. It will be a compromise between equal parties rather than an imposition of will by a stronger party on a weaker party. Russia and China have not articulated a concrete set of proposals; they are unlikely to do so. Thus, the main question experts in the United States should be asking and exploring is a simple one, inherent in any negotiation: what do we want, and what are we willing to pay to get what we want?

This is the proper moment for such an undertaking. The history of arms control demonstrates that there are stretches where progress on further arms control appears dark, only for a window of opportunity to open with a frantic rush for new proposals to get something done now. It is an open question whether we will be ready for such a future rush given the erosion of the field over the last decade. A stockpiling of potential ideas and proposals is important to take advantage of such a future moment. Expertise should be maintained and taught. New thinking is needed, shaped by guidance from the past, an analysis of the impasse, a spectrum of the possible, and a realistic assessment of the feasible. If progress is to be made, either before

the formal expiration of the New START Treaty (NST) in February 2026 or during the subsequent interregnum, a practical, concrete proposal must be agreed within the U.S. interagency and put in front of allies and negotiating partners to serve as the basis for future work.

Several topics can help provide some clarity on this question. The first section serves as a reminder of past thinking on formulating arms control objectives. Returning to first principles, if arms control is an armaments policy or military policy between adversaries in a competitive environment, then arms control formats in a two-peer environment should be centered less on reducing numbers and more on minimizing the likelihood of war, the destructiveness of war should it occur, and the costs and risks of armaments competitions. Much of these aims center on providing information during a period of strategic competition, and past periods of arms control thinking provide useful guides for future work. Defense-focused arms control thinking is critical, and defense leadership is necessary to chart a proper future course for negotiations.<sup>192</sup>

The second section focuses on the current impasse, the stated U.S. arms control positions regarding both Russia and China, and why these positions have not gained traction.<sup>193</sup> In some cases, these are problems with the basic building blocks of arms control. How is the central unit of accountability defined? In other cases, there is a lack of clarity of purpose in what security objectives the agreement is attempting to accomplish. What does it mean to “capture” or “limit” something in an agreement? What does it mean that the United States is “ready to negotiate”? Overall, most of the issue lies in the new realities with Russia and China, particularly how their leadership positively views competition in the form of arms racing and negatively views cooperation in the form of arms control. These new realities are both a help and a hindrance. While they limit the possibilities of what can be achieved, they help to focus the problem set assuming U.S. security objectives regarding arms control can be understood and prioritized.

The third section will attempt to align currently articulated goals with longstanding policy objectives, providing concrete substance to developing negotiating positions regarding the challenges posed by Russian novel systems, Russian non-strategic nuclear warheads, and Chinese nuclear force expansion in today’s security environment. With each of these challenges, there are different formats centered mainly around the question of equal or unequal treatment of numbers, systems, and parties. Options are available depending on U.S. national security goals and priorities, and how much the United States might be willing to trade in order to get differing levels of what it wants. Choices must be made.

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192 See the relevant arms control sections in Brad Roberts, ed., *China’s Emergence as a Second Nuclear Peer: Implications for U.S. Nuclear Deterrence Strategy* (Livermore, CA: Center for Global Security Research, 2023). [https://cgsr.llnl.gov/content/assets/docs/CGSR\\_Two\\_Peer\\_230314.pdf](https://cgsr.llnl.gov/content/assets/docs/CGSR_Two_Peer_230314.pdf). Accessed August 24, 2023.

193 This lack of traction was largely independent of the current war in Ukraine, although that has made dialogue and progress all the more difficult given Russian decisions to explicitly tie arms control to U.S. military support to Ukraine.

Some key conclusions can be drawn with regards to both strategic objectives and viable formats. A realistic assessment shows that at present the United States lacks symmetric negotiating leverage, which limits to a large extent the kinds of agreements it can push for unilaterally or trade for in a negotiated setting. Competitive dynamics with China and the open hostility with Russia further limit the possibilities. The United States and its allies have two sound options. They should push for an arms control agreement centered on information to manage competition with Russia and China and bridge the gap from the current point in formal bilateral and multilateral strategic arms control to a potential future point where progress may be possible, and they must build the necessary leverage for future negotiations when all-out strategic competition may yield to some form of moderated competition undergirded by arms control.

### **Section I: Foundational Principles in Arms Control**

Two distinct snapshots in time serve as useful starting points for a policy analysis of current and anticipated strategic objectives: the foundational arms control thinking of the late 1950s and early 1960s and the reexaminations of a stalled arms control agenda done in the late 1970s and early 1980s. The late 1950s and early 1960s was a period of fervent intellectual exploration on arms control as the United States and Soviet Union began to actively compete both quantitatively and qualitatively in the strategic nuclear weapons space. International efforts to control nuclear weapons had failed. Leading deterrence thinkers took the arms control lessons learned from before World War II, when arms control was largely multilateral and focused on codifying battlefield norms of behavior and limiting conventional armaments, and attempted to update the definition and goals of arms control to a new environment of bilateral, superpower, ideologically driven, and nuclear-focused competition. In contrast, the late 1970s and early 1980s were a period when arms control efforts were being questioned and reassessed in the face of great power competition, where experts had doubts about whether arms control efforts remained consistent with desired national security policy goals. The modern-day lesson is that soul searching, hard bargaining, and capabilities developments led to negotiating leverage and later diplomatic breakthroughs.

Contemporary thinking should start with the three basic underpinnings of arms control. First, arms control is at its core an armament policy aimed at stabilizing or improving the military balance, rather than foreign policy or diplomatic policy designed to improve overall bilateral or multilateral relations. Armament policy must focus not only on numbers and types of weapons, but the uniquely dangerous attributes of systems and the specific security environment in which these weapons are likely to be utilized in a crisis and conflict. Concrete military scenarios of crisis and conflict, explored using analytic tools such as net assessments and wargaming, can serve as the basis for the formation of arms control goals as systems are singled out for limitations, restrictions, or reductions as measures tailored to the problem. Arms

control is a tool, one which can substitute for other potential military responses to a specific armament challenge posed by other parties.

Second, arms control is done amongst adversaries.<sup>194</sup> True progress on arms control is not underpinned by agreements made between allies or friends, who can accomplish similar goals through means other than formal agreements with verification and compliance dimensions. As often remarked, the United States does not have arms control agreements with the United Kingdom and France, its allies. Multilateral agreements can play a major role in this equation, but they suffer in effectiveness when the major problematic actors are not parties to the agreement. One does not undertake arms control with the notion of converting an adversary into a friend; it is about accomplishing a mutually beneficial goal through a means otherwise unavailable should the sides not cooperate in some manner. It is about two or many parties agreeing to some level of mutual discomfort they can both live with as being better than the status quo. This runs largely counter to the narrative history of the last five decades of formal arms control, where agreements tended to mark warming in the bilateral relationships during U.S.-Soviet détente, the Reagan-Gorbachev era, the Clinton-Yeltsin period, and the Obama-Medvedev “reset.”

Third, states pursue arms control in a competitive environment. Cooperation in the single area of arms control does not mean cooperation in all areas of the bilateral or multilateral space, nor does it signal a relaxation in broader tensions. A state must be prepared, even when arms control is successful in certain dimensions, to compete and pursue advantages against its adversary in other areas and prepare itself adequately should arms control disappear. This is a difficult cognitive balancing act for many: the ability to cooperate and compete at the same time, the necessity to reach a landmark agreement yet remain vigilant about backsliding on the deal or about bad behavior in other areas of the competitive relationship. It is always difficult to be seen as “doing favors” to competitors in such an environment, particularly where there is a perceived U.S. technological advantage (i.e., missile defense or conventional strike) or point of particular concern to the other side (e.g., admitting mutual vulnerability with China). When relations improve, many are surprised that arms control negotiations remain difficult or acrimonious given the mistrust and continued competitive dimensions at play. When relations worsen, it becomes challenging to determine how and where cooperation remains necessary when competitive dynamics (i.e., tit-for-tat diplomacy, military signaling, aggressive rhetoric) dominate the landscape and the policy discussion.

The three major goals of arms control defined in the late 1950s and early 1960s—avoidance of war, the minimization of costs and risks of arms competitions, and the curtailment of the scope and violence of war if it occurs—should also be

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194 In some cases, a small group of like-minded states can come together to set best practices, create norms, or deny systems and technologies to outsiders or adversaries. Here, of course, the ultimate objective typically remains persuading or compelling an adversary to participate in the agreement.

remembered.<sup>195</sup> These have been seen as the most canonical listing of goals, durable in the face of the many ups and downs in arms control's fortunes. Hedley Bull wrote in 1976 that the security objectives of arms control were to make nuclear war less likely, less catastrophic if it should occur, and less costly to implement in terms of military and economic costs.<sup>196</sup> Similarly, Joseph S. Nye, Jr. echoed in 1984 the contemporary focus on reducing numbers was steering arms control away from its foundational goals of reducing the risk of nuclear war, reducing the damage done by nuclear war should it occur, and reducing the costs of arms races.<sup>197</sup>

The largest disagreement was around the goal of reducing costs—whether this be an explicit goal to be pursued for its inherent value or merely a desired outcome far subordinate to other security objectives. Herman Kahn and Anthony Weiner focused on the need to “improve the inherent stability of the situation, decrease the occasions or approximate causes of war within the system, and decrease the destructiveness and other disutilities of any wars that actually occur.”<sup>198</sup> Decreasing costs of defense priorities, they believed, “would take a low priority” to these three objectives. In contrast, Bernard Brodie highlighted that “in a pragmatic approach to arms control the object of saving money really deserves a superior rating to that of saving the world,” based on his conviction that the probability of nuclear war would remain extremely low and that in any case arms control could do little to change that probability.<sup>199</sup> Reducing unnecessary costs on both sides was thus one area where objectives could be sought and results achieved. This debate has some contemporary relevance given the concerns by some regarding increased defense spending on U.S. nuclear modernization and “unnecessary and wasteful arms racing” between the United States, Russia, and China.

While arms control first principles are frequently referenced, the history of arms control is a cautionary tale of these foundational principles often being ignored in policy. Consistency in thinking about objectives failed to yield consistency in developing results. The successes of the late 1960s and early 1970s stalled in the late 1970s and early 1980s, leading many to doubt the viable future of arms control as a national security tool in the technologically complex and bipolar confrontation of the period. Many argued that restrictions and limitations on weapons systems were becoming increasingly artificial and divorced from security realities. Bernard Brodie, focusing in his 1976 *International Security* article “On the Objectives of Arms Control,” was struck by the volume of the literature and the paucity of results in arms control

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195 As summarized in Michael Krepon, “On the Objectives of Arms Control,” *Arms Control Wonk* (May 16, 2018). <https://www.armscontrolwonk.com/archive/1205160/on-the-objectives-of-arms-control/>. Accessed November 12, 2021.

196 Hedley Bull, “Arms Control and World Order,” *International Security* 1, no. 1 (Summer, 1976), pp. 3-16.

197 Joseph S. Nye, Jr. “Arms Control and the Prevention of War,” *The Washington Quarterly* 7, no. 4 (1984).

198 Herman Kahn and Anthony Weiner, “Technological Innovation and the Future of Strategic Warfare,” *Astronautics and Aeronautics* (December, 1967), p. 28.

199 Bernard Brodie, “On the Objectives of Arms Control,” p. 19.

and demanded that objectives be grounded in a practical approach that ensured they would be “mutually consistent,” “worth achieving,” and “to be in some degree achievable.”<sup>200</sup> Some believed that the objectives had shifted away from foundational thinking. Thomas C. Schelling lamented as much in his 1985 piece in *Foreign Affairs* titled “What Went Wrong with Arms Control?” that the good arms control thinking of the 1950s and 1960s was largely discarded after 1972, leading to stalemate in negotiations and illogical policy positions warped to fit requirements of numerical limitations and verification.<sup>201</sup>

This concept of arms control as an armaments policy between adversaries in a competitive environment has often faded into the background. Arms control policy is frequently more driven—or at least it is seen as being largely driven—by a foreign policy run by the White House and the State Department as opposed to a military or armaments policy led by the Defense Department and the military services. Numerous biographies and diplomatic histories highlight the push for arms control agreements to be done in time to form the substantive backbone for a high-level bilateral summit meeting. Progress in arms control is often heralded as signaling an improvement, a relaxation, or a sea change in relations between adversaries or competitors, losing sight of the continuing competitive dynamics in nuclear deterrence or broader bilateral relations. Détente in the 1970s or the reset of the Obama administration were later criticized when competitive dynamics re-surfaced, and the arms control treaties that represented the era were criticized not on their substance but for the supposed naivete of the cooperative period they represented. This leads to complaints of “arms control for arms control’s sake” or “arms control is a gift to the other side,” perceptions that concrete U.S. defense capabilities are being weakened or sacrificed in the hopes of improved diplomatic relations or presidential prestige.<sup>202</sup> These complaints often paper over the inability by the Defense Department and the military services to see the value provided by arms control agreements or integrate the possible utility of the arms control tool in their overall toolkit in thinking about the future competitive security environment.

## **Section II: The Current Impasse in Arms Control**

Foundational principles serve as a useful lens through which to view the current impasses in U.S.-Russian bilateral, U.S.-Chinese bilateral, and U.S.-Russian-Chinese trilateral arms control. Of these three listed potential combinations, one is in serious jeopardy and two are largely non-existent. Of the three countries in the mix, only the United States has a quasi-articulated set of arms control positions. Having been articulated early in the Biden administration, these positions have been hamstrung

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200 Bernard Brodie, “On the Objectives of Arms Control,” *International Security* 1, no. 1 (Summer 1976), p. 17.

201 Thomas C. Schelling, “What Went Wrong with Arms Control?” *Foreign Affairs* 64, no. 2 (Winter 1985), pp. 219-233.

202 A narrative which is prevalent in the United States among many policymakers and experts, but also one present increasingly in Russian revisionist narratives of arms control deals of the 1980s and 1990s as imposed on Russia when it was weak.



by Moscow's actions in Ukraine, Russia's poorly conceived plan to hold NST hostage to U.S. support for Ukraine, China's continued opacity, and sharp U.S. divides on the efficacy of arms control as a national security tool in dealing with great power competition with Russia and China. Meant to be starting points for discussion, U.S. proposals continue to lack specificity regarding how these positions meet U.S. armament and security objectives in an environment dominated by Russia's war in Ukraine and the two-peer problem. Its goal of getting to the table to hone aspirations to concrete proposals have been waylaid by Russian enmity and Chinese silence. Russia has no concrete proposals on next steps, only a propensity for hostage taking, a long-standing set of perceived grievances, and an increasingly hostile attitude to any engagement with the United States. Moscow's refusal to engage on further arms control measures predates the current hostilities in Ukraine, with Russia rejecting a wide variety of U.S. proposals on nuclear and non-nuclear issues over the last decade. China maintains a mistrustful skepticism of arms control, reiterating outdated lines on how the onus is on the United States and Russia to disarm further before China should be involved. All of this forms a significant impasse. Some in the United States see a role for continued arms control, while others want to compete without restrictions. The current impasse demonstrates the need for managing expectations, discarding proposals that are aspirational and outdated, and seeking the necessary and the possible in line with U.S. armaments policy in the current and projected competitive security environment.

United States: Over the last three U.S. administrations, the goals of arms control as a tool of U.S. national security policy with Russia and China have been presented in the respective Nuclear Posture Review documents:

### **2010 Nuclear Posture Review**

As the United States and Russia reduce their deployed weapons through New START, the United States will pursue negotiations for deeper reductions and greater transparency in partnership with Russia. Over time, we will also engage with other nuclear weapon states, including China, on ways to expand the nuclear reduction process in the future. This process should include efforts to improve transparency of states' nuclear policies, strategies, and programs.<sup>203</sup>

### **2019 Nuclear Posture Review**

The United States is committed to arms control efforts that advance U.S., allied, and partner security; are verifiable and enforceable; and include partners that comply responsibly with their obligations. Such arms control efforts can contribute to the U.S. capability to sustain strategic stability. Further progress is difficult to

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203 U.S. Department of Defense, *2010 Nuclear Posture Review* (2010). [https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010\\_Nuclear\\_Posture\\_Review\\_Report.pdf](https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf). Accessed June 27, 2022.

envision, however, in an environment that is characterized by continuing significant non-compliance with existing arms control obligations and commitments, and by potential adversaries who seek to change borders and overturn existing norms.<sup>204</sup>

## 2022 Nuclear Posture Review

The NPR underscores our commitment to reducing the role of nuclear weapons and reestablishing our leadership in arms control. We will continue to emphasize strategic stability, seek to avoid costly arms races, and facilitate risk reduction and arms control arrangements where possible.<sup>205</sup>

These aspirations have been executed through specific policy proposals: the desire to replace START I with New START in 2009-2010, the proposal for further reductions in 2013 by the Obama administration, the pressure campaign and nuclear “freeze” proposal late in the Trump administration, the debate around extension of NST, and the early hope by the Biden administration to replace NST with a follow-on agreement. Such proposals have focused primarily on reducing and capping numbers and adding items of accountability.

In 2021, the Biden administration outlined a set of arms control goals vis-à-vis Russia and China, articulated in the greatest detail by Under Secretary of State for Arms Control and International Security Bonnie Jenkins. Regarding Russia, three U.S. goals were presented, representing a desire to expand NST to cover the so-called Russian novel weapons systems, to reach agreement on a mechanism to tackle both warheads and delivery vehicles, and to maintain NST limits after 2026:<sup>206</sup>

1. Capture new kinds of intercontinental-range nuclear delivery systems not currently limited by the New START Treaty
2. Address all nuclear warheads, including non-strategic nuclear weapons and non-deployed warheads
3. Retain limits on Russian intercontinental-range ballistic missiles, submarine-launched ballistic missiles, and heavy bombers equipped for nuclear armaments after New START expires in 2026

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204 U.S. Department of Defense, *2018 Nuclear Posture Review* (2018). <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>. Accessed June 27, 2022.

205 U.S. Department of Defense, “Fact Sheet: 2022 Nuclear Posture Review and Missile Defense Review” (2022). <https://media.defense.gov/2022/Mar/29/2002965339/-1/-1/1/FACT-SHEET-2022-NUCLEAR-POSTURE-REVIEW-AND-MISSILE-DEFENSE-REVIEW.PDF#:~:text=Nuclear%20Posture%20Review%20The%202022%20NPR%20represents%20a,top%20priority%20for%20the%20Department%20and%20the%20Nation>. Accessed June 27, 2022.

206 U.S. Department of State, “Under Secretary Bonnie Jenkins’ Remarks: Nuclear Arms Control: A New Era?” (September 6, 2021). <https://www.state.gov/under-secretary-bonnie-jenkins-remarks-nuclear-arms-control-a-new-era/> Accessed December 7, 2021.

The United States desired arms control goal vis-à-vis China was less ambitious—“apply and tailor the lessons we’ve learned in the U.S.-Russia arms control process when possible to U.S.-PRC discussions”—highlighting the reality of a repeated Chinese unwillingness to enter into arms control or strategic stability-related discussions at the government-to-government or Track 1 level.<sup>207</sup> Little progress was made with either the Russians or the Chinese on this agenda.

In an effort to reinvigorate the Biden administration’s arms control agenda after almost two years of little to no forward progress with Russia or China, National Security Advisor Jake Sullivan spoke to the Arms Control Association (ACA) Annual Forum on June 2, 2023 and laid out the administration’s approach going forward. Having highlighted the problems in the geopolitical environment from Russia, China, North Korea, and Iran, Sullivan noted that the strategic stability goals of this administration were similar to longstanding U.S. goals: prevent an arms race, reduce the risk of misperception and escalation, and ensure the safety and security of people around the world from nuclear threats.<sup>208</sup> Three pillars were outlined for arms control going forward: 1) a U.S. willingness to engage in bilateral arms control discussions with Russia and with China “without preconditions,” 2) a U.S. willingness to engage in new multilateral arms control efforts, including through the five permanent members of the UN Security Council (i.e., the P5: United States, Russia, China, United Kingdom, and France), and 3) the U.S. intention to step up to help set the norms and shore up the values of the new nuclear era.<sup>209</sup>

Russia: Russia has stated that it will hold future progress on arms control hostage to U.S. support on Ukraine. As such, diplomatic engagements will be more difficult to arrange and execute, and arms control in future policy debates will likely be part of a wider internal debate about how to engage the United States (if at all). But three additional sets of issues predominate the impasse in U.S.-Russian arms control, just as they have stymied further progress for much of the last decade.<sup>210</sup>

One is that Russia has a longstanding list of demands or preconditions regarding next steps in arms control. The most concrete of these is the demand that before an agreement on all warheads can even be discussed, the United States must remove all of its nuclear weapons forward deployed to Europe as part of the NATO nuclear sharing arrangements and permanently destroy the associated nuclear weapons infrastructure. Regarding strategic offensive arms, Russia’s unwillingness to pursue further reductions has been based on varying concerns across a number of domains

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207 Ibid.

208 The White House, “Remarks by National Security Advisor Jake Sullivan for the Arms Control Association (ACA) Annual Forum” (June 2, 2023). <https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/06/02/remarks-by-national-security-advisor-jake-sullivan-for-the-arms-control-association-aca-annual-forum/>. Accessed July 6, 2023.

209 Ibid.

210 Michael Albertson, *Negotiating with Putin’s Russia: Lessons Learned from a Lost Decade of Bilateral Arms Control* (Livermore, CA: Center for Global Security Research, 2021). <https://cgsr.llnl.gov/content/assets/docs/CGSR-LivermorePaper9.pdf>. Accessed October 7, 2021.

including U.S. missile defenses (homeland or deployed abroad, theater, or strategic), U.S. conventional strike capabilities (ranging from Conventional Prompt Global Strike to all conventional cruise and ballistic missiles), U.S. placement of weapons in space, the overall conventional balance in Europe, the Russian-assessed U.S. arms control compliance record, and the inclusion of the allied nuclear arsenals of the United Kingdom and France. Some of these concerns date back to the earliest arms control negotiations in the 1960s and 1970s; others have formed and hardened over the last two decades as new U.S. capabilities have emerged.

Two is that Russia has categorically rejected the U.S. approach of “compartmentalization” of arms control from other topics on the bilateral agenda. Deputy Minister of Foreign Affairs of the Russian Federation Sergey Ryabkov delivered a keynote speech on the topic of strategic stability at the XXII PIR Center International School on Global Security, which was seen as a response to Sullivan’s recent speech at the ACA.<sup>211</sup> In it, Ryabkov noted the U.S. desire to “compartmentalize” progress in arms control from Russia concerns regarding U.S. support to Ukraine, an approach which Russia rejected: “in this regard, our counter appeal to the United States both earlier and now remains unchanged and consists in the following: if Washington and the West as a whole do not radically revise their aggressive anti-Russian policy, which is being carried out (figuratively speaking) right on the threshold of our house, then it is hardly possible to imagine productive arms control negotiations.”<sup>212</sup>

Three is that the longer President Putin has remained in office, the more his views on arms control and relations with the West have calcified into a revisionist narrative of bad deals and grievances. He has transformed over his tenure from someone pushing arms control deals on the United States to a deep-seated skeptic of past, present, and future arms control agreements. He speaks openly of a desire to raise rather than reduce risks, to destabilize rather than stabilize strategic stability, in order to increase U.S. discomfiture. Putin and his officials are quick to threaten the West with new Russian nuclear systems. Arms control agreements signed by Gorbachev or agreed in the 1990s went from being criticized in military journals by a minority of disgruntled military officers or defense industry officials to part of a broader revisionist narrative from Putin and the Kremlin that these were one-sided deals imposed on Russia when it was weak. The articulation of the benefits to Moscow of agreements with the United States have been confined to a shrinking list of Russian experts willing to argue at some risk to themselves the potential benefits in arms control and risk reduction measures. Russia chose to violate the Intermediate Range Nuclear Forces Treaty and refused to return to compliance despite years of attempted resolution by the United States. Russia chose to ignore concerns raised about the Open Skies Treaty. Russia complained openly about NST throughout its

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211 Elena Chernenko, “If Only It Didn’t Come to Nuclear Winter” (June 21, 2023). [https://www.kommersant.ru/doc/6055434?from=top\\_main\\_2](https://www.kommersant.ru/doc/6055434?from=top_main_2). Accessed July 6, 2023.

212 Ibid.

duration and threatened not to extend unless its concerns were satisfied. It has now gone so far as to “suspend” its participation in NST over U.S. military support for Ukraine. It has stated its intent to withdraw from the Conventional Forces in Europe (CFE) Treaty.

The self-enforced Russian narrative has become that the United States needs Russia, and not the other way around, including on issues like arms control. The United States should therefore be prepared to pay Russian demands, or Russia will continue to ignore and mock U.S. requests to come to the arms control negotiating table. Putin noted on June 16, 2023 to a gathering of the St. Petersburg International Economic Forum: “We have more than NATO countries and they want to reduce our numbers. Screw them.”<sup>213</sup> As Dmitry Medvedev, former Russian president and prime minister, and currently deputy chairman of the Russian Security Council, summarized: “there is no need to negotiate with them (on nuclear disarmament) yet. This is bad for Russia. Let them run or crawl back themselves and ask for it.”<sup>214</sup>

China: China’s thinking on bilateral or multilateral strategic arms control has been marked by longstanding skepticism of the U.S.-Soviet and U.S.-Russian approach. As this summary of U.S.-China Track 1.5 discussions highlighted, Chinese officials have had preconditions as well as an overall aversion to the topic:

Whenever arms control was discussed, the Chinese presented arguments unchanged since they were first made back in the 1990s. China’s experts see the responsibility to reduce arms as falling squarely on those two powers which still have 95 percent of the global total. They understand arms control to be a process involving adversaries locked in Cold War-like strategic competition—a competition they refuse to join. Action-reaction cycles may become a problem, they argue, but China won’t be tricked into an arms race by the United States.<sup>215</sup>

The 2021 revelations regarding the rapid growth in the Chinese strategic arsenal so far have not resulted in a change in Chinese diplomatic positions on arms control. China still seeks to paint the increasingly blurry picture that it is a responsible global actor in arms control and non-proliferation (while it adamantly refuses to engage in arms control) and that it is a lesser nuclear power who has no obligations until the United States and Russia reduce (while it undertakes a massive expansion of its forces, perhaps to parity or beyond the level of the United States and Russia). It remains an open question whether quantitative and qualitative improvements in the

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213 Reuters, “Putin says Russia put nuclear bombs in Belarus as warning to West” (June 17, 2023). <https://www.reuters.com/world/europe/putin-says-russia-positions-nuclear-bombs-belarus-warning-west-2023-06-16/>. Accessed July 6, 2023.

214 Reuters, “Russia’s Medvedev suggests U.S. should beg for nuclear arms talks” (June 20, 2022). <https://www.reuters.com/world/europe/russia-should-not-negotiate-with-us-nuclear-issues-yet-ex-president-says-2022-06-20/>. Accessed June 27, 2022.

215 Brad Roberts, ed., *Taking Stock: U.S.-China Track 1.5 Nuclear Dialogue* (Livermore, CA: Center for Global Security Research, December 2020). [https://cgsr.inl.gov/content/assets/docs/CGSR\\_US-China-Paper.pdf](https://cgsr.inl.gov/content/assets/docs/CGSR_US-China-Paper.pdf). Accessed September 12, 2023.

Chinese force would make their leadership more willing to at least sit at the arms control negotiating table.

With the Chinese a hard “no” on arms control engagement—even regarding a formal government-to-government Track 1 dialogue on strategic stability issues—U.S. goals have remained difficult to articulate. Some have attempted to set modest expectations, harvesting some potential low-hanging fruit through transparency and confidence-building measures aimed at crisis deconfliction and a gradual acclimatization to the potential benefits of formal arms control through steps like Chinese observation of U.S.-Russian arms control treaties. Others, both prior to and in light of Chinese force developments, have been firm that further bilateral arms control agreements with Russia should be contingent on Chinese participation. Under these conditions, Chinese unwillingness to engage would jeopardize any future U.S.-Russian bilateral agreement—no matter how one-sided or how successful the agreement is for supporting U.S. armament policy and reducing the risks, damages, and costs of a potential nuclear conflict.

### **Understanding the Impasse**

Given the positions of the various players, it is no surprise that there continues to be an impasse in negotiations. The United States and Russia want very different things in the next agreement. The United States is focused on warhead numbers and Russian systems which are not captured in current agreements. Russia has sought to make the arms control conversation broader to address areas of perceived military disadvantage and now will likely use future arms control to attempt to extract concessions on Ukraine-related support or sanctions. Both have publicly staked out and entrenched their own positions. Both have largely rejected the preconditions outlined by the other. Both have seen the technical arms control debate overwhelmed by the emotions associated with the cratering of the bilateral relationship. Trade space on asymmetric capabilities is difficult in the current bilateral climate, as any admission of the validity of the other side’s concerns would be condemned as a sign of weakness or appeasement. China remains firmly on the sidelines, suspicious to the entire endeavor. It is offered no incentives to join the table and suffers no consequences for its refusal to participate, which could curtail any further bilateral progress between the United States and Russia.

Attempting to break the current impasse requires some thinking on what a more concrete U.S. proposal should look like—one that is grounded in the projected armaments and competitive realities of the anticipated security environment as well as the positions and leverage of the various parties at the negotiating table. Such a viable U.S. arms control proposal must pass several tests. First and foremost, it must act as a corollary to armament policy and be held up against the traditional goals of reducing the risks, damage, and costs of nuclear war. It must also meet the stated objectives in a partisan U.S. domestic climate, somehow involving Russian warheads, Russian novel systems, and some degree of Chinese participation. It

must be defensible as clearly in the U.S. national security interest in the anticipated security environment and decoupled as much as possible from the foreign policy goals of a particular president. It must be on its surface palatable to a Russian leadership whose self-identity and bureaucratic interagency is increasingly built around competition and conflict with the United States. It must go far enough in capturing U.S. and Russian desires to move forward in disparate areas. Trades must be defensible. It cannot go so far as to scare away the Chinese from participating, going at least some way in articulating to the Chinese that it is a departure from the bilateral Cold War arms control. It must be able to stand up to scrutiny by allies and arms control experts as a viable proposal rather than simply propaganda or posturing for an arms race, even if the Russians and Chinese refuse to engage. Developing such a proposal requires going through a list of various objectives and proposals to determine what is critical to each side, which will then help determine a potential arms control format that might be viable in achieving these objectives.

### **Section III: Developing Concrete Objectives for U.S Arms Control Beyond Reductions**

It is often useful to look to the writings of arms control practitioners who were skeptical of the endeavor, as they have a high standard of what is needed to pass muster in terms of a proposal. Edward Rowny, a senior U.S. military official who spent 17 years in various arms control delegations during the Cold War, listed 10 commandments for U.S. officials negotiating arms control agreements with their Soviet counterparts. These were based on his own observations, but also his reading of the accounts of predecessor U.S. negotiators including Dean Acheson, Dean Rusk, George Kennan, and others. He went as far as taping them to his desk for reference during negotiations. The first of these commandments was a simple one “Thou shalt remember thy objective,” which was grounded in the belief that the United States needed to think longer-term (i.e., beyond four-year presidential cycles) about what it was trying to achieve in arms control negotiations and understand where arms control negotiations fit into a broader U.S. set of geopolitical objectives.<sup>216</sup>

A set of concrete objectives for arms control beyond deeper numerical reductions has proven elusive, in part because the path was so clear for the better part of the last several decades. The strategic objective was for both the United States and Russia to have fewer nuclear weapons, as both countries recognized they had more than they needed and had a shared understanding of the risks and dangers these weapons presented. Both sides could modernize their legacy Cold War arsenals to new sets of lower limits. Fewer weapons implied improved safety, stability, and cost savings for both sides. China’s arsenal was too small to be of immediate concern. Strategic delivery systems were the largest systems, making verification

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<sup>216</sup> Edward L. Rowny, “Ten Commandments for Negotiating with the Soviet Union,” Leon Sloss and M. Scott Davis, eds., *A Game for High Stakes* (Cambridge, MA: Ballinger, 1986), pp. 47-54.

and monitoring practical within an arms control construct. Treaties were structured to monitor and verify that reductions were taking place, new systems would be captured as appropriate, and no militarily significant cheating was occurring. The legacy of a lengthy sequence of foundational strategic arms control agreements stretching back to the 1960s could continue to be remodeled and updated.

This agenda hit a wall following the ratification of NST. Russia felt it had reached the limit of where it was comfortable in reducing its nuclear forces, given its perceptions of future U.S. non-nuclear capabilities and intentions. Any further progress for Russia was conditioned on the United States paying high costs in terms of tradeoffs with missile defenses, forward-deployed nuclear weapons, and conventional strike systems. The Americans were unwilling to pay these costs, seeking unsuccessfully to allay Russian concerns through strategic stability talks, risk reduction offers, and transparency proposals. The ability to pursue an agreement on further reductions grew more tenuous as a strategic policy objective as progress stalled, positions hardened, and tensions worsened.

An overwhelming focus on numerical reductions as the primary strategic objective is now outdated, as are positions and proposals along these lines articulated before the Russian war in Ukraine and the expansion of the Chinese nuclear arsenal. New thinking—grounded in past first principles, guided by U.S. strategic modernization goals, and bounded by a geopolitical climate of multipolar strategic competition—is needed. If arms control is in fact a cooperative endeavor as an extension of broader U.S. armaments policy, then this has four major implications for U.S. negotiators.

One, arms control objectives moving forward should be dictated by the fact that arms control will be taking place in an era of likely prolonged strategic competition with two peer competitors, who may work in concert somewhere along the cooperative spectrum. It must be framed as helpful to the United States in that context. Both peer competitors have political leadership desirous of a reshaping of the post-Cold War U.S.-led global power structure. Putin and Xi both have been in power for a lengthy period, have restructured their political systems to remain in power for as long as they desire, and more than likely will be succeeded by someone in their system whom they have hand-selected and groomed for office (or will likely emulate them in substance and style). They and their elites have developed their own selective views of the historical record which fit with their preferred narrative, one of a haughty victorious United States keeping other states weak and divided to extend the American unipolar reign for as long as possible. Subjective emotions like humiliation and broken promises color their respective narratives of the past. They have devoted time, energy, and money to the long-term development of capabilities, plans, and operations which improve their chances of making their long-term regional and global aspirations a reality.

For both Russia and China, arms control policy has seemingly been much more in line with the traditional conception as a corollary to broader armaments policy. Russia has repeatedly tried, albeit unsuccessfully, to limit the U.S. military capabilities in which it is lagging or which it fears most—conventional strike, missile defenses, and



U.S. tactical systems deployed in Europe. Russia has used agreements to moderate uncertainties during its strategic modernization program, while actively pursuing capabilities not specifically captured in any arms control agreement. Its armaments are its chips and its leverage at the negotiating table. China in contrast has declined to sit at the table at all. Up to this point, China has not felt it has had the necessary chips to play competitively at the high rollers table and remains skeptical of the notion that arms control can be leveraged more to its advantage than the simpler unilateral production of military material. Most importantly, for both Russia and China, “arms control” is a term largely lacking a positive connotation; instead, it evokes thoughts of either past bad deals made or the possibility of future bad deals, concrete and useful weapons systems given away or destroyed to codify continued U.S. global hegemony.

Two, arms control objectives moving forward should be dictated by pace and ambition of the three ongoing strategic modernization programs. Russia is at the tail end of its modernization program and has choices about what to do next. It has a robust nuclear infrastructure capable of supporting a wide variety of options. China is in the early stage of a massive buildup, and its end point remains undefined and perhaps unknown by Beijing. The United States is only at the beginning of a long-term, and largely inflexible, strategic modernization program. Outside of the so-called supplemental capabilities outlined in the Trump administration’s NPR and revisited in the Biden administration’s NPR, the strategic modernization path forward is clear: replace over the coming decades the numbers and types of systems in the U.S. arsenal with new but substantially similar systems. Silo-based ICBMs with new silo-based ICBMs. SSBNs and SLBMs with new SSBNs and SLBMs. Strategic bombers and air-launched cruise missiles (ALCMs) with new strategic bombers and ALCMs. Older dual-capable aircraft with old nuclear air-dropped bombs will be replaced with the latest generation fighter bombers with a new nuclear air-dropped bomb.

Many of the hardest questions have therefore already been answered for the United States. What needs to be procured? (Newer, similar replacements.) How many need to be bought? (The same number as we have now, plus spares.) How much flexibility needs to be built into the modernization plan? (Slim to none, as dictated by budgets and the industrial base.) U.S. armaments policy is largely a constant for the next two decades, and few nuclear-related bargaining chips are available. The biggest costs and risks are therefore related to the likely opacity and uncertainty about what Russia and China have in their arsenals and what is taking place inside their nuclear complexes. Information about U.S. strategic forces is readily available. The ultimate goal is managing competition while the United States pursues its intended armaments policy and adjusts to developments in the Russian and Chinese nuclear arsenals. Any agreement would need to be seen as creating a more beneficial environment for U.S. security than one of unrestricted competition.

Three, U.S. arms control objectives in this security environment must be driven and defended in large part by those most familiar with U.S. armaments policy—the military services, the Joint Staff, the combatant commands, and the Office of the Secretary of

Defense (Policy). Given the ruptured or strained relations between the United States and Russia and China respectively, the strengthening partnership between those two countries, and the dimmed prospects for a rapid turnaround, there is little hope or desire that the next arms control agreement will be part of a larger diplomatic breakthrough or sign of warming relations. It will likely instead be a hard-nosed and coldly calculated means to an end in a larger competitive multipolar relationship. The agreement will be forced to live or die on its own merits, as it will not be able to be sold as part of a broader package of improved relations. This will require a broad coalition of support within the U.S. interagency, including from those agencies likely to be most skeptical of such an endeavor, to both develop and defend such a proposal under the scrutiny and tension it will likely face.

Four, while a useful starting point for analysis, the goals for nuclear arms control set out in the 1950s and 1960s may no longer be the best goals moving forward for the 2020s and 2030s. Each post-Cold War administration, presented with the geopolitical circumstances of their particular moment in time, has pursued arms control for new and different reasons. Much of this focused on reducing numbers of nuclear weapons and maintaining U.S. technological advantages in non-nuclear systems. Goals moving forward may be very different: the need to share information to manage arms competition, the need for dialogue mechanisms to exchange views on misperceptions, and so on. Some of these goals will serve as the foundational basis for new proposals. Some of these will create beneficial corollaries stemming from some form of structured negotiation and engagement.

As a reminder, the arms control goals for the Biden administration as currently articulated are:<sup>217</sup>

1. Russia – “Capture new kinds of intercontinental-range nuclear delivery systems not currently limited by the New START Treaty”
2. Russia – “Address all nuclear warheads, including non-strategic nuclear weapons and non-deployed warheads”
3. Russia – “Retain limits on Russian intercontinental-range ballistic missiles, submarine-launched ballistic missiles, and heavy bombers equipped for nuclear armaments after New START expires in 2026”
4. China – “Pursuing new risk reduction measures”

How would these look in a concrete proposal? How would they be negotiated? What would be the relevant costs and tradeoffs to different approaches? Retaining limits on ICBMs, SLBMs, and heavy bombers beyond the expiration of NST is on the surface a relatively straightforward goal, a simple maintenance of the verification mechanisms

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217 U.S. Department of State, “Under Secretary Bonnie Jenkins’ Remarks: Nuclear Arms Control: A New Era?” (September 6, 2021). <https://www.state.gov/under-secretary-bonnie-jenkins-remarks-nuclear-arms-control-a-new-era/>. Accessed December 7, 2021.

which have been negotiated, agreed, and tested over the last three decades of START I, II, and III, SORT, and New START. Even this, however, may be a bridge too far given Russia's hostage taking on NST and rejection of compartmentalization. The other three, however, require deeper exploration as to whether various approaches support or contradict the traditional goals of arms control.

## **Russia – “Capture new kinds of intercontinental-range nuclear delivery systems not currently limited by the New START Treaty”**

### **Defining the Key Terms**

“Capture” is an undefined term in arms control and therefore open to some degree of interpretation as to what is meant in this context. “Capturing” in the sense of these new systems could mean creating new definitions and inspection provisions by which the so-called Russian novel systems<sup>218</sup> become roughly analogous to ICBMs, SLBMs, and heavy bombers under NST. “Capturing” also could imply that these systems should be counted under the existing central limits or under a special prescribed cap created as part of an agreed statement. As these systems by definition are not ICBMs, SLBMs, and heavy bombers, thus falling into the basket of “new kinds of strategic offensive arms” under NST, some new language is required. Definitions must be either created or revised to cover them, as will associated notification and data exchange documentation. New inspection procedures likely need to be devised to walk inspectors through how to verify these systems when they are encountered in storage, maintenance, or operational deployment during inspections. New sites will likely be made available for inspections, and new site diagrams will need to be created and exchanged. New verification equipment could need to be added to the approved list of inspection equipment to handle inspection procedures of nuclear-powered, nuclear-armed systems.

Assuming the political will exists, the blueprints exist to do all these things. Blueprints start with definitions. Every system in an arms control treaty is clearly defined. Terms form the foundational building blocks of the system and the definitions are themselves specifically defined. Terminology can be specific or generic. Sometimes, everything of importance can be captured in a single definition. A definition can be specifically tailored to the parameters of a known something under development or expected to enter the force to ensure it is captured in an agreement. A term can also be crafted to be more generic, to account for any system that might conceivably fit over the lifetime of an agreement into a particular mission space.

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218 Amy Woolf, “Russia’s Nuclear Weapons: Doctrine, Forces, and Modernization,” Congressional Research Service R45861 (September 13, 2021). <https://crsreports.congress.gov/product/pdf/R/R45861>. Accessed October 7, 2021.

Many times, however, multiple definitions are needed to define a single system. For example, under NST, the definition of a particular strategic offensive arm, the heavy bomber, must be reinforced with detailed definitions for a host of supporting terms:<sup>219</sup>

- The term “heavy bomber” means a bomber of a type, where any one of which satisfies either of the following criteria: (a) its range is greater than 8,000 kilometers; or (b) it is equipped for long-range nuclear ALCMs.
- The term “bomber” means an airplane of a type, where any one of which was initially constructed or later converted to be equipped for bombs or air-to-surface missiles.
- The term “airplane” means a power-driven, heavier-than-air aircraft that derives its lift in flight chiefly from aerodynamic reactions on surfaces that remain fixed under given conditions of flight.
- The term “aircraft” means any manned machine that can derive support in the atmosphere from interaction with the air other than the interaction of the air with the Earth’s surface.
- The term “range” means: (a) For an ALCM, the maximum distance that can be flown by an ALCM of that type in its standard design mode flying until fuel exhaustion, determined by projecting its flight path onto the Earth’s sphere from the launch point to the point of impact. (b) For a ballistic missile, the maximum distance determined by projecting the flight trajectory onto the Earth’s sphere from the launch point of a missile of that type to the point of impact of a reentry vehicle. (c) For an aircraft, the maximum distance that can be flown, without refueling, by an aircraft of that type when carrying an ordnance load of 7,500 kilograms, with a full fuel load in the internal and external fuel tanks and a flight profile optimized to ensure minimum fuel consumption per kilometer, taking into account the distance covered during climb and descent. The fuel remaining in the fuel tanks after landing shall be no more than five percent of the maximum capacity of the fuel tanks.
- The term “long-range nuclear ALCM” means a long-range ALCM that is nuclear-armed.
- The term “long-range ALCM” means an ALCM with a range in excess of 600 kilometers.

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219 U.S. Department of State, New START Treaty Text, <https://2009-2017.state.gov/t/avc/newstart/c44126.htm>. Accessed September 18, 2023.

- The term “air-launched cruise missile” or “ALCM” means an air-to-surface cruise missile of a type, any one of which has been flight-tested from an aircraft or deployed on a bomber after December 31, 1986.
- The term “cruise missile” means a missile that is an unmanned, self-propelled weapon-delivery vehicle that sustains flight through the use of aerodynamic lift over most of its flight path.

Definitions are thus often complex, intertwined, and mutually reinforcing bindings of terminology which must be carefully considered when conceiving of an agreement and thoroughly reviewed through the drafting of an agreement to ensure consistency. They must cover not only systems in question, but also the key terms of the inspection regime and even the equipment allowed to be used for verification purposes.

In developing the definitions for these new kinds of Russian systems, decisions need to be made as to the central feature, or combination of features, which will be used to classify systems. Is the definition’s focal point the payload (nuclear-armed), the range (a capability exceeding a certain number of kilometers), or the launcher (carried in or on a particular system)? How is range defined? Is a hypersonic glide vehicle unique, or to be defined and treated similar to an ICBM warhead or cruise missile? Is a nuclear-powered, nuclear-armed transoceanic torpedo unique, or to be defined and treated similar to an SLBM?

The main question, then, becomes how they will be treated if they are captured, whether these new kinds of systems are equally or unequally treated as compared to the standard set of strategic offensive arms.

### Equal or Unequal Treatment for Novel Systems?

#### **Equal Treatment – A so-called novel system is counted and/or treated the same as any other strategic offensive arm.**

Equal treatment likely provides an easier negotiating pathway, but it goes against many of the traditional goals of arms control in which systems are singled out for special treatment given perceptions of destabilizing capabilities and potential employment paths. The path of least resistance is to count these new kinds of systems under the same counting rules for launchers and deployed warheads of strategic offensive arms under NST—a nuclear-powered, nuclear-armed transoceanic underwater torpedo counts the same as an ICBM, SLBM, or heavy bomber,<sup>220</sup> and each side is free to choose their own force mix under the proscribed treaty limits. Conceptually, to a U.S. analyst a Russian force composition made up of 700 deployed launchers of these new kinds of systems would therefore be seen as comparable or

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<sup>220</sup> Due to their characteristics, heavy bombers have been subject to specialized counting rules and inspection procedures. While treated somewhat differently from ICBMs and SLBMs, they have long been seen as “equal” in terms of limits within the agreements.

equal to a Russian force mix of predominantly ICBMs, SLBMs, and heavy bombers. As all systems count the same in terms of deployed launchers and deployed warheads, the only question becomes ensuring a sufficient degree of confidence in the verification and monitoring regime for these new systems.

**Unequal Treatment – A so-called novel system is not counted and/or treated the same as any other strategic offensive arm.**

Unequal treatment, while likely more difficult to negotiate when one side possesses these systems and the other does not, would represent an approach more in keeping with traditional arms control goals. In the expert debates,<sup>221</sup> these new kinds of Russian systems are seen as inherently different from ICBMs, SLBMs, and heavy bombers in terms of both their destructive capacity, the environmental implications of their use, their intended purpose within Russia’s strategic nuclear arsenal, and how and when they would be used in a crisis or conflict. One major question is whether these are intended as weapons for a first strike against key critical targets early in a conflict or weapons of retaliation to ensure an unacceptable level of damage on an opponent. Another question is numbers: are these intended as a small-scale niche capability to complement or supplement the core strategic triad, or the beginning of a larger scale replacement of outdated platforms with newer and more capable systems?

These unanswered questions would suggest that these Russian systems would run counter to traditional U.S. arms control goals of avoiding nuclear war, minimizing the damage of nuclear war should it occur, and minimizing the costs of nuclear arms racing, and thus these systems should be limited in some unequal way. As mentioned earlier, “capturing” could involve the concept of fairness, simply adding them to the pool of strategic offensive arms capped by the limits of NST and subject to verification. Other forms of unequal “capturing” can also be considered with these systems. The Russian side has them. The U.S. side has shown no interest in pursuing them. Therefore, any provision would be both one-sided and unequal in terms of their application. While these would be seen as fair to the U.S. side given the destabilizing nature of these systems, the Russians would see these provisions as unfair and unnecessary and likely either reject them outright or demand an equal set of U.S. concessions in return where the United States has capabilities or perceived advantages where Russia does not.

- Caps or sublimits on new kinds of systems: Sublimits have been used traditionally in arms control as a mechanism to show that certain systems within a force mix are seen as of particular concern. Thus, they are given a proscribed cap to show that they carry more weight, and thus perhaps bear more restrictions

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221 See, for example, Atlantic Council, “Russia’s Exotic Nuclear Weapons and Implications for the United States and NATO” (March 2020). <https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/russias-exotic-nuclear-weapons-and-implications-for-the-united-states-and-nato/>. Accessed February 10, 2021.

or scrutiny, than other systems. In such a scenario, new kinds of Russian systems could be subject to a sublimit (e.g., “each side is allowed no more than 10 of such systems”), which could be laid out throughout the main body of the protocol or within a specially constructed agreed statement with special verification provisions.

- Increased restrictions or verification provisions on new kinds of systems: Many treaties created special verification provisions for certain systems based on their operational characteristics. Launchers for silo-based ICBMs, SSBNs, and heavy bombers all had their unique verification provisions, but it was mobile ICBM launchers and their associated missiles which often received increased attention and restrictions. Under START I, given the verification concerns with Russian mobile systems, special restrictions were created on restricted areas, activities outside of these restricted areas, relocations, and movements of mobile systems.
- Prohibitions on new kinds of systems or operations: The most draconian arms control measure is that of a legally binding prohibition, which usually comes from both sides agreeing that certain types of systems or operations are destabilizing enough to be forbidden. Such a prohibition could be a ban on possessing or deploying systems with certain characteristics (e.g., nuclear-armed and nuclear-powered systems), or particular ways of operating such systems. The INF Treaty banned and destroyed entire classes of systems. START II prohibited MIRVs on ICBMs. New START prohibited the production, testing, or deployment of systems designed for the rapid reload of ICBM or SLBM launchers.

In summary, the goal of “capturing” these systems does not alone address the traditional goals of arms control; absent prohibition, it merely subjects them to some form of numerical limits. Key questions must be asked and answered for each of these new kinds of Russian systems: Do they increase the risks and damage of nuclear war and the costs of nuclear arms racing? Are these novel systems critical for new U.S. goals of arms control in the emerged and emerging security environment? If the answer is no, or no more so than the systems which comprise the standard strategic nuclear triad, then they should likely receive equal treatment with other types of strategic offensive arms. If the answer is yes, they do bear a special burden that comes with special costs to be negotiated. The question then becomes to what degree they are especially destabilizing, and whether sublimits, increased restrictions, or prohibitions are the best mechanisms to deal with the recognized problem within a formal arms control agreement. The preferred mechanism will then come with its associated negotiating costs in terms of likely trades and prospects for success. Another alternative is some form of special risk reduction measures regarding the operations of such systems.

## **Russia – “Address all nuclear warheads, including non-strategic nuclear weapons and non-deployed warheads”**

### **Defining the Key Terms**

As with “capturing” new kinds of Russian strategic systems, “addressing” all nuclear warheads is problematic both in terms of its intended purpose and how that purpose aligns with the three traditional goals of arms control. “Addressing” likely means making a nuclear warhead (however that item is defined) accountable in some form or fashion under a future arms control agreement. The challenge with a future warhead agreement is thus a two-part problem, one both alluringly simple at first glance to many experts and also devilishly difficult to treaty negotiators and implementers: What object is defined as a warhead? And how should the defined warhead be verified in the agreement?

It is worth remembering that in NST—as in its predecessor strategic arms control agreements—“warhead” is not a physical item defined by what it is and what it does. It is simply “a unit of account used for counting toward the 1,550 aggregate limit as applied to deployed ICBMs, deployed SLBMs, and deployed heavy bombers.” Associated terms like “reentry vehicle” and “nuclear armaments” are slightly different, being physical items declared by the inspected party and confirmed by observation during Type One inspections, but neither term gets at the basic definition of what a “warhead” should be defined as in a future agreement. Other agreements like the Treaty on the Prohibition of Nuclear Weapons refer throughout the text to “nuclear weapons or other nuclear explosive devices” but do not define such objects.<sup>222</sup>

Other potential consensus documents therefore need to be explored to look for potential starting points on what an agreed definitional basis for warhead can be in a future strategic arms control agreement. The term “warhead” is also noticeably absent in the P5 Glossary of Key Nuclear Terms, appearing in only two places in the 272-page document.<sup>223</sup>

- “Nuclear arms reduction” – A decrease in the number of a state’s nuclear deployed and/or non-deployed, strategic, and/or nonstrategic warheads and/or launchers, and delivery vehicles dedicated to nuclear weapons delivery.
- “Nuclear stockpile stewardship” – A science-based program that ensures the safety, security, and effectiveness of a country’s nuclear warheads without nuclear explosive testing.

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222 “Treaty on the Prohibition of Nuclear Weapons, 7 July 2017.” <https://ihl-databases.icrc.org/en/ihl-treaties/tpnw-2017>. Accessed August 10, 2023.

223 *P5 Glossary of Key Nuclear Terms* (2015). <https://2009-2017.state.gov/documents/organization/243293.pdf>. Accessed August 10, 2023.



The P5 Glossary does, however, include some useful definitions for “nuclear weapons” and other related physical items.

- Nuclear weapon – Weapon assembly that is capable of producing an explosion and massive damage and destruction by the sudden release of energy that is instantaneously released from self-sustaining nuclear fission and/or fusion.
- Limited life component – A component used in a nuclear weapon that decays or degrades relatively rapidly with age and must be replaced on a periodic basis, usually on a time scale of several years or less.
- Primary stage – A fission device that is the initial source of nuclear energy in a thermonuclear weapon or device.
- Secondary stage – A nuclear stage physically separate from the primary stage in a thermonuclear weapon or device, the explosion of which is initiated by the energy generated from the explosion of the primary stage.

The 2020 *Nuclear Matters Handbook*, an unclassified, unofficial handbook published by the Office of the Deputy Assistant Secretary of Defense for Nuclear Matters, includes definitions in its glossary for both “nuclear weapon” and “warhead.”<sup>224</sup>

- Nuclear weapon – Complete major assembly (i.e., implosion, gun, or thermonuclear) in its intended ultimate configuration, or in a disassembled configuration for a temporary period of time, which, upon completion of the prescribed arming, fusing, and firing sequence, is capable of producing the intended nuclear reaction and release of energy.
- Warhead – the part of a missile, projectile, torpedo, rocket, or other munition that contains either the nuclear or thermonuclear system, high explosive system, chemical or biological agents, or inert materials intended to inflict damage.

The *English-Chinese Nuclear Security Glossary* published by the U.S. National Academy of Sciences and the Chinese People’s Association for Peace and Disarmament contained agreed definitions for both “nuclear warhead” and “nuclear weapon,” including the NATO and Russian definition of the latter.<sup>225</sup>

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224 Office of the Secretary of Defense, *The Nuclear Matters Handbook 2020* (2020). <https://www.acq.osd.mil/ncbdp/nm//NMHB2020rev/>. Accessed August 10, 2023.

225 Committee on the U.S.-Chinese Glossary of Nuclear Security Terms, *English-Chinese Nuclear Security Glossary*, (Washington DC: National Academies Press, 2008), pp. 48-50.

- Nuclear warhead – The part of a nuclear weapon whose function is to destroy or damage targets. It mainly consists of a nuclear explosive device—as well as its arming, fuzing, and firing system—and other functional parts or relative structures. Chinese arms control experts refer to the nuclear warhead as *hedantou*. Note: The warhead is that part of a missile, projectile, torpedo, rocket, or other munition which contains either the nuclear or thermonuclear system, high explosive system, chemical or biological agents, or inert materials intended to inflict damage.
- Nuclear weapon
  1. Weapon assembly that is capable of producing an explosion and massive injury and destruction by the sudden release of energy instantaneously released from self-sustaining nuclear fission and/or fusion. From the generalized point of view, it refers to a nuclear weapon system with a warfighting capability including the delivery or launch system.
  2. NATO definition – a complete assembly (i.e., implosion type, gun type, or thermonuclear type) in its intended ultimate configuration, which upon completion of the prescribed arming, fusing, and firing sequence, is capable of producing the intended nuclear reaction and release of energy. Also called “atomic weapon.”
  3. Russian definition – Nuclear weapons in the Armed Forces of the Russian Federation include an aggregate of armaments including nuclear charges, nuclear ammunition, and means to their delivery to the target and control means.
  4. A device that releases nuclear energy in an explosive manner as the result of nuclear chain reactions involving the fission or fusion, or both, of atomic nuclei.

All of these definitions are subtly different, but each provides markers around which to develop an agreed definition. The agreed definition then centers on the intent and the implementation of a treaty. The definition, particularly one concerning the central item of accountability in an agreement, will be under heavy scrutiny. It will need to be clear and consistent throughout the entirety of the treaty text. Important considerations regarding a legal definition for nuclear warhead or nuclear weapon include the following:

- The definition should be sufficient to delineate both what is and is not accountable under such an agreement.
- The definition should be based on specifying the particular item determined to be the central focus of accountability and technical verification (e.g., is the central

unit of concern the nuclear material, the primary alone, the primary when coupled with a secondary, or the fully assembled device?).

- The definition should be able to follow the item of accountability from when it enters accountability to when it leaves accountability for the purposes of the treaty (i.e., when does “life” begin and end for a warhead in this agreement assembly and disassembly? Construction and destruction? Leaving or entering a particular facility?).
- The definition should be all encompassing enough to meet the intent of all parties in the agreement. One party should not be able to easily exclude items from accountability by claiming they do not meet some technicality in the definition, thus creating a loophole or militarily significant cheating scenario.
- The definition should be grounded in operational realities. The definition should consider the various states and configurations that an inspector may encounter during on-site inspections or other verifications activities as the warhead is transported, stored, and maintained.

The wide array of U.S., Russian, and Chinese warhead types, the differences in design and force structure, and the variances in nuclear weapons operations and storage practices likely imply that a singular definition of a nuclear warhead will be insufficient to cover the entire spectrum of potential items of accountability as they might be encountered during verification activities. As was done with heavy bombers during previous strategic arms control agreements, a definition of warhead or nuclear weapon will likely need to be multipart (i.e., it meets the definition if it is either a or b, or if it meets one or more of the following criteria) and will likely need to be supplemented with additional specified definitions to explain various terms of art used in its definition (primary, secondary, nuclear material, pit, and so on.) A more in-depth technical analysis of this issue is likely required.

### **Equal or Unequal Treatment for Warheads?**

As with strategic delivery systems, the second question is whether all nuclear warheads—strategic and non-strategic, deployed and non-deployed—will be treated equally or unequally under a future agreement. Again, equality likely provides the simpler path to negotiation and has served as the basis for many expert proposals centered on a total warhead ceiling. This, of course, assumes a broader goal of “capturing” all warheads within a future arms control agreement. However, U.S. national security concerns may be specific to certain types of warhead designs, dual-capable systems, locations, or operations. These could require various forms of specially designed and likely unequal provisions to address underlying U.S. concerns. Some varieties of equal and unequal treaty designs will be explored for perspective.

## **Equal Treatment – A non-strategic nuclear warhead is counted and/or treated the same as a strategic nuclear warhead.**

Three potential formats can be considered as corresponding to a standard of equal treatment of warheads, regardless of delivery platform.

1. Warhead Transparency Agreement – In this framework, “capturing” warheads simply means providing information through data exchanges and notifications on numbers and locations, perhaps coupled with inspections to confirm the accuracy of the declared data. Under such a transparency framework, because there were no numerical or geographical limits, there would be no pressures for numerical reductions or other restrictions singling out non-strategic nuclear warheads or their associated delivery systems.
2. Numerical Total Cap with “Freedom to Mix” – In this framework, “capturing” warheads would mean that each side would be allotted a total warhead cap and a freedom to create their own force mix of warheads within the total cap depending on their national security needs. This would be a similar formula to New START, where each country is permitted to choose its force structure of ICBMs, SLBMs, and heavy bombers within the central limits of the treaty. For example, if the total cap was 4,000 warheads, both sides would have to reduce their total warhead numbers to below this cap, but one side could have 1,000 strategic warheads and 3,000 non-strategic warheads—and the other side reverse ratios. Such an agreement would likely need to be analyzed and modeled at the extremes (i.e., one side chooses to have 4,000 strategic warheads and no non-strategic warheads) to determine potential stability impacts.
3. Numerical Total Cap with Permissive Sublimits – In this framework, concerns about the composition within the total warhead cap identified in the previous section would determine the need for sublimits. Such sublimits would likely fall into two categories, either by the nature of the delivery system (strategic or non-strategic) or by the nature of the warhead’s deployment (deployed or non-deployed). Again, using a 4,000 warhead cap example, each side would be permitted 2,000 strategic and 2,000 non-strategic warheads, or 2,000 deployed and 2,000 non-deployed warheads. In this framework, the total cap and the sublimits would be designed to be viewed as relatively permissive with current force compositions, as the underlying goal is capturing more items in an arms control framework rather than reshaping force structures or numbers.

## **Unequal Treatment – A non-strategic nuclear warhead is counted and/or treated differently from a strategic nuclear warhead.**

The challenge with unequal treatment is that official U.S. statements have frequently failed to clearly define the U.S. security requirement to be met in a future warhead agreement with Russia. Rather than articulate specific security concerns within a broader armaments policy, discussions of Russian non-strategic nuclear warheads typically devolve to issues of fairness: Russia has many such warheads, the United States does not, and that is not fair, despite the fact the United States has determined its own non-strategic nuclear force composition in consultation with its allies.

The central question when devising a future nuclear warhead treaty regime, one which is likely to place greater burdens on the Russian side rather than the U.S. side (given current and projected force structures), is determining the concrete U.S. security problem regarding non-strategic nuclear warheads which arms control must be designed to solve. If the problem is simply fairness, one of the aforementioned frameworks can be used to make arms control “more fair” by inclusion of these systems on an equitable footing. In return, Russia would cite its own fairness principles to insist that the United States include other systems. If the problem is a hard U.S. security challenge specific to some particular aspect of Russian numbers, capabilities, deployments, or strategy and doctrine regarding non-strategic nuclear weapons, some degree of exploration of the challenge is required:

- Is the problem the disparity in total number of U.S. and Russian non-strategic nuclear warheads?
  - Potential solution: Numerical reductions of warheads, likely overwhelmingly on the Russian side
- Is the problem the disparity in the nuclear warhead capacities of the U.S. and Russian nuclear weapons complexes?
  - Potential solution: Monitoring of production facilities, or numerical limits on annual production
- Is the problem the wide variety of dual-capable delivery systems in the Russian arsenal?
  - Potential solution: Prohibitions on certain types of delivery systems, again likely overwhelmingly on the Russian side
- Is the problem the numbers or geographic locations of Russian nuclear weapons storage sites?
  - Potential solution: Numerical limits on numbers of storage locations, or geographical limits on storage facilities away from international borders or associated military units.

- Is the problem one of perceived/stated Russian willingness to use non-strategic nuclear weapons first in a conflict?
  - Potential solution: This is the most difficult factor to address using purely arms control mechanisms, as this is more a matter of leadership intention rather than force numbers, capabilities, or locations. Likely some combination of the abovementioned mechanisms to lessen or slow the ability of the Russian military to deploy non-strategic nuclear warheads in a crisis.

Depending on the central problem identified in these questions, several unequal arms control mechanisms exist.

1. Numerical Total Cap with Restrictive Sublimits: As opposed to a regime with a more permissive or equitable sublimit, this total cap would have a restrictive sublimit that would require a substantial reduction in the Russian non-strategic nuclear warhead stockpile. For example, in a treaty with 4,000 total warheads, the sublimit on non-strategic nuclear warheads might be capped at 500 (representing a 75% reduction in the estimated Russian arsenal) or 200 (a 90% reduction which would bring Russian numbers in line with U.S. numbers).
2. Prohibitions: Arms control mechanisms can also be designed using blanket prohibitions to single out certain non-strategic nuclear warhead types or dual-capable launchers. As was attempted in the early 1990s in the Presidential Nuclear Initiatives (PNIs), this could involve a renewed focus on eliminating certain categories of non-strategic nuclear weapons from the Russian inventory, leaving each side with smaller number of air-delivered and potentially sea-delivered weapons. Prohibitions could also be placed on numbers of non-strategic nuclear weapons associated nuclear stockpile sites and nuclear weapons storage sites to force a consolidation of the Russian storage complex.
3. Geographical or Locational Restrictions: Similar to prohibitions, geographical restrictions would attempt to move Russian non-strategic nuclear weapons away from borders of concern (e.g., all Russian borders with NATO, Russian borders with Ukraine, specific areas of concern like Crimea or Kaliningrad, specific regions such as near the Baltics) or away from their associated operational units.

Each of these mechanisms are inherently unequal, requiring much greater reductions and restrictions on the Russian non-strategic nuclear arsenal than its U.S. counterpart. Many of these are likely non-starters as negotiating positions, just like Russia's precondition that the United States must remove all of its non-strategic nuclear warheads from NATO countries and permanently destroy the associated infrastructure before discussions can begin. This is assuming that a reciprocal mix of concessions in other areas (e.g., missile defense or conventional long-range strike)

cannot be constructed to satisfy Russian demands in equality for restrictions and reductions on its non-strategic nuclear weapons.

At the end of the day, many in the U.S. envision a one-sided deal: a warhead agreement with Russia on non-strategic nuclear weapons that demanded deep cuts in the Russian arsenal. This agreement would likely only be obtained at steep costs at the negotiating table. Given Russian doctrinal and operational emphasis on non-strategic nuclear warheads, fewer—either in the form of warheads, dual-capable launchers, or storage locations—likely but does not necessarily mean better or safer for the United States or its allies.

A far more achievable and likely outcome would be an agreement focused on information, knowing the previously unknown about Russia's total stockpile and in particular its non-strategic nuclear arsenal. The benefit for the United States, at least a first step in arms control, likely comes from obtaining the kinds of reliable information that allows for U.S. force planning and armaments policy—as well as prevents unnecessarily expenditures based on worst-case assumptions. This information—where non-strategic nuclear warheads are, how many Russia has in total, and how Russia moves warheads through the nuclear weapons complex—can all be gained through an agreement shaped on equitable grounds. Such an approach could potentially remove some of the harder sticking points in terms of preconditions and trade spaces.

### **Russia – “Retain limits on Russian intercontinental-range ballistic missiles, submarine-launched ballistic missiles, and heavy bombers equipped for nuclear armaments after New START expires in 2026”**

Until the recent Russian decision to take NST hostage over U.S. support to Ukraine, the treaty performed its intended task—maintaining transparency and stability between the United States and Russia on deployed and non-deployed strategic delivery vehicles and deployed strategic warheads. This is an accomplishment which is not to be overlooked or taken for granted, given the major swings in the bilateral relationships since the treaty's negotiation and entry into force. Even before Russian suspension, there was a growing reproach that NST has become outdated, and that the security environment of today is far different from that of 2010 when it was signed and ratified. Criticisms have been focused on what it explicitly does not cover—systems that do not meet the its definitions, warheads that are not deployed on strategic delivery systems, and countries which are not parties to NST. If limits on these systems are to be “retained” after it formally expires in February 2026, it will likely be in one of the following forms, each with a distinctive set of implications:

- The existing NST limits on Russian systems are retained, with no new agreement: In such a scenario, the existing treaty limits remain in place between the United States and Russia—either by some form of mutually agreed extension

or by political agreement to simply conform with the limits—but exist alone in the strategic arms control landscape. This agreement would provide transparency and stability in this area of the bilateral relationship; however, it would be pressured by its perceived shortcoming and would be at risk of getting taken hostage yet again. Such perceptions and criticisms would hinge upon the pace of Chinese strategic force expansion, the size and scope of the Russian non-strategic nuclear weapons arsenal, the pace of development and deployment of Russian novel weapons systems, and the state of the Russian war in Ukraine.

- The existing NST limits on Russian systems are retained, within a new and broader agreement: In this scenario, the United States and Russia have agreed to a broader more comprehensive agreement on nuclear warheads, but they seek to maintain the current levels of deployed and non-deployed strategic delivery vehicles and deployed strategic warheads as under NST. The maintenance of such levels could be simply by default, if the United States and Russia are unable to agree on new levels either above or below the current levels. Chinese strategic force expansion is the most likely factor to pressure a change in levels from NST.
- The existing NST limits on Russian systems are modified upward, within a new and broader agreement: In this scenario, Chinese nuclear force expansion has likely resulted in an increase in the sublimits on deployed and non-deployed strategic delivery vehicles and deployed warheads. Definitions largely remain the same, perhaps with an expansion to include the limited number of Russian novel systems being operationally deployed. The upward change in limits will need to be defended as a necessary product of Chinese force expansion and the repeated refusal of the Chinese government to join the United States and Russia in arms control.
- New definitions and conceptions of limitations are codified within a new and broader agreement: Increases in arms control limits will likely result in criticism by those who see this as a reversal of the decades long trend in downward reductions and commitments under the Nuclear Nonproliferation Treaty's Article VI commitments. Numbers in arms control treaties, however, are frequently dependent on definitional changes and accounting practices. The best example is with heavy bombers equipped for nuclear armaments, which have been counted as 0 or 1 in past agreements while the nuclear air-launched cruise missiles have remained uncounted and unconstrained. Likewise, under the START I Treaty, deployed warheads on missiles were counted using a maximum attribution rule rather than the actual number deployed on a system. An increase in levels could be explained by changes in definitions of strategic offensive arms to include new U.S. and Russian long-range weapons systems or modifications to arms control accounting practices like the bomber counting rules. While larger numbers



associated with the central limits would be alarming to some, these limits could be explained as a reflection of better, more inclusive terminology and the end of outdated arms control practices.

Looking at these various options, the first three all present difficulties and criticisms. The maintenance of NST limits, either alone or within a broader agreement covering warheads, would be criticized by many national security experts as not reflecting the current security environment. A blunt and inelegant raising of the central limits would come under criticism from a different community that would view such an agreement as a significant step backwards in arms control progress. The potential solution, although perhaps the most complex for negotiators, would involve increases in limits but a redefinition of the counting rules and definitions of items accountable under the sublimits. While greater scrutiny would likely mean some degree of criticism in the expert community, the higher sublimits could be defensible given the security environment and the agreed terminology in the new and broader agreement.

Another solution would be to re-examine this question of numerical limits in its entirety. The stated position assumes that the limits are the most important part of NST, the thing which should be preserved above all else. Given the seismic changes in the security environment, however, should these limits (or any limits) be retained at all? Limits may be the most defined aspect of NST, but it is an open question whether the limits are the most important part of the agreement. Less well understood to those outside the day-to-day implementation of the treaty is the importance of the information, the routine exchange of detailed data that has provided predictability and transparency during the decade-plus modernization of the Russian strategic nuclear forces.

### **China – “Apply and tailor the lessons we’ve learned in the U.S.-Russia arms control process when possible to U.S.-PRC discussions”**

Much has been made of the Chinese refusal to engage in strategic arms control, either in the form of formal legally binding treaty negotiations or broader politically binding transparency and confidence-building measures. This refusal, coupled with the Chinese strategic and regional nuclear force expansion, have led many to question the continuation of bilateral arms control between the United States and Russia. They insist instead that any future agreement must involve the Chinese. They have been unable to find, however, the necessary stick or carrot by which to punish or incentivize China to participate in arms control.

Much less has been outlined, however, in terms of what exactly people want out of an agreement that involves China. Many of the unanswered questions are similar to those already discussed above regarding Russia. Is the central point simply fairness, that no agreement for the United States is “fair” if China does not participate? Is the desire one of information on Chinese numbers, in an effort to stave off unnecessary arms racing driven by worst case analyses? Is it based on hard military requirements, tied to certain quantitative metrics or concerns over particular systems? Is insistence

on Chinese participation a point of leverage to further arms control efforts in a broader geopolitical competition, or simply a poison pill designed to destroy arms control as a viable national security tool? If China does agree to come to the table, what does the United States want and what will it give in return? Given that this point has been made so stridently by many experts as a precondition for future arms control, it is surprising how little has been explored and answered on the topic. Chinese refusals to engage have overshadowed a complete lack of analysis of what arms control with China is designed to achieve. Again, as with Russia, potential arms control constructs emerge primarily out of the question of whether China should be treated equally to the United States and Russia.

**Equal Treatment – China will be an equal partner (i.e., same limits, same verification provisions, etc.) in an agreement with the United States and Russia.**

Equal treatment likely depends on the quantitative and qualitative end point of China's current nuclear modernization and expansion program. This end point is currently unknown to Western observers and may in fact be unknown at present to Chinese political and military leadership, dependent instead on perceived future changes in the security environment. Assuming that Chinese expansion results in being a nuclear "peer" or "near-peer" with the United States and Russia in terms of overall numbers, force composition, and system sophistication, it would make sense to have China be an equal partner in any future agreement between the United States and Russia. Such an agreement could follow any of the prescribed pathways with Russia—something akin to NST, something broader looking at all nuclear warheads, or something fundamentally different and expanded to include non-nuclear systems that impact the strategic nuclear balance—and would look "fair" at least on paper. China would be "included."

The difficulty with equal treatment for China lies in two areas. The first is the learning curve. The United States and the former Soviet Union/Russia have roughly five decades of institutional memory with strategic arms control—an official record of past successes and failures in negotiations, implementation, and compliance; bureaucratic structures to support these parts of an arms control process; and a shared strategic culture of solving difficult bilateral issues using arms control as a tool. It would be a considerable leap to expect China to jump immediately to this point. Nothing for China would be based on agreed past precedent as with the United States and Russia. Every provision would be new, subject to detailed explanation if not renegotiation or revision. The Chinese military would have no experience in hosting inspections or conducting inspections, in transmitting notifications, in passing classified data exchanges, in using verification tools and equipment, or in participating in confidential implementation meetings to resolve inspection issues and address compliance concerns. The composition of a Chinese arms control negotiating team is unknown, as would be the implementation team for any agreement. Even if China were to be a peer on paper, they would be far behind in institutional experience and

knowledge of the practical implementation of arms control, making any negotiation likely more difficult than it would appear between three “peers” with a similar historical experience.

The second is mindset. China continues to reject inclusion in the arms control regime, whether as a peer or otherwise. The Chinese have never framed themselves as an equal partner in strategic arms control. They have instead chosen to benefit from U.S.-Soviet/Russian bilateral agreements while claiming that they would not participate until there were reductions down to Chinese levels. The rapid expansion of Chinese nuclear forces has not resulted in a change in its policy talking points regarding arms control. If China moves up to U.S. and Russian levels, will it expect to be treated as a peer, or will it continue to try and get a free ride on the benefits? China has viewed arms control as prejudiced against the weaker party. Will this remain the same when it can no longer be viewed as the weaker party? For a nation which has always attempted to describe itself as the smaller and aggrieved party, it will be a significant change in mindset to now be considered as an equal and a peer subject to the same rights and responsibilities as the other two parties in the agreement. China could also attempt to define what it thinks an equal partnership looks like, forcing the United States and Russia to react to a proposed framework whose terms have been designed to benefit China’s interests.

**Unequal Treatment – China will be an unequal partner (i.e., different limits, different verification provisions, etc.) in an agreement with the United States and Russia.**

As challenging as including China as an equal partner with the United States and Russia in future arms control would be, an agreement with unequal treatment would likely be even more complicated. Such an unequal agreement would likely be based on a Chinese decision to stop its force modernization at a level quantitatively lower than that of the United States and Russia. This numerical disparity could allow China to continue to argue that it remains a lesser nuclear state and thus should not be included in any arms control agreement or should be subject to fewer or lesser provisions in any agreement. There are several variations on what such an unequal agreement would look like:

- Same agreement, different provisions, different caps: China is an equal party in an agreement, but because of its acknowledged near-peer rather than peer status, it is capped at a lower level and subject to fewer verification provisions.
- Same agreement, same provisions, different caps: China is an equal party in an agreement with the same verification provisions, but because of its acknowledged near-peer rather than peer status, it is subject to a lower cap.
- Same agreement, different provisions, same caps: China is an equal party in an

agreement with the same caps, but because of its acknowledged near-peer rather than peer status, it is subject to fewer verification provisions.

- Same agreement, different status: In this scenario, China participates in the negotiation of an arms control agreement, but perhaps ultimately is an observer rather than a party to such an agreement. The goal would be to raise Chinese institutional knowledge in the process and benefits of formal arms control, with perhaps the goal of them becoming a party to the agreement in the future.
- Different but linked agreements: Because of the unequal dynamics, the United States much reach separate agreements with Russia and China. These different agreements may be centered around similar or different verification provisions.

Given its blanket refusal to participate, it is unclear what position China wants to have in an agreement with the United States and Russia. It may only wish to participate as an equal given the desire for a broader recognition of its status as a nuclear peer. Alternatively, it could want to continue to posture itself as a lesser nuclear power, arguing for increased verification burdens on the other two states.

#### **Section IV: Conclusions and Recommendations**

The preceding analysis provides a laundry list of potential pathways and options on which to proceed in developing a U.S. concrete proposal. Some may be too costly or too difficult to achieve in the near term due to broader dynamics in the negotiating environment. Some that would likely be most appealing for the United States would likely be unworkable in a negotiation, as they would be largely one-sided deals that would require a great deal of Russia and China at little cost to the United States. Some dynamics of note also help to filter the realistic from the potential:

- Competitive dynamics hamper the possibility of cooperation on arms control: This is a time for pragmatism on arms control, a cooperative endeavor which was already eroding significantly over the previous decade as competitive dynamics emerged. Competitive dynamics are now front and center. They are likely to increase over the next decade if current trends remain. Each side is characterizing the leadership of the other in stark morally and emotionally charged terms. Russia and China do not want to hand the United States anything resembling a win, and vice versa. The grand idea of the mutual cooperative endeavor of arms control has crumbled given Russia's poor track record on treaty implementation and compliance and the U.S. lack of trust. Arms control is by no means something that is guaranteed to continue, as remaining arms control regimes may continue to erode and disappear due to Russian and Chinese bad behaviors. This is a time to focus on what must be done rather than what could or should be done.

- The emerging two-peer environment significantly complicates the concept of numerical limits in arms control: In past bilateral agreements, numerical limits represented status equality and statistical parity between the two sides. They have been a recognized stabilizing pillar of a bilateral environment, although they have been controversial at times in agreements when other metrics or considerations have been perceived as imbalanced. In an environment where there are three equal players in direct competition with one another, numerical limits could be similarly designed to be equal and stable. Some agreement could be envisioned with an adequate ratio of deployed launchers and deployed warheads to cover the target sets in the other two countries. In the existing security environment, however—with an unknown degree of cooperation or collusion between two of the three players—numerical limitations become problematic for the third player in the equation, the United States. Any number, whether a reduction to 500 or an expansion to 5,000, would come under criticism for leaving the United States constrained to half of the combined arsenals of the two other players in the agreement.
- Negotiating dynamics within the United States are difficult but not impossible: Agreement within the United States government—both within the executive branch interagency and between the executive and legislative branches—on any future agreement will be difficult. Arms control expertise has eroded, which will lower the caliber of debates on substantive issues and likely result in simplistic criticisms about which parties, numbers, caps, and systems are included and which are not. An agreement which may be viewed as benefiting U.S. national security will be weighed against the cost of giving the president a perceived legacy-enhancing win on foreign policy. Terms like “winning,” “appeasement,” and “bargaining with the devil” rather than any calculation about strategic or military significance are likely to be the main focal points of debate. But this is a problem which has been endemic to arms control since the Cold War, as in the past. Overcoming this problem requires a concrete proposal, an engagement plan with allies and skeptics, and a long-term strategy to get to the negotiating table.
- Negotiating dynamics with Russia are difficult but could be in flux: Russia could very well stick to its well-worn position on future arms control indefinitely: an unwillingness to provide concrete proposals or positions coupled with a lengthy and vague list of preconditions for future talks on nuclear weapons. It could never come back to the negotiating table, either under Putin or his successors. It could also choose to stick to its path of raising risks and instabilities while eroding remaining agreements. Russian military performance in Ukraine could, however, force Russian leadership to seek some degree of stability in the nuclear relationship, as it grapples with hard fiscal choices between domestic and military spending and between nuclear modernization and expansion and the

rebuilding of its shattered conventional forces. Russia may choose not to seek an unconstrained nuclear arms race during a period of economic or conventional weakness, instead pursuing a tactical breather with the United States to rebuild its forces. It may come to view nuclear weapons as its one geopolitical negotiating chip, placing it on the table but giving it a steep cost.

- Negotiating dynamics with China are difficult but could evolve: Likewise, the most likely Chinese position is one that exists today: skepticism or hostility to becoming involved in traditional arms control negotiations and treaties. The massive expansion in the Chinese nuclear arsenal could change these attitudes, however, as China would come to the table as an equal rather than a lesser player in any future negotiation. Increased external criticism of the Chinese lack of constructive engagement could cost China its desired credibility as a leader in the nuclear nonproliferation space. While less likely, Chinese negotiating dynamics could also evolve. It could seek an arms control agreement on its own terms, in accordance with its own understandings, allowing the United States to be seen as getting them to the table while demanding their own recognition of a new strategic reality of China as a nuclear peer or superior to the United States.
- The United States lacks negotiating chips now but could have more in the future: In contrast to Russia and China, who are well into their own strategic modernization or expansion programs, the United States is just beginning its modernization cycle focused on the existing program of record. Russia and China have diverse arsenals, with a variety of missile systems and launcher types. In contrast, the United States is focused on limited number of one-for-one replacement systems. Right now, U.S. nuclear capabilities are well known, both from the open U.S. system as well as decades of arms control experience. In the future, however, Russia and China could seek to see the details of the U.S. modernization and replacement program with a level of granularity they could only get from arms control. This desire would be enhanced if additional U.S. nuclear capabilities were under consideration or in design, development, or testing. The United States also has a host of non-nuclear negotiating chips which it has chosen to exclude from the table. It could choose to bring these to the table and see what they are worth.
- Technological tools cannot overcome political distrust but define the parameters of the possible: Against these political divisions and geopolitical headwinds, new verification technologies are not a silver bullet solution for arms control. They can improve the odds of an agreement being adequately verifiable, or expand the list of potentialities of an agreement, but they cannot substitute for a lack of political will or shared understandings of the risks. Arms control technologies are inherently mistrusted and must be fully vetted by the most skeptical parties

on either side of the negotiating table. Procedures must be developed for their transportation, maintenance, and utilization. Thus, better verification technologies do not make a warhead agreement more likely. Instead, they help define what is possible within a potential warhead agreement.

- A predicted but unknown unconstrained world is possible and could come to be, as most in the United States and Russia have not experienced a prolonged period without strategic arms control. Given they have not experienced the downsides of this alternative, some on both sides chafe under the current restraints and take the benefits for granted; they have never experienced the uncertainties. As has been seen in the narratives surrounding the collapse of various agreements, the allure of the possible outside of the artificial boundaries of arms control is strong. The likely realities of the unconstrained world, however, are often less palatable, and unfortunately must likely be learned by experience. Withdrawal from the Anti-Ballistic Missile Treaty and Intermediate-Range Nuclear Forces Treaty, for example, were prefaced on the limitless possibilities for a United States unconstrained by outdated arms control treaties; withdrawal from both agreements have met with limited changes to U.S. force posture. If New START expires without a replacement, an initial euphoria by some will likely be replaced by pressures to reach a new agreement as time passes and sides begin to lose confidence in their own estimates of the other side, the increasing list of unknowns and uncertainties, and the recognition of their own inability to outrace or win in an unconstrained environment.

There is an increasingly limited list of practical pathways for arms control that could serve as the basis for a future U.S. concrete proposal. Further numerical reductions are unlikely. Continued endeavors with Russia, an international pariah after its actions in Ukraine, likely would be depicted by some as meaningless without including China, a country who categorically refuses to engage. Expansive arms control agreements that bring in many disparate military systems or attempts to tackle new domains such as cyber and space are improbable in this security environment. Looking more specifically at the nuclear arms control space, the United States lacks in the near term the dominating coercive leverage, or the nuclear negotiating trade chips (i.e., the sticks and the carrots) needed to force some form of unequal agreement with the Russians and the Chinese either separately or in tandem. Determining numerical limits is complicated by the Russia-China strategic partnership, which can range along a spectrum of opportunism to collaboration to cooperation to alliance.

Where does this leave us? We are left with a set of broad parameters for a future agreement: likely a nuclear-focused agreement, likely with equal relationships between the players, likely without hard numerical limits. The exact form of such an agreement founded on principles of equal footing could be envisioned along four lanes:

1. A bare bones agreement with China—some form of transparency or verification regime which would meet the minimum standard regarding the desire to “involve” China in arms control. This could stand alone, or serve as a corollary to something bilateral between the United States and Russia.
2. A deeper agreement with Russia focused on nuclear weapons—an agreement that meets the minimum standard regarding the desire to “capture” all Russian warheads and include so-called Russian novel systems in a future agreement.
3. A broader agreement with Russia focused on “fairness” and systems of concern—an agreement that captures all warheads and Russian novel systems and brings in systems of concern to both sides, such as missile defenses, conventional long-range strike, and dual-capable systems.
4. A bare bones agreement with Russia and China—an agreement that brings in a new player but one that is likely to be less intensive and have ceilings at higher levels as compared to NST.

Each of these agreements may not be possible in the short-term (i.e., between now and the formal expiration of NST in February 2026) due to the changing but unsettled security environment. Shifting dynamics are more likely to force the parties apart rather than bring them together in the near term. The United States’ thinking on arms control could change dramatically depending on election results over the next several cycles. China may not feel comfortable engaging until its forces reach a desired future qualitative or quantitative endpoint. U.S.-Russia relations will likely remain strained given Russian aggression in Ukraine and U.S. counter-responses, leading to questions of whether any agreement with Russia would be acceptable or binding. Questions would be raised about the parameters of any U.S.-Russian detailed agreement—what was included or not included, what the numerical limits should be in light of Chinese force expansion, and what was traded at the table for what. The Russian interagency could be unable or unwilling to engage as it juggles multiple internal and external crises of its own making. Parties will be yet to feel the pressures and uncertainties of an unconstrained nuclear world after NST expires and the sides see the negative impacts. All of this makes arms control unlikely in the short term.

The prospects for these arms control agreements could improve over the medium term (i.e., the early 2030s), however. NST will fade into the past, and thus it will no longer be the benchmark for future work. All sides will compete, and they will likely rediscover the lack of advantages to be won in quantitative racing. Following a period of uncertainty, worst case analyses, and defense spending, all parties could rediscover the value of formal arms control agreements as a way of managing armaments competition in a multipolar security environment. Successful U.S. nuclear modernization efforts and the rebirth of a responsive U.S. nuclear infrastructure could encourage the Russians and Chinese to engage. Internal dynamics or political leadership turnover in Russia and China could make them more willing to engage in



nuclear or broader arms control negotiations. The loss of transparency and confidence from the information exchanged in arms control agreements could be seen as invaluable and irreplaceable. A nuclear crisis could awaken policymakers and military officials on all sides to the need for some form of transparency or formal agreement.

With these dynamics and timeframes in mind, there are two sets of concluding recommendations for this paper. The first recommendation is determining what is a) a practical step in the near term and b) best manages the multipolar competitive landscape dominated by Russia-Ukraine and the two-peer problem.

Feasibility in this environment likely requires discarding ambitious and controversial proposals raised over the last two decades, proposals which may have had a likelihood of success at previous moments but are now out of touch with geopolitical realities. Significant reductions are unlikely. In any arms control agreement in the two-peer environment, there will be controversies about numerical caps—numbers that constrain the United States and Russia while permitting China to build up, numbers that codify United States inferiority to a combined Chinese and Russian arsenal, and numbers that limit some military capabilities and not others. Numbers make sense as the basis for negotiations in a bilateral arms control environment, even if they are often controversial in expert debates about advantages and gaps; they may, however, no longer be needed or important in a transitory period of competitive change. A complete departure from the past practices of the last five decades of arms control is also unrealistic. A dramatic expansion of arms control into emerging domains like outer space and cyberspaces, or into lanes of technologies like quantum computing and artificial intelligence, is also unlikely to succeed due to problems of negotiation and verification.

The most important commodity arms control can provide in the near to medium term is information. A proposed agreement without specifics on numbers—thus divorced from concerns over restricting and enforcing numerical limits and reductions— may serve as the best bridge to transition from a bilateral to a multilateral arms control environment and bring the Chinese to the U.S./Russian level of comfort and experience with arms control. Competitive dynamics are likely to drive qualitative and quantitative improvements in nuclear arsenals; arms control measures are unlikely to overcome such dynamics. Similar to the 1950s and the 1960s, in an era of changing force sizes and compositions and evolving deterrence relationships, each side will have concerns over the capabilities and intentions of the other two parties. Each side would benefit from a confidential exchange of information on these capabilities, perhaps supported by some degree of onsite verification, to track force developments and dispel worst case assumptions and analyses. Each side would gain confidence over time in the information provided through data exchanges and notifications provided by the others. Each side would benefit from an implementation body legally required to meet a certain number of times each year, regardless of other complications in the relationship, and discuss matters of concern.

A no numbers agreement comes with the flexibility necessary to support an evolving and complex security environment. It could be expanded or contracted as necessary to meet the national security needs of the parties. It could hew closely to the provisions and legal language of NST. It could be expanded to include new nuclear systems or all warheads. It could add missile defenses or conventional strike systems to the discussion. Having removed many of the more controversial issues surrounding numerical limits, prohibitions, or restrictions (qualitative, geographical, and so on), it would simply be a routinized, confidential exchange of information supplemented by additional verification measures and implementation dialogues. The goal of all this information is two-fold, fitting with the anticipated security environment. First, it would manage competition and lessen risks at a time of transition. Second, it would make everyone more comfortable with new foundational ground in arms control—getting the Chinese at the table and involved, convincing the Russians that information can be provided on nuclear warheads without jeopardizing national security, demonstrating to the United States that sharing information on missile defense and conventional strike does not limit it in any way.

The second recommendation is that the United States must create leverage. It is not enough to state that the United States is willing to negotiate. Likewise, it is not enough to rely on diplomatic pressure to “name and shame” parties to the negotiating table. This means leverage, in both diplomatic and military forms. Diplomatic forms would be a proposed agreement placed on the table and highlighted in the international arms control space. It is proposing substance and a workable plan into a vacuum that lacks both. Military forms mean highlighting the systems in question that concern Russia and China. It means designing, developing, and deploying leverage for the arms control negotiating table by having the chips in place to negotiate either equal or unequal agreements in accordance with calculated U.S. security interests. It also means leverage for an alternative but increasingly likely world where arms control no longer exists and all-out competition reigns.

A key piece of information in any negotiating framework is the BATNA (best alternative to a negotiated agreement) for both one’s own side and the other sides, as this impacts the potential zone of possible agreement as well as leverage in the negotiation. If the range of potential outcomes in a negotiated settlement is preferable to the BATNA, that side should continue to engage. If not, then there is little value in continuing to negotiate until the incentives and parameters of the agreement change. Discussions of future arms control negotiations are frequently framed in simplistic terms of “Who wants it more?” Better questions are: What are the BATNAs for the various parties? How can these be altered to impact negotiation dynamics?

Right now, the United States does not necessarily need arms control, but it has not adequately prepared for an alternative world without arms control. A formal proposal is absent, the program of record remains largely static, new capabilities are hotly debated, the nuclear weapons complex is strained after years of attention elsewhere, political gridlock complicates and delays funding and long-term planning efforts, and

the United States refuses to discuss Russian and Chinese concerns regarding some of its systems. Extended deterrent relationships have been slow to adapt to the changing security environment, and NATO's nuclear deterrent has remained largely unchanged despite repeated calls over the last decade to “bolster” these capabilities. The perception exists, true or otherwise, that the United States wants arms control and thus Russia and China should be given something to participate.

The United States and its allies have the ability to alter these negotiating dynamics, by making its BATNA look better for itself should an agreement fail to materialize and thus worse for its negotiating partners should they choose not to engage. A stronger nuclear capability could strengthen the negotiating position of any arms control proposal that was put on the table. Up until this point, the United States and its allies have largely exercised self-restraint. This restraint has gone unreciprocated by Russia and China, who have seen little incentive for engaging or punishment for not engaging in arms control. If arms control is intended to be a corollary of armaments policy, then a concrete arms control proposal should be tied to demonstrative changes in military capabilities or postures that would encourage a negotiating party to recalculate their BATNAs against a potential agreement. The United States has the ability to shape the negotiating environment around arms control to return to numerical limits or restrictions on systems of concern, but it must first develop its own BATNA and then must clearly articulate its BATNA to the other players at the table. If even a no-limits transparency-based arms control regime proves unacceptable to Russia and China at this moment, the United States can use it to shape the context for future constructive work, even in the midst of a potentially lengthy interregnum without arms control.

# Renovating the Nuclear Nonproliferation Regime for the Emerging World Order

Zachary S. Davis

In his much-debated article “The Spread of Nuclear Weapons: More May be Better,” Kenneth Waltz argued that instead of a policy of arm-twisting to persuade countries not to acquire nuclear weapons, international security would benefit if more nations solved their security dilemmas by possessing independent nuclear forces.<sup>226</sup> From this nuclear free-market perspective, the entire edifice of international nonproliferation and counterproliferation policies, laws, treaties, regimes, alliances, assurances, norms, and practices was wrong-headed from the outset and contrary to the best interests of global peace and security. Nuclear-armed countries, he argued, would be more secure and therefore less inclined to try to achieve their security goals via aggression and arms racing. More would be better.

*“The presence of nuclear weapons makes wars less likely.”*

Kenneth Waltz

The counterargument was famously articulated by Scott Sagan, who engaged Waltz in one of the most enduring and influential debates in modern strategic studies. In their book *The Spread of Nuclear Weapons: A Debate*,<sup>227</sup> Sagan countered Waltz’s premise by arguing that far from making the world safer, the spread of nuclear weapons would, in practice, lead to a wide array of escalating risks, including nuclear accidents, miscalculation, unauthorized access to weapons and materials, and “loose nukes” in the hands of unstable leaders and terrorist groups, all leading to unacceptably high risks of nuclear use. In other words: the fewer the better.

As all armchair nuclear strategists know, the Sagan argument best describes the course of U.S. nuclear policy from the onset of the atomic age to the present. Even the Manhattan Project scientists fretted about the spread of the bomb and advocated national and international systems of control to prevent proliferation.<sup>228</sup> Nonproliferation became the law of the land with the Atomic Energy Act, and U.S. laws and policies offered a template for international controls on the trade and transfer of nuclear technology. To ensure that President Dwight D. Eisenhower’s Atoms for Peace program would not inadvertently also provide scores of countries with the wherewithal to produce nuclear weapons, the United States championed the establishment of

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226 Kenneth N. Waltz, “The Spread of Nuclear Weapons: More May Be Better,” Adelphi Paper no. 171, International Institute for Strategic Studies 21 (1981). <https://www.tandfonline.com/doi/abs/10.1080/05679328108457394>. Accessed October 13, 2023.

227 Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: A Debate* (New York: W. W. Norton, 1995).

228 Henry Sokolski, *Best of Intentions: America’s Campaign Against Strategic Weapons Proliferation* (Westport, CT: Praeger, 2001).

the International Atomic Energy Agency (IAEA) to ensure that optimism about the widespread use of nuclear energy would not inadvertently fuel a Waltzian world of nuclear-armed states. And to assure that erstwhile enemies would not feel the need to pursue their own nuclear weapons options, America provided nuclear security guarantees to NATO allies, Japan, and South Korea, all of which possessed the technological wherewithal to acquire them if they chose to do so.

When it entered into force in 1970, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) formed the basis for international control efforts to hold the line at five de jure nuclear states, with the proviso in Article 6 that even they would eventually achieve progress toward the vaguely defined goal of nuclear disarmament. To strengthen the regime, the United States opposed widespread use of highly enriched uranium (HEU) and plutonium for energy production and imposed sanctions on those who sought to buy and sell nuclear technology on the black market. Multilateral organizations such as the Nuclear Suppliers Group (NSG) reinforced technology controls and consolidated adherence with developing global nonproliferation norms. Over time, the nuclear nonproliferation regime grew to become a network of international agreements, treaties, policies, and practices designed to stop the spread of nuclear weapons. It was a classic example of “building a plane while flying it.” There was no ultimate strategy to build the nuclear regime; the pieces and parts accumulated over time as need arose.

The nuclear regime mostly achieved its bold objectives. A new wave of “over-the-horizon” proliferation was prevented by using the proven tools in the nonproliferation toolbox: multilateral agreements and organizations, negative and positive assurances, alliances, export controls, sanctions, and counterproliferation as a last resort. Predictions of a proliferation breakout have not come to pass. The regime has stood the test of time.<sup>229</sup>

But what if the nonproliferation regime has run its course? Is Waltz’s brand of proliferation optimism the default if the nuclear regime becomes unsustainable? This essay examines the record of success and failure of the regime, highlights the threats to its future, and offers a prescription for extending its benefits into a new era.

## **It’s Working!**

The end of the Cold War spawned new hope for nuclear rollback with the elimination of nuclear-weapons programs in South Africa, Iraq, Argentina, Brazil, and the removal of weapons and materials from former Soviet states (including Ukraine) via Cooperative Threat Reduction programs.<sup>230</sup> There would be no new nuclear states.

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229 See for example Zachary Davis and Benjamin Frankel, eds., *The Proliferation Puzzle: Why Nuclear Weapons Spread and What Results* (London: Frank Cass, 1993). See also James Wirtz and Peter Lavoy, eds., *Over the Horizon Proliferation Threats* (Stanford, CA: Stanford University Press, 2012). A more recent survey of experts in 2021 found the experts evenly divided on the question of whether more states would acquire nuclear weapons. *Foreign Affairs*, “Will More States Acquire Nuclear Weapons?” (December 14, 2021). <https://www.foreignaffairs.com/ask-the-experts/2021-12-14/will-more-states-acquire-nuclear-weapons>. Accessed October 13, 2023.

230 Mitchell Reiss, *Bridled Ambitions: Why Countries Constrain Their Nuclear Capabilities* (Washington DC: Woodrow Wilson Center, 1995).

The threat of loose nukes and nuclear terrorism, amplified by the attacks on the United States on September 11, 2001, eventually appeared manageable through national and international counterterrorism and interdiction programs. Even North Korea seemed, at times, to be on the right track when it joined the NPT and agreed via the six-party talks to disarm in exchange for energy and food assistance. Nuclear tests by treaty outliers India and Pakistan in 1998 were widely condemned and not repeated. Israel remained aloof from the regime by maintaining its opaque “don’t ask, don’t tell” policy. The exceptions, thankfully, did not derail the broader norm. There was no nuclear tipping point.<sup>231</sup> Not yet, anyway.

The strengthening of IAEA safeguards after the discovery in the early 1990s of Iraq’s secret weapons program added credibility to the global nonproliferation regime, as did UN Security Council resolutions on Iraq, Iran, the India-Pakistan nuclear tests, and North Korea. The A.Q. Khan nuclear smuggling scandal, the covert Syrian reactor, and North Korea’s proliferation behavior inspired new efforts such as UN Security Council Resolution 1540, requiring national controls and regular reporting on exports of nuclear technologies. It also spawned the creation of new multilateral efforts such as the Proliferation Security Initiative to combat nuclear smuggling. Iran entered negotiations that eventually led in 2015 to the Joint Comprehensive Plan of Action (JCPOA). Multilateral nonproliferation norms were on a roll through the 1990s and early 2000s.

On the vertical proliferation axis, the combination of progress toward a Comprehensive Nuclear Test Ban Treaty (CTBT), backed by a voluntary moratorium on nuclear testing and prospects for progress in U.S.-Russia arms control in pursuit of the Prague agenda partially satisfied Article 6 expectations for progress on disarmament. Unprecedented reductions under the 2010 New Strategic Arms Reduction Treaty (New START) brought U.S. and Russian arsenals down to levels not seen since the 1950s. Proposals for a Fissile Material Cutoff Treaty (FMCT) further raised hopes that nuclear weapons were receding from their defining role in international security. New treaties and institutions for chemical and biological weapons showed promise. When arms control stalled in the Obama years after New START, a series of nuclear security summits aimed at securing nuclear materials maintained at least the prospect of progress in topics related to arms control.

If one now looks back at the historic evolution of nonproliferation and arms control, it seemed obvious that the Sagan approach had prevailed and that the Waltzian alternative was little more than a theoretical thought experiment. To borrow a popular phrase used to describe American triumphalism at the end of the Cold War, for a brief period it looked like “the end of (proliferation) history.”<sup>232</sup> Deterrence had produced

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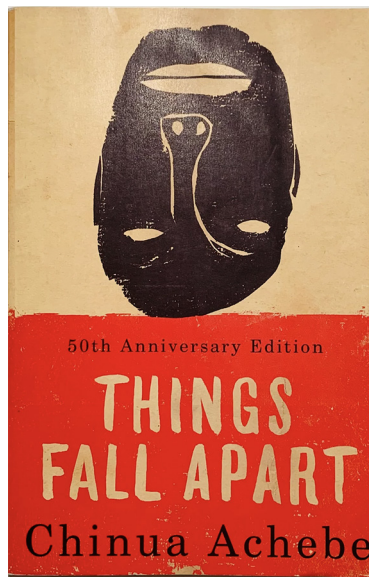
231 Kurt Campbell, Robert Einhorn, and Mitchell Reiss, *The Tipping Point: Why States Reconsider Their Nuclear Choices* (Washington, DC: Brookings, 2004).

232 Francis Fukuyama, “The End of History,” *National Interest*, no. 16 (Summer 1989), pp. 3-18.

The Long Peace between the former Soviet Union and the United States.<sup>233</sup> And since democratic nations were supposedly less inclined to fight each other, the spread of democracy meant that systemic pressures for proliferation would disappear. The American-led, post-World War II world order had successfully managed nuclear dangers by using a combination of realist hard power and idealist concepts of negotiation and multilateral cooperation.

### What Happened?

Eventually, however, cracks appeared in the edifice of world order that had paved the way for nonproliferation norms to take root and grow in the first place. Today, tectonic shifts in the global balance of power are reshuffling alliances and calling into question the rules, norms, and institutions that were established in the aftermath of World War II. Moreover, a wave of revanchism led by Russia and China is dismantling the liberal, rules-based order that made the nonproliferation regime possible. How can the nonproliferation regime survive if the underlying system that supports it is falling apart?



Book cover of *Things Fall Apart* by Chinua Achebe, a novel about the fall of a great civilization.

Existing norms are fading as hopes for the establishment of new norms for global health, cyber warfare, outer space, and climate change appear out of reach. Even deeply rooted norms against genocide, labor, and human trafficking are under assault. Nuclear norms are no exception. As the post-World War II world order crumbles, basic precepts of nuclear restraint are being challenged. Vladimir Putin's Russia, it turns out, views nuclear weapons very differently than those who consider them

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233 John Lewis Gaddis, "The Long Peace: Elements of Stability in the Postwar International System," *International Security* 10, no. 4 (Spring 1986), pp. 99-142.

an undesirable, unusable, and illegitimate form of military power. Nuclear weapons continue to be a central component of Russia's full-spectrum doctrine, under which the envisioned role of these weapons is not limited to deterrence but integrated into the Kremlin's offensive "theory of victory," as we have seen in the Ukraine conflict.<sup>234</sup> China also doubled down on its nuclear weapons as a mainstay of its expanding multidomain capabilities<sup>235</sup> Iran, always an enigma for U.S. policy, bridled at the Trump administration's rejection of the JCPOA and returned to its pursuit of advanced enrichment capabilities, perhaps provoking regional adversaries such as Saudi Arabia and Turkey to revisit their own nuclear options. Pakistan and India continued their penchant for nuclear-edged crises, joined by China in a new South Asian triad of nuclear uncertainties.<sup>236</sup> North Korea remains immune to positive or negative pressures to restrain its nuclear and missile programs and pushes ahead with the testing of missiles designed to reach U.S. territory. Even U.S. allies Japan and South Korea, shaken by American political whims and questions about the reliability of U.S. security guarantees, have renewed rumblings about the need for independent nuclear deterrence options while advancing their latent capabilities.<sup>237</sup> Could the dam that was built to hold back the floodwaters of proliferation be in danger of bursting? Are we heading toward what Paul Bracken called the Second Nuclear Age?<sup>238</sup>

## A Waltzian Redux?

Today the nonproliferation regime is being squeezed between growing global insecurities that could fuel a new wave of Waltzian possibilities on the one hand, and long-standing demands for nuclear disarmament on the other. The latter has been given new momentum by the Treaty on the Prohibition of Nuclear Weapons (TPNW), which proponents hope to use as a cudgel to advance disarmament.<sup>239</sup> Further undermining the nonproliferation regime, the UN Security Council is hopelessly divided, removing a key component of international pressure on proliferators. Moreover, the international community is stymied by the hard cases; North Korea and Iran remain unconstrained in their advance toward strategic capabilities; India and Pakistan are deploying strategic triads consisting of land, sea, and air delivery options; and the prospects for progress in arms control are grim, with Russia and

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234 Brad Roberts, *The Case for US Nuclear Weapons in the Twenty First Century* (Stanford, CA: Stanford University Press, 2016).

235 Defense Intelligence Agency, *Military and Security Developments Involving the People's Republic of China* (2021). <https://media.defense.gov/2021/Nov/03/2002885874/-1/-1/0/2021-CMPR-FINAL.PDF>. Accessed October 13, 2023.

236 Ashley Tellis, *Striking Asymmetries, Nuclear Transitions in Southern Asia*, (Washington DC: Carnegie Endowment, 2022). [https://carnegieendowment.org/files/202207-Tellis\\_Striking\\_Asymmetries-final.pdf](https://carnegieendowment.org/files/202207-Tellis_Striking_Asymmetries-final.pdf). Accessed October 13, 2023.

237 Yukio Satoh, *US Extended Deterrence and Japan's Security* (Livermore, CA: Center for Global Security Research, 2017).

238 Paul Bracken, *The Second Nuclear Age* (New York: St. Martins, 2013). Other scholars have added a third nuclear age. See Andrew Futter and Benjamin Zala, "Strategic Non-nuclear Weapons and the Onset of a Third Nuclear Age," *European Journal of International Security* 6, no. 3, pp. 1-21.

239 Arms Control Association Press Release, Nuclear Ban States Solidify Treaty (June 24, 2022). <https://www.armscontrol.org/aca-press-releases/2022-06/nuclear-ban-states-solidify-2017-treaty>. Accessed October 13, 2023.



China rejecting U.S. entreaties for strategic stability talks while developing new generations of weapons and delivery systems.<sup>240</sup> Far from decreasing in value, nuclear weapons are gaining value for a number of states as the main tools of nonproliferation policy are losing their efficacy. The old tools of nonproliferation are not working.

If the nonproliferation regime is on its final legs after 75 years, is it time to contemplate a new age of Waltzian proliferation? If the nonproliferation regime has run its course, and the United States is no longer willing or able to play the role of global Leviathan to redirect the tides of national nuclear aspirations, one alternative is to accept Waltz's free-market, laissez-faire approach to proliferation and allow those countries that harbor nuclear ambitions to have them. If the global order is transitioning from the rules-based and norm-guided structure that was championed by U.S. leadership in the aftermath of World War II to a less organized, more chaotic, multipolar arrangement governed more by unconstrained pursuit of national interests than care for the global commons, is it time to quit pushing the rock of nonproliferation up the hill of a disintegrating world order and embrace the Waltzian alternative?

What would such a world look like? Proliferation optimists and pessimists have long disagreed.<sup>241</sup> Waltzian optimists argue that nuclear deterrence would work just as well for new nuclear states as it did for the superpowers throughout the Cold War and beyond. They point to India and Pakistan as a case study of the positive attributes of nuclear weapons, citing the restraint demonstrated by both countries, even through successive crises.<sup>242</sup> Why wouldn't nuclear deterrence also work for Japan, South Korea, Taiwan, Iran, Turkey, Egypt, Syria, Saudi Arabia, and Ukraine?

From this perspective, the prospect of nuclear retaliation guarantees that rational actors will refrain from taking undue nuclear risks. Even "crazy" leaders, the argument holds, fear for their own survival. Deterrence relies on universal human fears of annihilation, which transcend all leaders and cultures. Even large-scale conventional conflict can be deterred if more countries are armed with civilization-busting atomic weapons. What's good for the goose is good for the gander.

*"Even if deterrence should fail, the prospects for rapid de-escalation are good."*

Waltz

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240 Global Nuclear Arsenals are Expected to Grow, SIPRI (June 2022), <https://sipri.org/media/press-release/2022/global-nuclear-arsenals-are-expected-grow-states-continue-modernize-new-sipri-yearbook-out-now> (accessed October 13, 2023); Jennifer Bradley, "China's Nuclear Modernization and Expansion: Ways Beijing Could Adapt Its Nuclear Policy," National Institute for Public Policy (July 2022).

241 Peter Feaver, "Proliferation Optimism and Theories of Nuclear Operations," in *The Proliferation Puzzle*.

242 Devin Hagerty, "The Power of Suggestion: Opaque Proliferation, Existential Deterrence, and the South Asia Nuclear Arms Competition," in *The Proliferation Puzzle*; Sagan and Waltz, *The Spread of Nuclear Weapons, A Debate Renewed*, Chapter 3, "Indian and Pakistani Nuclear Weapons, For Better or Worse?" (New York: WW Norton, 2003).

Beyond assured retaliation against nuclear attack, threatening to use nuclear weapons first in response to conventional aggression might even extend the benefits of nuclear deterrence to deter non-nuclear attacks. Thus, NATO Cold War doctrine was to counter a Soviet invasion into Western Europe with nuclear munitions. Pakistan mimics NATO nuclear strategy by subscribing to a first-use doctrine against an Indian conventional invasion of its territory. So far, it seems to be working. Despite North Korea's saber rattling, its successive leaders appear content with a defensive, retaliation-based nuclear posture. India subscribes to a pure retaliation doctrine, even while reconsidering its no-first-use pledge. Nuclear weapons, it could be argued, are an essential stabilizing factor in the emerging China-India-Pakistan strategic competition. Would Russia have so recklessly invaded Ukraine if Kyiv possessed a credible nuclear option? Waltzian scholars such as John Mearsheimer say no. And what if Taiwan had persisted in its efforts to acquire nuclear weapons?<sup>243</sup> Would Xi Jinping and the Communist Party of China still threaten to invade if the consequence were a nuclear bomb delivered to Beijing? And what about the sheer cost of American security guarantees? Is the United States willing and able to bear the burden of extended deterrence? Is it possible that Waltz was right that peace and stability throughout the world really would increase if more countries embraced the logic of deterrence and, as Winston Churchill framed the problem, solved their security dilemma by making peace "the sturdy child of terror?"<sup>244</sup> Nukes don't kill people; people kill people. More is better.

At the other end of the spectrum of possibilities lies the proliferation nightmare imagined by Sagan and the proliferation pessimists. More weapons; more weapons-usable materials; more people with access to weapons and materials; more transportation of weapons and materials; more training exercises; more deployed weapons on land, sea, and air; and more industrial-scale production of nuclear weapons by more states can only result in greater risks of nuclear weapons being used, either on purpose or through accidents or miscalculation. The history of accidents and near misses in the United States alone provides stark warnings about the likely consequence of nuclear globalization.<sup>245</sup> The Cuban Missile Crisis and successive nuclear showdowns in South Asia provide similar warnings about nuclear risks.<sup>246</sup> India's accidental firing of a nuclear-capable Brahmos missile into Pakistan in 2022 further illustrates the growing dangers. More impulsive leaders with more fingers on more nuclear buttons equals greater nuclear risk, not less. And with global

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243 Institute for Science and International Security, Taiwan. <https://isis-online.org/countries/category/taiwan>. Accessed October 13, 2023.

244 Churchill's last speech before Parliament (March 1, 1955). <https://www.parliament.uk/about/living-heritage/transformingsociety/private-lives/yourcountry/collections/churchill/exhibition/churchill-the-orator/hydrogen/>. Accessed October 13, 2023.

245 Scott Sagan, *The Limits of Safety: Organizations, Accidents and Nuclear Weapons* (Princeton, NJ: Princeton University Press, 1993); Eric Schlosser, *Command and Control: Nuclear Weapons, the Damascus Accident, and the Illusion of Safety* (New York: Penguin, 2013).

246 United States Institute of Peace, *Enhancing Strategic Stability in Southern Asia*, USIP Senior Study Group Final Report (May 17, 2022). <https://www.usip.org/southern-asia-strategic-stability-report>. Accessed October 13, 2023.

and regional nuclear competition unleashed, arms racing will accelerate, further compounding the risks for humankind.

From a purely U.S. perspective, U.S. force projection would be greatly constrained by the presence of foreign nukes scattered throughout a Waltzian world, especially in the maritime domain. More nuclear weapons would mean that long-sought missile-defense options against nuclear attack would face increasingly impossible odds. Moreover, Waltz's "more is better" scenario presumes that regional deterrence works perfectly, forever. Should deterrence fail, what are the chances that nuclear wars will be limited? Once the nukes start to fly, how does it end? Waltz believed that the presence of nuclear weapons would ensure de-escalation. That humanity dodged a few nuclear bullets should give no comfort about the outcome of a Waltzian renaissance. It would be far better to limit nuclear dangers wherever possible. Nonproliferation, for the pessimists, was the right choice from the outset of the nuclear age. Over-the-horizon proliferation should be stopped, not celebrated.

### **Theoretical Extremes and Nonproliferation Reality**

Of course, there is plenty of middle ground between the theoretical poles of a proliferation free-for-all and international control of the absolute weapon, as proposed by the Baruch Plan in 1946.<sup>247</sup> In practice, not all states, even those with real security threats, want nuclear weapons. Some over-the-horizon candidates might still seek nuclear alliances with nuclear-armed states, while others might hedge by developing latent capabilities that could be actualized if conditions warrant. Japan and South Korea appear to fit this model. And the norms, treaties, and institutions such as the NPT and the IAEA are not likely to disappear overnight, even without strong unified support from the United States and other great powers. None of the major powers are likely to repudiate the NPT or quit the IAEA. Rather, norms and institutions erode when they no longer serve the security interests of powerful states.<sup>248</sup> The nuclear regime is founded on the bedrock of steely-eyed realism and secondarily adorned with idealist concepts of peace and disarmament. It is more grounded in the thinking behind the Treaty of Westphalia than the League of Nations, more NATO than TPNW. It will survive as long as it serves the interests of states powerful enough to enforce it. It would be far better to sustain it than trash it—but how?

The fate of the nuclear regime will be determined in part by the international response to future challenges to verification and enforcement. Previous challenges by North Korea, Iraq, and Iran evoked strong multilateral reactions—the 93+2 safeguards upgrade, the Additional Protocol, the six-party talks and the Korean Peninsula Energy Development Organization, the JCPOA, UN Security Council resolutions including Resolution 1540, the Proliferation Security Initiative, and national policies to reinforce international nonproliferation efforts. Even without clear resolution of the challenges

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<sup>247</sup> Bernard Brodie, ed., *The Absolute Weapon: Atomic Power and World Order* (New Haven: Yale University, 1946).

<sup>248</sup> Zachary Davis, "The Realist Nuclear Regime," in *The Proliferation Puzzle*.

to the regime, these international responses at least demonstrated widespread fidelity to nonproliferation norms, as opposed to embracing the Waltzian alternative of standing back and allowing NPT member states to brazenly defy global standards. The exceptions of a few non-NPT outliers and a few cheaters did not overwhelm the rules and create a tipping point, just as a minority of scofflaws running stop signs does not obviate the community value of traffic controls. The question, then, is how many challenges the regime can withstand before they seriously undermine the authority of nonproliferation norms and institutions. How the international community responds to new cases of over-the-horizon proliferation will determine the fate of the regime.

### **Life Extension for the Nonproliferation Regime: Dos and Don'ts**

There will be no Waltzian redux. Even with the systemic challenges facing the nuclear regime, nonproliferation still serves the security interests of most members of the global commons, including global-order revisionist states such as Russia and China and rising powers such as India and Brazil. Even Iran would be better off if others don't follow Tehran's slow-motion NPT breakout. Noncompliance by a few countries and the continued existence of a few outliers is still not enough to topple 75 years of multilateral cooperation. Norms are made of sturdier stuff and won't evaporate overnight, even if their potency is gradually waning.

Other factors also favor the regime. The timeline for over-the-horizon proliferation (beyond North Korea and Iran) allows time for traditional positive and negative incentives to head off potential proliferators from making fateful decisions. Global and regional insecurities are mounting, but at a pace that has not yet triggered a flood of near-term proliferation. The process of transforming initial intent into usable weapons normally extends over a period of years, providing opportunities to delay, dissuade, negotiate, sanction, interdict, or otherwise interfere in progress toward the bomb. If there is a surge of proliferation ahead, we still have time to employ the traditional tools of non- and counterproliferation to stave off a looming Waltzian dystopia. We have not yet reached the tipping point.

What, then, is the best way to preserve the nonproliferation regime? First, a few things to avoid. The disarmament pledges in Article 6 of the NPT and the aspirations embodied in the TPNW give voice to the legitimate desires of humanity to escape the ethical ironies of the nuclear age, "where safety will be the sturdy child of terror, and survival the twin brother of annihilation."<sup>249</sup> These are understandable motivations. But unintended consequences have long shadowed the disarmament movement. While understandable, moral opposition to nuclear weapons leaves little room for compromise with the requirements of deterrence.<sup>250</sup> President Obama did his best to thread the needle between disarmament and deterrence with his hopeful Prague

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249 Churchill.

250 Brad Roberts, "On Creating the Conditions for Disarmament: Past Lessons, Future Prospects," *The Washington Quarterly* 42, no. 2 (June 2019). <https://www.tandfonline.com/doi/abs/10.1080/0163660X.2019.1621650?journalCode=rwaq20>. Accessed October 13, 2023.

agenda and his administration's pragmatic nuclear posture review.<sup>251</sup> Neither slaked the thirst for more immediate, and if necessary, unilateral actions to eliminate the scourge of nuclear weapons.

The way to disarmament, advocates argue, is for someone to demonstrate goodwill by making the first move. Unilateral nuclear reductions—presumably by the United States, since Russia and China show no interest in arms control of any kind, much less symbolic gestures—would signal a genuine desire to remove nuclear weapons from the front lines of strategic competition and invite others to take similar steps. A recent call for the unilateral withdrawal of U.S. nuclear weapons from NATO as a way to stimulate negotiations with Russia exemplifies this line of reasoning.<sup>252</sup> Why not try? If it doesn't work, we still have enough nuclear weapons to blow up Moscow and Beijing, so what's the harm?

Putting aside the question of what such a gesture would mean for deterrence stability with Russia and China, the harm for nonproliferation would be quickly evident in those countries that have staked their security on nuclear guarantees from the United States. The surest way to stimulate nuclear hedging in allies such as Japan and South Korea, which face near-term nuclear threats from China and North Korea and already question the reliability of U.S. promises, is to unilaterally cut the perceived ability of the United States to make good on its extended-deterrence commitments. With a deployed force limited to 1,550 warheads, as specified under New START, the math for two-peer, multiregional deterrence is already tight for a Cold War arsenal that was designed with only Russia in mind.<sup>253</sup> NATO allies, facing explicit nuclear threats from Russia, would view unilateral nuclear withdrawal as a sure sign of U.S. retreat, as would Russia and China. Would Poland and Sweden turn to France for nuclear guarantees, or reconsider their nuclear options? How would leaders in Tokyo and Seoul respond to unilateral U.S. nuclear reductions?

Other countries would also react to an American retreat from its nuclear commitments. National leaders such as Mohammed bin Salman in Saudi Arabia, Recep Tayyip Erdogan in Turkey, and leaders of nations facing Chinese aggression such as Vietnam, Indonesia, Philippines, and Australia would be remiss if they did not at least review their options if the United States folded its nuclear umbrella. The prospect of reciprocal disarmament moves from Putin or Xi are minuscule, but the costs of unilateral reductions for nonproliferation could be catastrophic. Tragically for disarmament advocates, the perception of American weakness as embodied in its nuclear forces is a sure prescription for the further spread of nuclear weapons.

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251 Department of Defense, *Nuclear Posture Review Report* (April, 2010). [https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010\\_Nuclear\\_Posture\\_Review\\_Report.pdf](https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf). Accessed October 13, 2023.

252 Oscar Arias and Jonathan Granoff, "Nuclear Strategy and Ending the War In Ukraine," *The Hill* (July 17, 2022). [https://thehill.com/opinion/international/3565996-nuclear-strategy-and-ending-the-war-in-ukraine/?utm\\_source=sailthru&utm\\_medium=email&utm\\_campaign=mil-ebb](https://thehill.com/opinion/international/3565996-nuclear-strategy-and-ending-the-war-in-ukraine/?utm_source=sailthru&utm_medium=email&utm_campaign=mil-ebb). Accessed October 13, 2023.

253 U.S. State Department, "New START Treaty," <https://www.state.gov/new-start/>. Accessed October 13, 2023.

For decades, U.S. policymakers addressed disarmament pressures with progress in strategic arms control, accomplishments in Cooperative Threat Reduction, steps towards a CTBT, and other small victories such as 93+2, the Additional Protocol, the elimination of WMD in Iraq, the six-party talks, UN Security Council Resolution 1540, and the JCPOA. When these efforts stalled or lost their appeal for disarmament groups, the nuclear-security summits sufficed to demonstrate continued fidelity to the principles of nonproliferation. Now we are at an impasse, with nuclear weapons increasing their role in international politics, regional deterrence flagging, and all roads to disarmament seemingly blocked. The old formulas no longer work.

## What Can Be Done?

If Waltz's theory is not an option, and the gulf between the contradictory demands of deterrence and disarmament is widening, what can be done to sustain the global nuclear order?

First, the United States and its allies must double down on support for the regime and its constituent parts, which were carefully constructed over 75 years to satisfy the interests of nearly every nation. This includes a central component of the original nuclear bargain that was embedded in the IAEA and the NPT—access to civilian nuclear technology. As the world faces urgent challenges of climate change, nuclear energy offers clean, carbon-neutral energy to an increasingly energy-starved world. New designs and decades of experience make nuclear energy a prime candidate for meeting future energy demand while reducing our carbon footprint and advancing the full range of renewable energy sources.<sup>254</sup> Moving India and China away from coal is critical. In addition to proven, proliferation-resistant light-water reactors, small modular reactors could open possibilities for more localized electricity-distribution grids that may be appropriate for new urban city-planning concepts.<sup>255</sup> And, as the promise of fusion energy appears closer on the horizon, new concepts of energy production and distribution will be possible.<sup>256</sup> Increasing global interest in nuclear energy could be used as an incentive to reinvigorate support for the regime, both among potential proliferators and throughout the broader international community who do not want to see a Second Nuclear Age.

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254 Daniel Poneman, "We Can't Solve Climate Change Without Nuclear Power," *Scientific American* (May 24, 2019), <https://blogs.scientificamerican.com/observations/we-cant-solve-climate-change-without-nuclear-power/>. Accessed October 13, 2023.

255 Ars Technica, "US regulators will certify first small nuclear reactor design" (July 29, 2022), <https://arstechnica.com/science/2022/07/us-regulators-will-certify-first-small-nuclear-reactor-design/> (accessed October 13, 2023); Urvashi Rathore, "Prospects for Small Modular Reactors in South Asia," Stimson Center (October 21, 2021), <https://www.stimson.org/2021/prospects-for-small-modular-reactors-in-india/> (accessed October 13, 2023).

256 Adrian Cho, "Road Map to US Fusion Power Plant Comes Into Clearer Focus – Sort of," *Science* (February 19, 2021), <https://www.science.org/content/article/road-map-us-fusion-power-plant-comes-clearer-focus-sort> (accessed October 13, 2023); Philip Ball, "US Project Reaches Major Milestone Toward Practical Fusion Power," *Scientific American* (February 2, 2022), <https://www.scientificamerican.com/article/u-s-project-reaches-major-milestone-toward-practical-fusion-power/> (accessed October 13, 2023).



A new generation of nuclear technologies would, of course, have to overcome the troubled legacy of accidents, high costs, unresolved nuclear-waste issues, and public fears that have plagued the nuclear industry for decades. Russia's attacks on the Zaporizhzhia power plant in Ukraine certainly reinforces public fears about nuclear safety, especially in war zones. Safety and security must be the top priorities. Moving forward, old concepts for a "closed fuel cycle" that uses weapons-usable materials to fuel reactors should be abandoned once and for all; breeding and reprocessing plutonium makes even less sense today than it did earlier in the atomic age, and is an obvious pathway for nuclear hedging. The so-called "gold standard" of full-scope safeguards as a condition of supply should prevail, and low-enriched uranium fuel supplies should be guaranteed for new reactors to prevent new national enrichment programs. The recent agreement for peaceful nuclear cooperation between the United States and the United Arab Emirates provides a good model.<sup>257</sup> Earlier proposals for regional enrichment and fuel disposal services could be revived.<sup>258</sup> More than ever, the United States, Russia, China, and other producers and users of civilian nuclear power technologies share the same national and international interests in securing the future of nuclear energy without fueling proliferation.

Critics are right that the original Atoms for Peace failed on both of its objectives—to provide the world with endless supplies of energy and to do so without spreading the technology and know-how to build nuclear weapons. While the balance of wins and losses can be debated, the fact that 191 countries have joined the NPT and only a few have opted out or violated their commitments is a testimony to the effectiveness

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257 NTI, "US-UAE Nuclear Cooperation" (August 12, 2009). <https://www.nti.org/analysis/articles/us-uae-nuclear-cooperation/>. Accessed October 13, 2023.

258 Mohamed Shaker, "Nuclear Power in the Arab World and the Regionalization of the Nuclear Fuel Cycle: An Egyptian Perspective," *Daedalus* (Winter 2010), <https://www.amacad.org/publication/nuclear-power-arab-world-regionalization-nuclear-fuel-cycle-egyptian-perspective> (accessed October 13, 2023); World Nuclear Association, *Ensuring Security of the Supply in the International Nuclear Fuel Cycle* (September 2011), [https://www.world-nuclear.org/uploadedFiles/org/WNA/Publications/Working\\_Group\\_Reports/security.pdf](https://www.world-nuclear.org/uploadedFiles/org/WNA/Publications/Working_Group_Reports/security.pdf) (accessed October 13, 2023).

of the original concept, far exceeding expectations for a world governed only by national imperatives.<sup>259</sup>

The nuclear-nonproliferation regime proves what can be achieved through the deft application of positive and negative incentives, aligned with great-power interests and expert diplomacy. Efforts to re-create similar norms and institutions for chemical and biological weapons have met with varying degrees of success, and the prospect of establishing new global norms for climate, health, cyber, and space governance face seemingly insurmountable obstacles. But the nuclear regime is already deeply rooted in international practice and can be reinvigorated without adding significant new burdens for international and national authorities. Rather than allowing the nuclear regime to degrade as it faces growing pressures from deterrence and disarmament, a far better option is to shore up the sagging timbers of the global nuclear order and extend the life of the regime with a new mission to address climate change.

Reimagining the original energy component of the nuclear bargain in the context of climate change would come with a renewed commitment to safety, security, and a global upgrade of nuclear safeguards and export controls to ensure that a nuclear energy renaissance would not inadvertently fuel a new wave of proliferation. New technologies offer opportunities to strengthen existing norms and practices. For example, new reactor designs and production techniques present opportunities to integrate safety and safeguards technology more deeply into critical components by creating a dedicated, secure, safeguards and safety verification network to provide real-time data on the operation of nuclear facilities.<sup>260</sup> New plant designs and new construction materials can integrate safeguards to enhance safety and security. Instead of bolt-on cameras, physical seals and managed access, an upgraded IAEA safeguards regime could provide 24-7, real-time, surveillance of global nuclear operations to detect diversion or misuse. Advancements in commercial satellite imagery also help to ensure unprecedented transparency for nuclear operations. Artificial intelligence and machine learning (AI/ML) can process massive data flows to detect potential safety and security problems.

In addition to upgrades in safeguards technologies, a nuclear renaissance could take advantage of new technologies and approaches to usher in a new age of cradle-to-grave export controls to ensure transparency and enhanced real-time multilateral cooperation for nuclear trade.<sup>261</sup> Embedded sensors, ubiquitous surveillance, and the

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259 "Atoms for Peace After 50 Years, The New Challenges and Opportunities," Center for Global Security Research, Lawrence Livermore National Laboratory (2003), <https://www.osti.gov/servlets/purl/15009747> (accessed October 13, 2023); Joseph Pilat, ed., *Atoms for Peace: A Future After Fifty Years?* (Baltimore, MD: Johns Hopkins University Press, 2007); Henry Sokolski, *Best of Intentions: America's Campaign Against Strategic Weapons Proliferation* (Westport, CT: Praeger, 2001).

260 Cindy Vestergaard, "Safeguarding the Nuclear Fuel Cycle," Stimson Center, <https://www.stimson.org/project/safeguarding-the-nuclear-fuel-cycle/>; Cindy Vestergaard, ed., *Blockchain for International Security* (New York: Springer, 2021).

261 Cindy Vestergaard et al., "SLAFKA Demonstrating the Potential for Distributed Ledger Technology for Nuclear Safeguards Information Management," Stimson Center (November 17, 2020), <https://www.stimson.org/2020/slafka/> (accessed October 13, 2023); MATCH Prototype Tracking and Tracing Dual Use Chemicals with Blockchain Technology, Stimson Center, <https://www.stimson.org/project/match/>.



Internet of Things could keep diversion and hedging in check and make it even harder to illicitly acquire, build, and operate covert nuclear facilities. Here too, AI/ML can monitor irregularities in global nuclear trade.

A reimagined Atoms for Peace would meet the challenges of future noncompliance with a global upgrade of verification and monitoring technologies that would be the price of admission for countries interested in sharing the benefits of advanced nuclear-energy technologies. The norms and practices of the existing multilateral institutions would be reinforced and advanced with new investments in technology and matched with the necessary diplomatic and resource commitments to meet the challenge of over-the-horizon proliferation. Building on the Obama-era nuclear-security summits, a new global nuclear security initiative would modernize the technological capabilities of the IAEA, the NSG, and their supporting national infrastructures. The reporting process for UN Security Council Resolution 1540 could help calibrate needs and facilitate upgrades of national monitoring and reporting mechanisms. Longstanding Cooperative Threat Reduction programs run by the U.S. Department of Energy and its National Nuclear Security Administration and by the Department of Defense and its Defense Threat Reduction Agency provide a ready mechanism for implementing such capacity building with foreign partners. Such a revitalization could start with a global outreach initiative to hire, train, and retain a new generation of international nuclear experts. The IAEA and its members could join with national and international nuclear organizations to fund and implement these initiatives.

While they might not help, Russia and China stand to gain from a nuclear-energy renaissance and would not block such initiatives, which would be welcomed by an overwhelming majority of nations motivated by a combination of nonproliferation, climate, energy, and export considerations. By embracing changes in technology, nonproliferation can evolve to keep pace with the defining trends of international relations as we enter the Fourth Industrial Revolution.

Of course, modernized safeguards and export controls would not by themselves preserve the regime without commensurate enforcement actions—always the Achilles heel of global governance. What happens if a country is caught cheating? This problem has not changed. While prospects for robust enforcement are hobbled by disunity within the international system, especially dysfunction within the United Nations Security Council (UNSC), these mechanisms have not stopped a few committed proliferators from diverting civil nuclear technologies to covert military programs. The basic toolbox for multilateral enforcement of nonproliferation commitments has not changed, even if its technological edges are sharpened. IAEA inspectors can still detect and report noncompliance, and the IAEA Board of Governors can make recommendations to the UNSC, even if the prospects for UNSC enforcement actions remain bleak. Technological improvements cannot change the underlying dynamics of the international system.

Greater transparency opens the door to enforcement, but it does so with no guarantees of punishment or coercive action to bring violators into compliance with

their obligations. Nevertheless, the combination of existing multilateral processes, unilateral actions, and ad hoc coalitions of nations whose interests are directly threatened by the nuclear ambitions of particular states still pose a significant barrier to casual proliferation. The international response to Russia's invasion of Ukraine provides a useful preview of the emerging, ad hoc compliance and enforcement mechanisms that are still functioning in what Hedley Bull described as the anarchical world order.<sup>262</sup> Any country contemplating nuclear breakout would face a variety of undesirable consequences, including economic sanctions, that will continue to weed out casual proliferators from the few committed outlaws who are willing to bear the costs of defying the weakened but still formidable norms of nonproliferation. Over-the-horizon proliferators will not get a free pass and would still face a barrage of potent disincentives. Even a weakened regime still has some teeth.

Another way to sustain the nonproliferation regime is to keep arms control alive. Arms control remains an essential tool for managing nuclear competition, even more so in the evolving nuclear order.<sup>263</sup> Extending New START represents the bare minimum of meeting the responsibilities of the new security environment. Building on the legacy of bilateral U.S.-Soviet/Russian arms control, new agreements should address the challenge of complex deterrence to include China and perhaps others in shared concepts of strategic stability and competition. The emerging nuclear triad in South Asia, for example, is ripe for some form of strategic-stability dialogue and arms control.

Job one for arms control talks is to identify common understandings of the asymmetric capabilities that characterize emerging deterrence dyads and triads with the goal of deterrence stability and avoidance of miscalculation, escalation, and avoidable conflict. Strategic dialogues and Track 1.5 and 2 engagement are useful ways to develop such shared concepts. Here too, new technologies may unlock new possibilities for monitoring and verification.<sup>264</sup> Commercial satellite imagery and ubiquitous sensors can augment traditional national technical means of verification, hopefully adding confidence and creativity to the search for future agreements.<sup>265</sup> Limits on numbers, ranges, types, deployments, and production of verifiable systems may still be possible. To get the process started, joint verification experiments have

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262 Hedley Bull, *The Anarchical Society: A Study of Order in World Politics* (London: Red Globe, Fourth Edition, 2012).

263 Michael Albertson, *Closing the Gap: Aligning Arms Control Concepts with Emerging Challenges* (Livermore, CA: Center for Global Security Research, 2022).

264 Mona Dreicer, Irmgard Niemeyer, and Gotthard Stein, eds., *Nuclear Nonproliferation and Arms Control Verification, Innovative Systems Concepts* (New York: Springer, 2020).

265 Rose Gottemoeller, "Arms Control in the Information Age," US Mission to International Organizations, Geneva (April 12, 2012). <https://geneva.usmission.gov/2012/04/02/rose-gottemoeller-arms-control-in-the-information-age/>. Accessed October 13, 2023.

served as a first step toward negotiating mutually acceptable restraints.<sup>266</sup> Avoiding a new arms race should be a priority for all nuclear-armed states.<sup>267</sup>

Arms control agreements reduce nuclear risks by establishing consistent lines of communication, codifying shared practices, and developing common understandings among nuclear rivals. Numerical limits are less important than shared concepts about nuclear stability. Stable and professional management of nuclear relationships can also help ease perceptions of nuclear disorder that fuel insecurity and may provide justification for states to acquire their own nuclear capabilities. Chaos is not good for nonproliferation. Stable deterrence relationships are an essential element of global nuclear order. Conversely, nuclear threats and unregulated arms racing undermine confidence in global nuclear order.

Finally, progress in arms control also responds to disarmament pressures expressed through NPT Article 6 diplomacy and the TPNW.<sup>268</sup> Most thoughtful disarmament advocates want to see progress in the right direction—away from arms racing and toward the eventual goal of eliminating nuclear dangers.<sup>269</sup> Although the yearning for a world free of nuclear weapons is destined to be unfulfilled, good-faith efforts to demonstrate a healthy respect for the dangers associated with nuclear weapons through arms control eases political pressures aimed at delegitimizing nuclear deterrence, especially in nations that depend on American nuclear guarantees. Arms control is an essential component of responsible nuclear stewardship.

## Deterrence is Key

The most important bulwark against over-the-horizon proliferation is extended deterrence. Proliferation optimists such as Waltz and pessimists such as Sagan agree that the decision to pursue nuclear weapons is primarily motivated by external security threats, which are sometimes augmented by domestic political constituencies.<sup>270</sup> Extended deterrence security guarantees solve the security dilemma for states facing the need to “balance or bandwagon,” precluding the motivation for an independent nuclear deterrent, as argued by Richard Betts. In an update of his classic 1977 *Foreign Policy* article, “Paranoids, Pygmies and Pariahs,” Betts asserted that America’s nuclear umbrella is the primary factor in the decision not to proliferate—not the regime, not norms or treaties or arms control—but American nuclear guarantees are

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266 Sandra Blakeslee, “In Remotest Nevada, A Joint US and Soviet Test,” *The New York Times* (August 18, 1988), <https://www.nytimes.com/1988/08/18/world/in-remotest-nevada-a-joint-us-and-soviet-test.html> (accessed October 13, 2023); Mark A. Stein, “Nevada A-Blast Makes Arms Control History,” *Los Angeles Times* (August 18, 1988), <https://www.latimes.com/archives/la-xpm-1988-08-18-mn-768-story.html> (accessed October 13, 2023).

267 Rose Gottemoeller, “The Case Against a New Arms Race, Nuclear Weapons Are Not the Future,” *Foreign Affairs* (August 9, 2022).

268 Lewis Dunn, *Redefining the US Agenda for Nuclear Disarmament* (Livermore, CA: Center for Global Security Research, 2016).

269 David Cooper, *Arms Control for the Third Nuclear Age* (Washington DC: Georgetown University Press, 2023).

270 Peter Lavoy, “Nuclear Myths and the Causes of Nuclear Proliferation,” in *The Proliferation Puzzle*.

the independent variable.<sup>271</sup> Avoiding Waltz's dystopian vision depends on making sure that the U.S. Strategic Command can carry out its mission, which is augmented by a healthy nuclear regime. The latter is a necessary but not sufficient component of the global nonproliferation calculus. Solving the security dilemma of states facing existential threats is job one for preserving nuclear order.

Putting together the pieces of the proliferation puzzle suggests a strategy for maintaining global nuclear order. In addition to maintaining the capability to credibly extend nuclear deterrence guarantees to key allies, a renewed commitment to the nuclear bargain—no weapons in exchange for access to nuclear technology—could extend the life of the regime. Such a renewed commitment could be implemented by using emerging nuclear technologies for carbon-neutral energy production aimed at saving the world from the harmful effects of climate change. New concepts of local and regional energy production could help meet the challenge of energy-starved megacities throughout the world. Emerging technologies would also be applied to reinvigorate national and multilateral (IAEA) safety, security, safeguards, export control, monitoring, and verification capabilities to ensure that a nuclear renaissance restores public confidence in nuclear energy without fueling nuclear hedging. Finally, a continued commitment to arms control would demonstrate responsible stewardship of existing nuclear arsenals and signal respect for the desire to reduce nuclear dangers.

Admittedly, this strategy is old wine in new bottles—a renovation of the main elements of the original nuclear bargain for a new age. The main difference is the integration of emerging technologies to refurbish the aging components of the system that evolved from the post-World War II period, matured through the Cold War, and adapted to the post-Cold War environment. Now it's time for an upgrade that adapts to the geopolitical realities of the Fourth Industrial Revolution. It's never been perfect, but the nonproliferation regime has weathered the storms that reshape international politics, and has largely succeeded in preventing nuclear disasters. It's worth saving.

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271 Richard Betts, "Paranoids, Pygmies, Pariahs and Nonproliferation Revisited," in *The Proliferation Puzzle*.

# Managing Nuclear Risks in an Era of Strategic Confrontation

Lewis A. Dunn

Approximately a decade ago, I set out a line of argument about how to manage nuclear risk in the inaugural Livermore Paper entitled *Redefining the U.S. Agenda for Nuclear Disarmament*.<sup>272</sup> I argued that the goal of U.S. nuclear disarmament policy should be the “strategic elimination” of nuclear weapons as instruments of power and statecraft by 2045—in effect, moving nuclear weapons into the “back room.” My argument reflected a balancing of risks: on the one hand, the risk that continued reliance on nuclear deterrence would sooner or later break down in a global nuclear catastrophe and, on the other hand, the risk that seeking to escape from reliance on nuclear deterrence would undermine U.S. and allied security. My judgment in 2016 was that the risk of an ultimate nuclear catastrophe outweighed the risk of pursuing an escape from nuclear deterrence. Moreover, I believed the obstacles to significant progress toward that goal could be overcome.

Developments in global politics over the last decade compel me to reconsider this judgment. Global events have moved in a very different direction. We live today in an era of strategic confrontation. I need not elaborate this point here, as the overall contours are self-evident. A clear implication of this turn in global politics is that the obstacles to progress toward disarmament cannot now be overcome. The strategic elimination of nuclear weapons by 2045 is not possible, barring dramatic political change in Russia and China. The risk of pursuing an escape from nuclear deterrence now outweighs the risk of nuclear catastrophe.

U.S. nuclear strategy must, of course, account for both risks. But prioritizing deterrence has significant implications for the overall approach. To help focus thinking and debate about nuclear risk management in an era of strategic confrontation, this essay elaborates seven guiding principles.<sup>273</sup>

## Principle 1: The Nuclear Bedrock

My first principle is that *effective nuclear deterrence is the necessary bedrock of policies and postures to reduce the risk of use of nuclear weapons—but with measured adaptations to today’s realities*. As argued above, in today’s world, the risk assessment must be rebalanced. The risk that sooner or later nuclear deterrence will break down is now outweighed by the more immediate risk that absent robust nuclear deterrence, the use of nuclear weapons will become more likely. This judgment partly reflects the need now to counter the regional and global ambitions of two nuclear-armed

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272 Available for review at [https://cgsr.llnl.gov/content/assets/docs/CGSR\\_Document\\_LLNL-TR-701463\\_103116.pdf](https://cgsr.llnl.gov/content/assets/docs/CGSR_Document_LLNL-TR-701463_103116.pdf).

273 The views expressed here are those of the author, not those of the organizations with which he is or has been affiliated.

revisionist major powers. It also reflects the rejection by Moscow and Beijing of U.S. overtures to find ways to cooperatively manage the separate bilateral strategic relationships. Finally, this reversal of the balance of risks reflects, on the one hand, Russian military planning for the possible limited use of nuclear weapons to achieve its goals in a conflict and, on the other hand, an apparent Chinese military belief in its ability to control escalation in any regional conflict.

This first principle has many implications for the design of the U.S. nuclear deterrent. In a timely way, the United States must complete the full Program of Record for the modernization of the U.S. nuclear force posture, as called for by the bipartisan Strategic Posture Commission. It must modernize the nuclear command and control infrastructure to ensure its responsiveness, effectiveness, and survivability. It must also adapt its nuclear deterrent to account for China's growing capabilities and ambitions. Given the dramatic, continuing, and so-far open-ended transformation of China's nuclear posture, the days are over of a Chinese nuclear deterrence "free ride."

These imperatives notwithstanding, the United States also faces critical choices in defining what effective nuclear deterrence requires and how to adapt the U.S. deterrence posture accordingly. The wrong choices could result in increased nuclear risk by foreclosing any residual opportunities for cooperation in managing nuclear risk and setting out on paths that would repeat mistakes of the Cold War.

One example suffices to make this point: the choice about how to deter China. Nuclear deterrence of China could mean any or all of the following:

- Deterring China from implicitly or explicitly threatening use of theater nuclear weapons to coerce the United States and its allies in a crisis or conflict;
- Deterring China from escalating to use of theater nuclear weapons in a conflict that it is losing;
- Deterring China from threatening or escalating to limited use of nuclear weapons against the American homeland to coerce the United States to yield to China in a conflict that again it is losing;
- Deterring China from an all-out nuclear response against the United States based perhaps on ambiguous warning that a U.S. first strike was underway;
- Deterring Chinese nuclear threat making or use in the midst of an ongoing U.S.-Russia conflict; or
- Deterring simultaneous nuclear attacks on the American homeland by both Russia and China (as suggested by the U.S. Strategic Posture Commission).

How to adapt the U.S. deterrence posture will depend partly on the choices made in weighing the urgency and credibility of different meanings of what is to be deterred. How to adapt the U.S. deterrence posture also depends on judgments made about what Xi Jinping and China's other leaders value most and choices for how most effectively to hold it at risk.

How to adapt the U.S. deterrent depends as well on whether the new prominence of China in U.S. deterrence policy and planning will "get the attention" of China's political and military leadership in a way that makes them reevaluate the potential risks and benefits to China of strategic engagement to reduce the costs and lessen the risks of accelerating bilateral strategic competition. Prospects for such a reevaluation are at best uncertain. Erring for now on the side of more measured adaptations to U.S. deterrence posture for China, however, could help to preserve the possibility of such reevaluation. Erring toward more measured adaptations also could help avoid institutionalizing an accelerating U.S.-China arms race, with heightened suspicions, new uncertainties, and worst-case scenarios that would make it more difficult to manage nuclear risks in a future U.S.-China confrontation, let alone conflict.

As for what "more measured adaptation" would entail, the basic principle would be to rely to the greatest extent possible on the capabilities set out in the Program of Record in order to be able to hold at risk what Chinese leaders, especially Xi Jinping, most value. China-specific augmentation of U.S. force posture would be avoided or at least deferred. Several other dimensions are touched upon below as my argument continues.

## **Principle 2: Flexible Response**

My second principle is that *although limited use of nuclear weapons may turn out to be a contradiction in terms, minimizing the risk of finding out requires a flexible, limited nuclear response capability for deterrence*. U.S. and allied experts are deeply divided on the possibility of containing a nuclear war once it has begun. But Russian experts and leaders appear to be undivided on this matter and to convince themselves that limited use of nuclear weapons is not only possible but useful in certain situations. Chinese thinking appears to be more speculative, hidden behind repeated affirmations that China has a policy against the first use of nuclear weapons. That said, China's acquisition of theater nuclear weapons, its military's belief that it can control escalation, and repeated pressure within the Chinese defense community to set aside the no-first-use policy all justify concern that China could resort to limited use of a nuclear weapon, for example, in a failing attempt to conquer Taiwan.

As long as Russia and possibly also China each believe that the limited use of nuclear weapons could offer a path to achieve their objectives in a conflict, deterrence requires U.S./allied options for flexible limited nuclear response. Some characteristics could include: a range of low nuclear yields; diverse delivery systems; proportional response; responsive, adaptive planning; timely decisionmaking and effective control; and procedures to communicate U.S. and allies' intent.

Some experts argue that U.S. and allied options for limited nuclear use in response to adversary limited nuclear use will make nuclear weapons more usable and increase the risk of nuclear war. This risk is outweighed by the need to convince Russia now and possibly China in the future that they cannot use nuclear weapons in a limited way to achieve their goals

### **Principle 3: Safety and Security**

My third risk management principle is: *safe, secure, effectively controlled nuclear operating practices serve everyone's interests*. The U.S. nuclear deterrence community has long been guided by this principle. It remains essential for assessing proposed adaptations of the U.S. nuclear deterrence posture.

But what about others? Russia is fielding next-generation theater nuclear weapons and developing exotic long-range delivery systems. China is confronting new operational challenges as it begins to rely on an early warning capability, creates a sea-based triad component, and deploys theater nuclear weapons. More broadly, the United States, Russia, and China all are seeking to leverage emerging technologies for deterrence—hypersonic weapons, AI, long-range conventional strike, and cyber- and space-based capabilities.

This suggests that there would be value in a quiet official U.S. dialogue with Russia and China focused on how to ensure safe, secure, and effectively controlled nuclear force postures. The goal would be informal or tacit agreement on operating practices and choices to be avoided on risk management grounds. But such dialogue seems very unlikely in today's world.

But there may be a way around this obstacle. History provides a suggestion. There is an alternative but long-overlooked approach from the Kennedy administration. In late 1963, the Deputy and later Assistant Secretary of Defense John McNaughton publicly explained U.S. actions to ensure the safety, security, and control of nuclear weapons as well as other dimensions of a more stable nuclear deterrence posture. The Kennedy administration encouraged U.S. experts to point out McNaughton's remarks to Soviet experts.<sup>274</sup> A comparable U.S. statement could be made today to set out what the United States believes would be safe, secure, and controlled nuclear operating practices going forward. Some examples warranting consideration could include: No launch on warning; restraint in nuclear exercises; no co-deployment of conventional- and nuclear-armed missiles; no first strikes on nuclear C3 or warning networks; no decapitating strikes; no delegation to artificial intelligence of nuclear employment decisions.

Still other U.S. actions could more directly serve U.S. and Chinese interests in the operational safety, security, and control of China's transforming nuclear deterrent. U.S. officials could describe for the Chinese deterrence community the types of early warning

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274 John T. McNaughton, "Arms Restraint in Military Decisions," *Journal of Conflict Resolution* 7, no. 3 (1963). <https://doi.org/10.1177/002200276300700304>. Accessed March 27, 2024.



system miscues and unexpected occurrences that the United States experienced and have since overcome. U.S. officials could also offer generic information on ensuring effective safety, security, and control of a sea-based nuclear deterrent and of theater nuclear weapons.<sup>275</sup> Would China be interested? Perhaps not, perhaps yes. If official engagement is not possible, semi-official channels could be used.

The Democratic People's Republic of Korea (also known as North Korea) poses a much tougher case because of its aggressive intentions and its international legal status as a former non-nuclear-weapon State Party to the Nuclear Non-Proliferation Treaty, the NPT. Nonetheless, the United States and its Asian allies all have an interest in avoiding a North Korean nuclear weapon accident or loss of control over its nuclear weapons. With tacit U.S. acceptance, either Russia or China could offer quiet advice to ensure the safety, security, and control over a steadily expanding North Korean nuclear arsenal.

#### **Principle 4: Conventional Deterrence**

Principle 4 is to *recognize that the road to nuclear use runs through conventional conflict—and act accordingly*. For managing nuclear risks, this principle underlines the need to strengthen U.S. and allied conventional defense capabilities in order to deter conflict and, if that fails, to avoid a U.S. choice between defeat in a conventional war and escalation to limited nuclear use. Conversely, the possibility of a Russian or Chinese choice facing conventional defeat to escalate to limited nuclear use underscores the importance of U.S. options for limited nuclear response to deter or counter such escalation.

To act accordingly, related activities of the U.S. government must be well aligned. Where feasible, a political-diplomatic effort must be made to address the issues in dispute so as to avoid conventional conflicts in Europe, Asia, and the Middle East in the first place. Coherent statements and consistent demonstrations of U.S. resolve to defend itself, its allies and partners, and regional security orders are also needed.

North Korea is a possible outlier to the proposition that the road to nuclear use runs through conventional conflict. Pyongyang could decide to use nuclear weapons at the very start of a conflict given the vulnerability of its nuclear force, a belief in nuclear use as a force multiplier, and attempts to coerce the United States or its allies to stand aside. How best to reduce this risk should attract much more attention at a time when many in the expert community seem most focused on major power rivalry.

The possibility of early North Korean nuclear use, along with the ongoing expansion of its nuclear force, puts into sharp perspective the judgment at the core of U.S. missile defense policy. This is the judgment that it is important to try to “stay ahead” of the developing threat to the U.S. homeland from attack by North Korea and Iran but to do so without jeopardizing the confidence of leaders in Moscow and Beijing in the credibility of their nuclear deterrents. Successive administrations have thus offered

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275 This possibility was raised by Ambassador Linton Brooks in Track 1.5 U.S.-China discussions in which I participated.

assurances to both Moscow and Beijing in this regard. It is now clear, however, that they have not been swayed by such U.S. efforts, have not wanted to be reassured, or both. The dramatic transformation of China's nuclear deterrent as well as Russia's investment in exotic delivery systems attest to this conclusion

Thus, U.S. policy should no longer constrain its deployment of homeland missile defenses to counter the North Korea nuclear missile threat because of an illusory hope of reassuring Beijing and Moscow. Instead, the United States should invest needed resources to augment the size and sophistication of its homeland missile defenses with the goal of greatly reducing, if not eliminating, U.S. vulnerability to a nuclear attack by North Korea—even while continuing to accept that eliminating U.S. vulnerability to a Chinese or Russian nuclear second strike is also illusory. Such investment in missile defenses against North Korean nuclear missile use is justified and necessary given the dangers of a potentially non-deterrable Kim Jong Un as well as the desirability of lessening the need for a U.S. nuclear use in response to North Korean nuclear use. Can the United States continue to outpace the North Korea nuclear missile threat? No one can say with confidence. But managing nuclear risks argues for not accepting U.S. vulnerability to a nuclear-armed North Korea until it is absolutely clear that there is no alternative.

### **Principle 5: Dialogue and Engagement**

*My fifth principle is to seek to reinvigorate official channels of dialogue and engagement with adversaries—but be realistic and prepared to pursue workarounds.*

The potential benefits of official dialogue and engagement are numerous. Above all, they offer the possibility of increasing predictability and reducing uncertainty regarding strategic plans, intentions, and capabilities. Doing so would help improve decisionmaking on defense issues in peacetime in Moscow, Beijing, and Washington. It would also lessen suspicions that could distort decisions in a crisis or conflict. More specifically, for the United States and Russia, dialogue and engagement could provide windows into possible changes of their strategic postures if, as seems increasingly likely, New START is not replaced in 2026—and if the two countries stop staying within its central limits. U.S.-China official strategic dialogue and engagement, again in principle, could provide insights for U.S. policymakers into China's new thinking about its nuclear deterrent, the endpoint of its deterrent transformation, and the strategic purposes driving its nuclear buildup. Conversely, for China, dialogue and engagement would provide insights into the potential spillovers for China of the breakdown of U.S.-Russian arms control and an opportunity for Chinese officials to seek clarification of specific strategic concerns. At best, such a dialogue could be a stepping-stone to an informal process of U.S.-China mutual strategic reassurance.

Dialogue and engagement can also be helpful in reducing the risk of misperception and miscalculation in a crisis or conflict through dialogue of defense officials and military personnel. Again, in principle, sustained engagement would offer today's protagonists windows into each other's thinking about possible "risky actions,"

sources of miscalculation, and escalation pathways. By doing so, it could help today's adversaries in a crisis or conflict to avoid unintentionally crossing red lines, misinterpreting each other's military intentions, and taking actions that would be misperceived as escalatory.

Efforts to lessen misperceptions are especially important for another reason. Officials and experts in both Russia and China believe that, in any future conflict with the United States, the balance of stakes favors them, in large part because the United States is across the ocean from the theater of conflict. From the U.S. and allies' perspective, this is a dangerous belief because it provides Moscow and Beijing with an incentive to initiate conflict and to escalate, including the use of nuclear weapons. Conversely, for Moscow and Beijing, it is a dangerous belief because as the U.S. response to Japan's attack on Pearl Harbor illustrates, once provoked, the United States becomes a very different adversary. Equally important, the very use of a nuclear weapon by an adversary would itself greatly increase U.S. stakes given the implications for U.S. and allied security and global order if the lesson learned is that "nuclear use pays."

Dialogue and engagement can also be useful in generating agreement on rules of the road to lessen the risk of escalation, including the use of nuclear weapons in conflict. Experts have suggested many possibilities to consider: no first attacks on C3; no attempted nuclear decapitating strikes; no long-range conventional strikes on nuclear deterrence assets; rejection of launch on warning; no first strategic attacks; and, particularly proposed by Chinese experts and officials, explicit U.S. acknowledgement of mutual nuclear vulnerability with China. Even without agreement, discussion of such rules of the road would be valuable.

Despite these important potential benefits for nuclear risk reduction of official dialogue and engagement by the United States with Russia and China, the prospects for sustained, substantive, and high-level dialogue are bleak. Moscow has refused U.S. entreaties to resume an arms control dialogue and other senior-level political military contacts, while the United States and NATO have suspended military-to-military dialogue with Russia because of its invasion of Ukraine. China too has refused U.S. entreaties on this topic, despite a recent resumption of some other contacts. Beijing has repeatedly rejected putting in place a sustained official dialogue, the concept of bilateral or trilateral arms control, discussion of less formal means of mutual reassurance, and the concept of transparency which underlies all such efforts to increase predictability and reduce uncertainties. But there is another, more fundamental, obstacle to official dialogue. For Russia, as evidenced by increasingly more pointed comments by Putin and other senior Russian officials from the outset of Russia's invasion of Ukraine, manipulating nuclear risk is a potentially valuable tactic to shape U.S. and allied actions. For China, comparable official statements are lacking, although occasional comments by retired military personnel in unofficial and off-the-record dialogues send a very different message.

To sum up, in principle, official dialogue and engagement could contribute significantly to nuclear risk management; in practice, if we are realistic, it is hard not to be pessimistic. We are left with the need to “pursue workarounds.” One such workaround is suggested by the John McNaughton example of unilateral initiatives.

A second workaround is to take advantage of ongoing Track 1.5 and/or Track 2 dialogue and engagement. Here, the plus side is that useful results may emerge to percolate sideways to officials. The minus side is that windows into what officials think is most needed—and only officials can take action.

Still another workaround is to make better use of the P-5 process under which the five NPT nuclear-weapon states meet to discuss NPT-related issues. Chaired this year by Russia, the P-5 process is again in one of its fallow periods. On the plus side, if reanimated, the P-5 process would be a forum in which officials could discuss relevant topics, for example, responsible nuclear operations and behavior, “risky actions” and choices to be avoided on risk management grounds, potential miscalculations, pathways to escalation, and rules of the road to manage nuclear risk. Agreed actions could follow later when the time is ripe. The minus side is that for the most part, the officials involved are diplomats, not defense officials or military operators, though participation is not fixed and could be changed.

### **Principle 6: Arms Control**

My sixth principle is to *seek to sustain what remains of the 20<sup>th</sup> century’s nuclear arms control legacy.*

The first and most obvious legacy is the latest in the string of nuclear reduction treaties going back to the 1980s: the New START Treaty. For now, although Russia has suspended implementation of New START, it also has officially stated that it will abide by the treaty’s central limits. The United States has said that it also will do so for as long as Russia does so. Though undesirable, this status quo still provides some predictability and reduced uncertainty to both countries. It also keeps open the possibility that Russian officials will eventually conclude that Russia has more to gain than lose from the New START verification process. This status quo could be extended past the treaty’s end in 2026, much as the United States and the Soviet Union in the early 1980s continued to abide by the limits of the SALT II treaty even though it never entered into force. Doing so would provide at least some predictability and lessened uncertainty.

The complete collapse of more than 50 years of bilateral U.S.-Soviet/Russia arms control would do significant damage to the nonproliferation regime. Most NPT non-nuclear weapon states would view such a development as a violation of the NPT Article VI obligation of Washington and Moscow to end the nuclear arms race and pursue nuclear disarmament. The legitimacy of the NPT would be significantly undermined, and pressures created for cascading withdrawals on the grounds that the NPT is no longer “fit for purpose.” Such an unraveling of the NPT would be a body blow to efforts to prevent proliferation.

The moratorium on nuclear explosive testing is a second legacy of 20th century nuclear arms control. The most recent U.S. compliance report expressed concerns about whether Russian and Chinese activities met a “zero-yield” standard.<sup>276</sup> Even so, more than 30 years have passed since the last nuclear tests by the major nuclear powers with a significant yield (as that term is publicly understood). The moratorium’s collapse would remove an important constraint on the nuclear weapon activities of Russia, China, and the United States. Equally importantly, a decision to end the moratorium by any one of the major nuclear powers would be seen as a dramatic signal to the others of its nuclear ambitions—even if couched in terms of “fixing” a technical warhead problem. The result would be heightened strategic suspicions and intensified nuclear arms racing. Here, too, the adverse impact on the NPT’s legitimacy and support would be very significant because the promise of an end to nuclear testing was the reason why many of the NPT’s non-nuclear weapon states agreed in 1995 to an indefinite extension of the treaty.

The NPT is a third legacy of 20<sup>th</sup> century arms control. For reasons already set out, the importance for nonproliferation of sustaining the legitimacy and effectiveness of the NPT is considerable. As already argued, the actions of the major nuclear powers could result in a loss of legitimacy that would put the NPT at significantly greater risk. However, the NPT also could be undermined by a new wave of nuclear proliferation. Countries of most concern include Iran and its Arab neighbors, South Korea, and less so Japan facing an already nuclear-armed North Korea. In response, proliferation firebreaks need to be sustained and strengthened. Essential to any such effort to sustain and strengthen such firebreaks is ensuring strong U.S. alliances and credible extended nuclear deterrence. Together, they have long been a critical support for U.S. and global non-proliferation efforts.

A fourth legacy is the 1967 Outer Space Treaty. It is now publicly known that Russia apparently is working on an anti-satellite system that would involve deployment in space of a nuclear explosive device in violation of the 1967 Outer Space Treaty.<sup>277</sup> This development reinforces concern for the Outer Space Treaty due to China’s development of orbital nuclear bombardment systems.<sup>278</sup>

One response would be to adapt the U.S. deterrence posture, including but not limited to its nuclear component, to shape calculations of whether to deploy such systems in violation of the treaty. Investing in increased redundancy and resiliency of U.S. and allied space-based assets is a different way to shape those calculations. The United States, its allies, and other countries also should remind both Russia and China of the logic that led originally to the Outer Space Treaty and which is even more

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276 Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments*, Annual Report (2023).

277 Jack Detch, “What We Know About Russia’s Nuclear Space Weapon,” *Foreign Policy* (February 22, 2024).

278 Theresa Hitchens, “It’s a FOBS, Space Force’s Saltzman confirms aid Chinese weapons test confusion,” *Breaking Defense* (November 29, 2021). <https://breakingdefense.com/2021/11/its-a-fobs-space-forces-saltzman-confirms-amid-chinese-weapons-test-confusion/>. Accessed March 28, 2024.

valid today given commercial use of space: all countries benefit from avoiding nuclear competition and use in outer space.

### **Principle 7: A Positive Vision**

My final principle is to *set out a credible and compelling positive vision of a desirable long-term nuclear future—even if mostly aspirational, for now*. Whereas Principles 1 – 6 address the necessities of managing nuclear risk in today’s world, Principle 7 looks beyond today’s era of strategic confrontation.

There are many compelling reasons to set out a credible and compelling positive nuclear vision, as a positive vision can help to avoid repeating the Cold War’s nuclear excesses:

- The need to gain and sustain political support within the United States and its allies for a more robust nuclear deterrence posture
- The need to sustain the legitimacy and effectiveness of the NPT
- The world changes, sometimes for the worse as now, but also not infrequently for the better, and, in so doing, change creates unexpected opportunities
- The many risks inherent in the very existence of nuclear weapons and the great danger that sooner or later nuclear deterrence will fail

The positive vision that makes sense to me is not the vision of nuclear abolition. The complete physical elimination of all nuclear weapons runs up against too many political obstacles and practical uncertainties. Rather, my positive vision remains the same from a decade ago: the strategic elimination of nuclear weapons as instruments of national power and statecraft.

### **Conclusion**

The seven principles are thus as follows:

1. Reemphasize effective nuclear deterrence as the necessary bedrock of policies and postures to reduce the risk of use of nuclear weapons—but, for now, with limited adaptations for new realities.
2. Invest in a flexible, limited nuclear response capability for deterrence as the best way to avoid finding out whether limited use of nuclear weapons is a contradiction in terms.
3. Encourage and, as possible, cooperate with other nuclear weapon states to ensure safe, secure, effectively controlled nuclear operating practices as something to serve everyone’s interests.
4. Sustain conventional deterrence, including clarity of U.S. commitments and

diplomatic efforts to avoid conflict, given that the road to nuclear use runs through conventional conflict.

5. Seek to reinvigorate official channels of dialogue and engagement with adversaries—but be realistic and be prepared to pursue workarounds.
6. Seek to sustain what remains of the 20<sup>th</sup> century's nuclear arms control legacy.
7. Set out a credible and compelling positive vision of a desirable long-term nuclear future—even if mostly aspirational, for now.

This set of seven should be understood as a package of mutually reinforcing approaches and not as an a-la-carte menu from which to pick and choose. Taken together as guideposts for U.S. nuclear strategy, they point to a way forward to manage nuclear risks in today's world of strategic confrontation. These principles are rooted in the fact that the world of today is not the world that we hoped for, wanted, expected, and worked toward. But that does not mean that we are without agency over the situation or that we must yield to ever-mounting nuclear risk.

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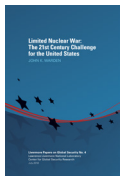
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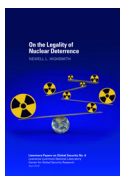
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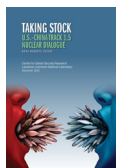
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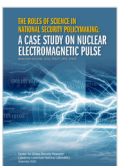
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**Heather W. Williams**

*Director, Project on Nuclear Issues and Senior Fellow,  
International Security Program  
Center for Strategic & International Studies*